

# PERCEIVED SERVICE QUALITY, PERCEIVED VALUE AND SATISFACTION IN GROUPS OF USERS OF SPORTS ORGANIZATIONS IN SPAIN

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## Abstract:

The objective of this study was to evaluate the perceived quality, satisfaction and the perceived value among customers of public and private professional sports services in Spain, and to establish prediction models for satisfaction and perceived value. The sample was comprised of 2,027 users of Spanish sports services, of whom 66.1% were men and 33.9% were women. All users completed a self-administered questionnaire. The psychometric properties of the questionnaire ensured a valid measurement of perceived quality, satisfaction and value. The results obtained revealed that the quality of the sports service received was good, and that the technical factors and service staff received the highest evaluations, however, information provided to users was the weakest point. Customer satisfaction and perceived value were also assessed positively. Significant differences were found in these three constructs depending on the activity group that the users were in. Combat activities scored highest for quality, and lowest for satisfaction, whereas customers of individual land-based sports were the most satisfied and perceived the most value, unlike racquet sports, which obtained the lowest scores in the three constructs. Both satisfaction with the service and the perceived value of the service depended chiefly on an intangible factor such as activities.

*Key words:* sports services, sports management, active sports consumers, organized physical activity

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## Introduction

In recent years the business sector has shown a growing interest in quality management, a concept that has become universally known and applied to practically all areas of management in organizations and businesses in the service sector (Mañas, Jiménez, Muyor, Martínez, & Moliner, 2008; Martínez & Martínez, 2008; Tsitskari, Tsiotras, & Tsiotras, 2006). This is no surprise, as measuring customers' perceptions of service quality is a relevant factor in explaining the competitiveness and feasibility of organizations (Mañas, et al., 2008). By measuring customers' perceptions of service quality, users' experiences can be determined, which is essential when implementing any type of system aimed at improving process efficiency and efficacy and at securing customer loyalty (Larson & Steinman, 2009; Martínez & Martínez, 2008). Users are increasingly more demanding (Martin & O'Neill, 2010), and as such their loyalty has become one of the most important achievements for any organization (Tsitskari, et al., 2006).

As sports organizations, this paper includes all the public and private professional sports organizations that provide services on a business basis or as a basic service for users. Although Caliskan (2009) states that sports organizations are structured and run differently from other types of administrations, they are no different in their need to assess quality on an ongoing basis (Larson & Steinman, 2009). Competitiveness between sports organizations leads to differentiation strategies to improve customer satisfaction (Morales, Hernández-Mendo, & Blanco, 2005), which is less difficult to achieve when it is clear what expectations the customers have and what they feel is important in terms of quality (Tsitskari, Vernadakis, Tzetsis, Aggeloussis, & Costa, 2009). This is an emerging and competitive sector (Langviniene & Sekliuckiene, 2008; Rial, Varela, Rial, & Real, 2010) that has adopted this trend towards quality, albeit with something of a delay (Martínez & Martínez, 2008), and although at a similar level as in other sectors and economic fields (Martínez, 2009), measuring

quality in the sports industry is still at a formative stage (Szabó, 2010; Tsitskari, et al., 2006), requiring further research (Martin & O'Neill, 2010).

An analysis of literature reveals studies of quality in sports services for rugby (Bisschoff & Lotriet, 2009), water sports (Calabuig, Quintanilla, & Mundina, 2008; Langvinienė & Sekliuckienė, 2008), skiing (Kyle, Theodorakis, Karageorgiou, & Lafazani, 2010), golf (Lee, Kim, Ko, & Sagas, 2011), athletics (Unruh, Unruh, Moorman, & Sesahadi, 2005), indoor cycling (Sanz, Redondo, Gutierrez, & Cuadrado, 2005) and active tourism sports (Shonk & Chelladurai, 2008). Other studies analyse the quality perceived by spectators at sports events (Calabuig, Burillo, Crespo, Mundina, & Gallardo, 2010; Larson & Steinman, 2009; Westerbeek & Shilbury, 2003; Yoshida & James, 2011). However, most studies focus on analysing service quality in sports centres (Afthinos, Theodorakis, & Nassis, 2005; Bodet, 2006; Szabó, 2010; Tsitskari, et al., 2006), either public (Morales, et al., 2005; Murray & Howat, 2002; Sanz, Ponce, & Rhoden, 2006; Yildiz & Kara, 2009) or private (Rial, et al., 2010; Mañas, et al., 2008), without distinction, except in schools (Nuviala, Tamayo, Fernández, Pérez-Turpin, & Nuviala, 2011), depending on the type of activity for each user group, even when the different activity types are specified (Martínez & Martínez, 2009). This limitation in the studies prevents quality levels perceived by customers in different activity groups from being compared, making it difficult for managers of sports organizations to make decisions aimed at improving customers' perceptions of the service provided.

Research indicates that perceived service quality is determined mainly by the tangible elements of the facilities and by the attitudes and skills of the staff (Afthinos, et al., 2005; Bodet, 2006; Kim & Trail, 2010), although recent studies have considered certain aspects of employee-customer social interaction to be less important, placing greater emphasis on various tangible elements (Mañas, et al., 2008; Rial, et al., 2010; Sanz, et al., 2006). Whatever the determining elements, it is well documented that service quality is a direct precursor to customer satisfaction (Bisschoff & Lotriet, 2009; Bodet & Meurgey, 2002; Kyle, et al., 2010; Murray & Howat, 2002; Shonk & Chelladurai, 2009), which in turn influences the future intentions of current customers (Kim & Trail, 2010; Kyle, et al., 2010; Murray & Howat, 2002; Shonk & Chelladurai, 2008; Westerbeek & Shilbury, 2003) and potential customers (Bisschoff & Lotriet, 2009) alike. Perceived value, a variable affected by service quality and price, has been described as an important factor mediating between service quality and customer satisfaction, and is a determinant for customers' future intentions (Calabuig, et al., 2010; McDougall & Levesque, 2000; Murray & Howat, 2002). The positive

and combined influence that these three constructs (quality, satisfaction and value) have on customer behaviour and service loyalty has been proven (Brady, Knight, Cronin, Hult, & Keillor, 2005).

Despite the stated relevance of customer satisfaction and analysis of service quality, the question has been raised of which service attributes should be used to assess satisfaction and which to assess quality (Bodet, 2006), and some have argued for measuring satisfaction and quality jointly (Bisschoff & Lotriet, 2009). However, studies measuring quality, satisfaction and value have used different instruments to evaluate each of these variables (Calabuig, et al., 2010; McDougall & Levesque, 2000; Murray & Howat, 2002). The SERVQUAL model is the instrument most frequently used to measure service quality (Bisschoff & Lotriet, 2009; Larson & Steinman, 2009), although not without criticism and suggestions for its improvement (Mañas, et al., 2008; Yoshida & James, 2011). Other scales of assessment have also been put forward to measure service quality for sports centres (Afthinos, et al., 2005; Morales, et al., 2005; Rial, et al., 2010; Yildiz & Kara, 2009) or for specific sports (Calabuig, et al., 2008; Lee, et al., 2011; Sanz, et al., 2005), as well as other innovative methods (Martínez & Martínez, 2009; Martínez, Yong, & Martínez, 2010; Shonk & Chelladurai, 2009), though similarly these are not without limitations (Calabuig, et al., 2008).

The variety of measuring instruments makes comparisons between organizations, the services they provide and customer activities difficult. There are also no precedents for studies of quality that compare groups of sporting activities, much less studies that also analyse customer satisfaction and perceived service value. The objectives of this study, therefore, are to evaluate perceived quality, satisfaction and perceived value among customers of Spanish sports services divided by activity type, and to establish prediction models for satisfaction and perceived value.

## Methods

### Subjects

A total of 2,707 customers of Spanish sports services took part in the study, of whom 66.1% were men and 33.9% were women, with a mean age of  $25.29 \pm 12.83$  yrs, from 78 organizations, 24 of which were public, chosen at random.

Of these subjects, 31.1% had studied at university, 45.4% had secondary education and 23.5% only basic education. In terms of frequency of activity, 39.6% used the organization four or more days a week, 60.7% two or three days a week, and 7% one day a week or less. A total of 41.8% were involved in a sports activity for 60 minutes or less per session, 28.9% between 60 and 90 minutes, and the remaining 29.3% more than 90 minutes.

**Instruments**

Data were gathered using the EPOD2 questionnaire (Nuviala, et al., in press). A questionnaire was used containing 34 Likert alternative response items, ranging from 1 (strongly disagree) to 5 (strongly agree), focusing on three areas of evaluation:

- 1) perceived quality (28 items)
- 2) satisfaction (5 items)
- 3) value of service (1 item)

Questions referring to perceived quality belong to the EPOD questionnaire (Nuviala, Tamayo, Iranzo, & Falc3n, 2008), except for the item "You are satisfied with the price/quality relationship of the activity", which was used to measure service value, as carried out by Murray & Howat (2002). McDougall & Levesque (2000) have argued for and validated the possibility of using a single item to measure this concept.

The 28 items were grouped into six factors after an explanatory factorial analysis was carried out explaining 57.53% of variance. A confirmatory factorial analysis was then performed that verified and improved the model, and Table 1 shows the results of the adjustment indices analysed. Total Cronbach's alpha reliability was .881, and factor reliability was between .823 (*technical*) and .720 (*activity*).

To assess satisfaction, we used a scale comprising five items designed by Oliver (1980) and used in various studies, such as the work by Bodet (2006) ("I am satisfied at having joined this club", "Choosing this club was a good decision", "I am disappointed at having joined this club" (reverse item), "Joining this club was a good idea" and "I am not satisfied with having joined this club" (reverse item). Cronbach's alpha reliability was .836.

A question was included so that subjects could indicate the type of activity that they took part in while at the sports organization. There were six options: training for fitness, team sports, swimming, racquet sports, individual land-based sports and combat sports.

**Procedure**

The fieldwork was carried out using a self-administered questionnaire, with the surveyor present. Participants were asked to complete the survey and to raise any doubts they might have about any of the items. Around 15 minutes were needed to complete the questionnaire. The managers of the

various organizations that took part in the study were asked for their permission before any data were gathered. Similarly, all customers voluntarily agreed to take part in the study.

**Statistical analyses**

Following tabulation and computerization, the SPSS v.18 software package (SPSS Inc., Chicago, IL) was used for data analysis by implementing the required statistical techniques. Due to the number of participants in the study, the decision was made to perform the analysis of variance (ANOVA). This statistical method is known to behave perfectly with large populations even when the variable distribution differs from normality. Perceived quality, satisfaction and perceived value were used as dependent variables, and the customer type of activity as an independent variable.

A multiple linear regression analysis was performed using the stepwise method to determine an equation (model) that would explain the behaviour of the dependent variables of satisfaction and perceived value using the information provided by the explanatory or independent variables. Two models were established based on the different dimensions of perceived quality ("technical", "service staff", "communication", "activity", "material" and "spaces").

**Results**

Training for fitness is the sports service most commonly used by the clients of the sports organizations in the study. After training-for-fitness users there are the users of team sports, swimming and racquet sports. These are followed both by people who engage in individual land-based sport with no opposition and by participants in combat sports (Table 2).

Table 2. Percentage of users by type of sporting activity

	Percentage
Team sports	25.2
Training for fitness	29.3
Racquet sports	19.0
Swimming	20.6
Combat sports	3.1
Individual land-based sports	2.8

Table 1. Adjustment and error indicators of the confirmatory factorial analysis

RMR	RMSEA	GFI	IFI	TLI	CFI	$\chi^2$	GI	$\chi^2/gI$
.052	.055	.915	.931	.914	.930	.233	1	2.18

Legend: RMR - root mean square residual, RMSEA - root mean square error of approximation, GFI - goodness of fit index, IFI - incremental fit index, TLI - Tucker-Lewis index, CFI - comparative fit index, GI - degree of freedom

The mean assessment of perceived quality obtained with the sum of items in the scale was good:  $3.72 \pm .55$  out of a maximum of 5. The technical dimension was rated the highest by customers, followed by the service staff factor. Communication was scored the lowest. Significant differences were found between the various sporting activity groups provided by the organizations. Combat sports scored higher both in the mean evaluation ( $4.00 \pm .49$ ) and in the six dimensions that comprise the quality perceived. Racquet sports and individual land-based sports received the lowest mean assessment ( $3.51 \pm .50$  and  $3.61 \pm .42$ , respectively) (Figure 1; Table 3).

Customer satisfaction was very good ( $4.09 \pm .73$ ), with significant differences between the various groups of activities. Individual land-based sports obtained the highest level of satisfaction, and combat sports the lowest.

Perceived service value scored  $3.67 \pm 1.00$ , with land-based individual sports scoring highest, and racquet sports lowest (Figure 1; Table 3).

The final model used to predict satisfaction (Table 4) selected five variables (*activity, services staff, material, technical factors* and *spaces*), with  $F=203.565$ ;  $p<.001$ , confirming a significant linear relationship between the dependent variable and the independent variables entered. The explained variance was 29.7%.

The most important variables in the satisfaction model were activity, with a Beta value of .238, and material, with a Beta value of .215. The Beta value of the spaces variable was the lowest, with a negative outcome.

The final perceived value model selected all the variables, with  $F=148,408$ ;  $p<.001$ , confirming a significant linear relationship between the dependent variable and the independent variables entered. The explained variance was 26.9%.

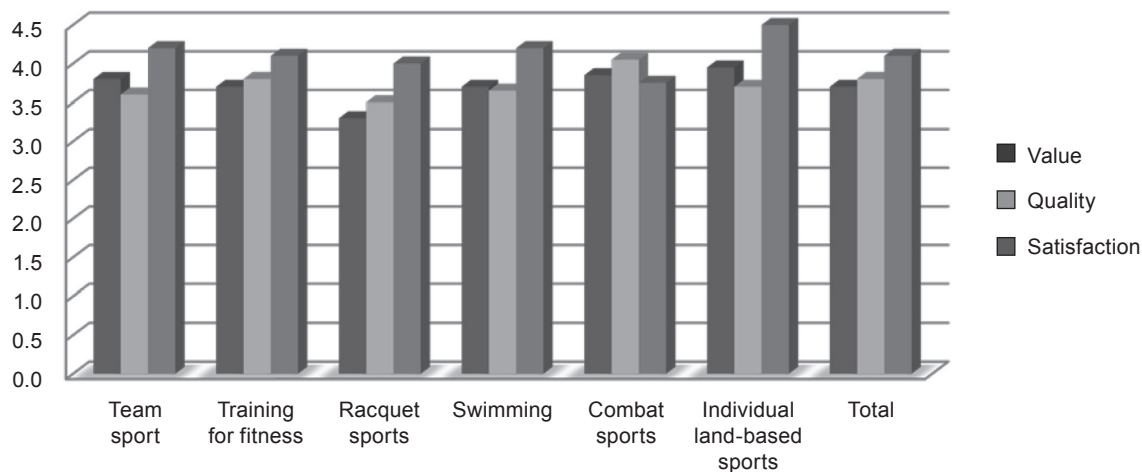


Figure 1. Perceived value, perceived quality and satisfaction among customers of sports services depending on the activity carried out.

Table 3. Evaluation of perceived quality, satisfaction and perceived value among customers; differences depending on the type of sport played/done

	Technical	Services provided	Communication	Activity	Material	Spaces	Satisfaction	Value
Team sports	3.94±.88	3.97±.86	3.22±1.06	3.95±.62	3.65±.93	3.67±.78	4.14±.75	3.91±.95
Training for fitness	3.94±.74	3.98±.87	3.36±.85	3.86±.71	3.75±.87	3.86±.78	4.07±.68	3.62±.99
Racquet sports	3.80±.67	3.76±.79	3.20±.75	3.60±.55	3.49±.76	3.51±.84	3.95±.71	3.31±.97
Swimming	3.98±.78	3.78±.90	3.32±.79	3.96±.62	3.57±.90	3.71±.83	4.20±.74	3.74±1.01
Combat sports	4.21±.60	4.38±.67	3.53±.75	4.00±.56	3.93±.66	3.92±.72	3.78±.77	3.89±1.05
Individual land-based sports	3.84±.59	4.28±.70	3.15±.63	3.71±.39	3.83±.68	2.86±1.21	4.45±.60	3.95±.97
Total	3.93±.77	3.92±.86	3.28±.88	3.85±.64	3.65±.87	3.69±.84	4.09±.73	3.67±1.00
F	4.838	14.709	4.365	22.533	8.487	27.392	12.879	22.851
Sig.	.000	.000	.001	.000	.000	.000	.000	.000

Table 4. Multiple regression model to predict satisfaction based on the dimensions of perceived quality

Model	R	R-squared	Corrected R-squared	Standard error of estimate	Statistics of change				
					Change in R-squared	Changes in F	gl1	gl2	CMS. Changes in F
5	.545	.297	.296	.62702	.004	14.003	1	2406	.000
Prediction variables				Non-standardized coefficients		Typified coefficients	t	Sig.	
				B	Standard error	Beta			
(Constant)				1.466	.089		16.394	.000	
Activity				.272	.025	.238	10.783	.000	
Service staff				.163	.018	.190	9.198	.000	
Material				.185	.018	.215	10.500	.000	
Technical				.128	.019	.133	6.660	.000	
Spaces				-.067	.018	-.075	-3.742	.000	

Table 5. Multiple regression model to predict the value of the service based on the dimensions of perceived quality

Model	R	R-squared	Corrected R-squared	Standard error of estimate	Statistics of change				
					Change in R-squared	Changes in F	gl1	gl2	CMS. Changes in F
6	.518	.269	.267	.86209	.001	3.951	1	2423	.047
Prediction variables				Non-standardized coefficients		Typified coefficients	t	Sig.	
				B	Standard error	Beta			
(Constant)				.620	.123		5.056	.000	
Activity				.528	.035	.342	14.962	.000	
Communication				.215	.024	.190	8.845	.000	
Technical				.133	.026	.103	5.045	.000	
Spaces				-.118	.025	-.099	-4.652	.000	
Service staff				.107	.024	.092	4.398	.000	
Material				-.048	.024	-.042	-1.988	.047	

The most important variables in the perceived value model were *activity*, with a Beta value of .342, and *communication*, with a Beta value of .190. The Beta values for the spaces and *material* variables were negative (Table 5).

### Discussion and conclusions

The most in-demand sports services were training for fitness, team sports, swimming and racquet sports. Individual land-based sports and combat sports had the lowest demand from the customers of the sports services studied. These outcomes are in line with studies of sporting habits in Spain (Centro de Investigaciones Sociológicas, 2010), which found the highest rates of involvement in training for fitness (29.9%), and in line with increased involvement in training for fitness throughout Europe and less involvement in traditional sports (Fridberg, 2010). This is important, as young Europe-

ans are more likely than their older counterparts, to be members of fitness centres (European Commission, 2010). However, this could vary depending on the country and its sports system.

Service quality was evaluated positively, with a mean score of 3.72±.55 out of 5 for all items. The dimensions relating to human resources, technical factors and service staff were the most highly valued. Communication obtained the lowest score. These outcomes are in line with the findings of Rial et al. (2010), who recorded a good score for staff assessment, which was higher than the score for the other factor considered (*facilities*). Mañas et al. (2008) also reported a more positive evaluation in aspects relating to the human factor than in other dimensions, an outcome also found by Nuviala et al. (2011) in younger subjects. Among the French customers of sports services studied by Afthinos et al. (2005), the human factor and tangible elements

received the highest scores. The low evaluation given to communication in perceived quality should be noted. Communication is a fundamental element in the relation between an organization and its users, and should be taken more into account in order to increase users' evaluation of the organization and the services that it provides.

For all dimensions of quality in the instrument used, significant differences were found in how service quality is judged, depending on which activities customers took part in, as reported previously in a school population (Nuviala, et al., 2011). Combat sports activities received a better mean evaluation, together with technical factors, information, materials and spaces. Racquet sports received the lowest mean evaluation, together with low scores for activity and material factors, an outcome that differs from the results obtained by Nuviala et al. (2011), where children and adolescents assessed tennis as one of the activities offering the best quality. There are no precedents for studies comparing customer-perceived quality in an adult population divided into groups of types of activity, which together with the variety of tools used to measure quality prevents comparison between existing studies. It could be supposed that the lower valuation of perceived quality in racquet sports is due to the reciprocal relationship between perceived quality and perceived value which, as can be observed, has a subsequent effect on the satisfaction of these users. These results are important, given the need to understand the organization's customers (Bednarik, Sugman, Urank, & Kovac, 2007), so that measures can be taken to improve sports services (Bednarik, Kolar, & Jurak, 2010). These results, together with the outcomes for other activities, allow different strategies to be established to improve how the various activities are evaluated, which, based on the existing literature, would tend to result in greater adherence to sports services by current or future customers (Bisschoff & Lotriet, 2009; Kim & Trail, 2010; Kyle, et al., 2010; Murray & Howat, 2002; Shonk & Chelladurai, 2008; Westerbeek & Shilbury, 2003).

Customers assessed *satisfaction* more positively than its antecedent, *service quality* (Bisschoff & Lotriet, 2009; Bodet & Meurgey, 2002; Kyle, et al., 2010; Murray & Howat, 2002; Shonk & Chelladurai, 2009). Significant differences were again found between the various activity groups for this variable. The most satisfied users were involved in individual land-based sports, with customers taking part in combat sports reporting the lowest levels of satisfaction. These outcomes are worth reflecting on. It is particularly paradoxical that individual land-based sports and swimming obtained low and medium scores, respectively, for *perceived quality*, but scored the highest for *satisfaction*. Combat sports, however, which scored highly for *perceived*

*quality*, scored the lowest for *satisfaction*. These outcomes could be explained based on the peculiarities of quality as a lasting attitude over time, and satisfaction as a transitory judgement of a specific service (Varela, Rial, & García, 2003), which suggests that judgement of satisfaction depends to a large degree on emotional aspects (Olsen & Johnson, 2003).

*Perceived value* scored positively, with significant differences between activities observed. As with *satisfaction*, individual land-based sports received the highest score, and racquet sports the lowest. The degree of satisfaction in racquet sports was considerably lower than the mean for the other activity groups, as was the case with perceived quality and satisfaction. These outcomes reinforce the positive relationship between customer satisfaction and perceived value (Calabuig, et al., 2010; McDougall & Levesque, 2000; Murray & Howat, 2002; Westerbeek & Shilbury, 2003).

Having studied how quality, satisfaction and perceived value were evaluated among the users of the various activity groups, the discussion turns to the outcomes of the multiple linear regression analysis for the *satisfaction* variable. In this analysis, it was the *activities* dimension that explained the highest percentage of variance, and was therefore the best predictor of customer satisfaction. In the successive steps of the model, the dimensions of *services staff*, *material*, *technical factors* and *spaces* were included, which increased the variance explanation, resulting in a final model ( $satisfaction = 1.466 + .272 (activities) + .163 (services\ staff) + .185 (material) + .128 (technical) - .067 (spaces)$ ) that explains 29.7% of the variance. The *activities* dimension was the most relevant in the regression equation, together with *material*. The least important dimension was *spaces*, the only factor with a negative influence. These outcomes do not coincide with those reported in literature, which considers the human factor as the main predictor of perceived service quality (Bodet, 2006; Murray & Howat, 2002), together with tangible elements, the importance of which has only increased in recent years (Mañas, et al., 2008; Rial, et al., 2010). Similarly, previous studies question the fact that one element of quality has a negative repercussion on customer satisfaction, as shown in the recent models proposed by Lee et al. (2011) and Kyle et al. (2010), which explain a higher percentage of variance than that obtained in this study. However, those studies focused on one specific activity group, and did not take into account the variety of activities that this research has considered. Nevertheless, the model needs to be perfected, as it does not seem logical that an improvement in service quality in any dimension could have a negative repercussion on customer satisfaction, following a positive relationship being shown between these two variables (Bisschoff & Lotriet, 2009; Bo-

det & Meurgey, 2002; Kyle, et al., 2010; Murray & Howat, 2002; Shonk & Chelladurai, 2009).

Regression analysis for the perceived value variable resulted in *activities* being the dimension that explained the highest percentage of perceived value, as occurred for the satisfaction predictive model. The other quality dimensions considered by the tool were added in the subsequent steps of the model, thus increasing the percentage of variance that it explained from 5.3% to 26.7%, which is lower than the percentage explained through structural equations by Murray and Howat (2002). In the regression equation (perceived value = .620 + .528 (activities) + .215 (communication) + .133 (technical) - .118 (spaces) + .107 (services staff) - .048 (material)) the *activities* variable was the best predictor of perceived value. The *spaces* and *material* dimensions had negative Beta values, and *material* obtained the least weight in the equation, differing from the considerable positive weight obtained in the satisfaction model. The negative influence on the perceived value of the tangible elements of quality, based on the positive relationship between quality and perception of value (Calabuig, et al., 2010; Chelladurai & Chang, 2000; Murray & Howat, 2002), could only be explained by the repercussion of the other aspect involved in perceived value, namely what the customer invests in money, time or effort (Calabuig, et al., 2010; McDougall & Levesque, 2000). Nevertheless, more research is needed in this regard, given that value remains an aspect that has received little study or attention with regard to sports service quality (Duque, 2005).

The practical application of the study is that it establishes management strategies to improve serv-

ice quality, satisfaction and perceived value among customers of sports organizations, whose ultimate aim is to secure these users' loyalty (Brady, et al., 2005; Calabuig, et al., 2010; Kim & Trail, 2010; Kyle, et al., 2010; McDougall & Levesque, 2000; Murray & Howat, 2002; Shonk & Chelladurai, 2008; Westerbeek & Shilbury, 2003) and attract potential customers (Bisschoff & Lotriet, 2009). However, this study has a series of limitations, as it requires a greater degree of perfection from the models, and different instruments are used in different studies, making it difficult to compare outcomes. The authors suggest that these limitations be addressed by future studies. Future studies should also attend to the influence of variables such as sports service usage time on service quality, satisfaction with the service and perceived value.

It can be concluded that the sports service received was of good quality, and that the *technical* and *services staff* factors received the best evaluations, whereas *information* provided to customers the worst. Customer satisfaction and perceived value were also assessed positively. Significant differences were found in these three constructs depending on the activity group that the users were in. Combat activities scored highest for quality, and lowest for satisfaction, whereas customers of individual land-based sports were the most satisfied and perceived the most value, unlike racquet sports, which obtained the lowest scores in the three constructs. As the regression models show, both satisfaction with the service and the perceived value of the service depend chiefly on an intangible factor such as the *activities*, with all the dimensions of quality except *communication* influencing the prediction of these variables in the satisfaction model.

## References

- Afthinos, Y., Theodorakis, N.D., & Nassis, P. (2005). Customers' expectations of service in Greek fitness centers. gender, age, type of sport center, and motivation differences. *Managing Service Quality*, 15(3), 245-258.
- Bednarik, J., Kolar, E., & Jurak, G. (2010). Analysis of the sports services market in Slovenia. *Kinesiology*, 42(2), 142-152.
- Bednarik, J., Sugman, R., Urank, J., & Kovac, M. (2007). Segmentation of sports consumers in Slovenia. *Kinesiology*, 39(1), 74-84.
- Bisschoff, C.A., & Lotriet, R.A. (2009). The service quality of the PUK rugby institute. *Tydskrif Vir Geesteswetenskappe*, 49(2), 266-286.
- Bodet, G. (2006). Investigating customer satisfaction in a health club context by an application of the tetraclasse model. *European Sport Management Quarterly*, 6(2), 149-165.
- Bodet, G., & Meurgey, B. (2002). Sports associative services and satisfaction: An exploratory study. *Revue Europeenne De Management Du Sport*, 8, 207-236.
- Brady, M., Knight, G.A., Cronin, J., Hult, G., & Keillor, B. (2005). Removing the contextual lens: A multinational, multi-setting comparison of service evaluation models. *Journal of Retailing*, 81(3), 215-230.
- Calabuig, F., Burillo, P., Crespo, J., Mundina, J.J., & Gallardo, L. (2010). Satisfacción, calidad y valor percibido en espectadores de atletismo. [Satisfaction, quality and perceived value in spectators of athletics]. *Revista Internacional De Medicina y Ciencias De La Actividad Física y El Deporte*, 10(40), 577-593.

- Calabuig, F., Quintanilla, I., & Mundina, J. (2008). La calidad percibida de los servicios deportivos: Diferencias según instalación, género, edad y tipo de usuario en servicios náuticos. [The perception of service quality in sport services: differences according to sport facility, gender, age and user type in nautical services.] *RICYDE. Revista Internacional De Ciencias Del Deporte*, 4(10), 25-43.
- Caliskan, G. (2009). Criteria in sport management. *International Business Management*, 3(2), 22-31.
- Centro de Investigaciones Sociológicas. (2010). *Encuesta sobre los hábitos deportivos en España 2010. Avance de resultados. [Survey sporting habits in Spain 2010. Preview of results.]* Retrieved on June 27, 2011 from <http://www.csd.gob.es/csd/estaticos/noticias/DOSSIER-ENCUESTA.pdf>.
- Chelladurai, P., & Chang, K. (2000). Targets and standards of quality in sport services. *Sport Management Review*, 3(1), 1-22.
- Duque, E.J. (2005). Revisión del concepto de calidad del servicio y sus modelos de medición. [Review the concept of service quality and its measurement models.] *Innovar*, 15(25), 64-80.
- European Commission. (2010). Special Eurobarometer 334, *Sport and Physical Activity*. Retrieved on June 27, 2011 from [http://ec.europa.eu/public\\_opinion/archives/ebs/ebs\\_334\\_en.pdf](http://ec.europa.eu/public_opinion/archives/ebs/ebs_334_en.pdf).
- Fridberg, T. (2010). Sport and exercise in Denmark, Scandinavia and Europe. *Sport in Society*, 13(4), 583-592.
- Kim, M., & Trail, G.T. (2010). The effects of service provider employment status and service quality exchange on perceived organizational image and purchase intention. *Sport Management Review*, 13(3), 225-234.
- Kyle, G.T., Theodorakis, N.D., Karageorgiou, A., & Lafazani, M. (2010). The effect of service quality on customer loyalty within the context of ski resorts. *Journal of Park & Recreation Administration*, 28(1), 1-15.
- Langvinienė, N., & Sekliuckienė, J. (2008). Assessment of SPA services quality in Lithuania: Customer's viewpoint. *Amfiteatru Economic*, 10(SUPPL. 2), 230-241.
- Larson, B.V., & Steinman, R.B. (2009). Driving NFL fan satisfaction and return intentions with concession service quality. *Services Marketing Quarterly*, 30(4), 418-428.
- Lee, J., Kim, H., Ko, Y.J., & Sagas, M. (2011). The influence of service quality on satisfaction and intention: A gender segmentation strategy. *Sport Management Review*, 14(1), 54-63.
- Mañas, M.A., Jiménez, G., Muyor, J.M., Martínez, V., & Moliner, C.P. (2008). Tangibles as predictors of customer satisfaction in sports services. *Psicothema*, 20(2), 243-248.
- Martin, D.S., & O'Neill, M. (2010). Scale development and testing: A new measure of cognitive satisfaction in sports tourism. *Event Management*, 14(1), 1-15.
- Martínez, J.A. (2009). Estudio de la invarianza de escala mediante el método de cálculo integral en la medición de la calidad percibida de los servicios deportivos. [Analysing scale invariance through integral calculus when measuring perceived quality in sports services.] *RICYDE. Revista Internacional De Ciencias Del Deporte*, 5(15), 17-35.
- Martínez, J.A., & Martínez, L. (2008). Measuring perceived service quality in sports services: A first person approach. *Revista Internacional De Medicina y Ciencias De La Actividad Física y Del Deporte*, 8(31), 244-255.
- Martínez, J.A., & Martínez, L. (2009). Applying brand concept maps to study perceived quality in sports services. *Revista Internacional De Medicina y Ciencias De La Actividad Física y Del Deporte*, 9(35), 232-253.
- Martínez, J.A., Yong, J.K., & Martínez, L. (2010). An application of fuzzy logic to service quality research: A case of fitness service. *Journal of Sport Management*, 24(5), 502-523.
- McDougall, G.H., & Levesque, T. (2000). Customer satisfaction with services: Putting perceived value into the equation. *Journal of Services Marketing*, 14(5), 392-410.
- Morales, V., Hernández-Mendo, A., & Blanco, Á. (2005). Quality evaluation in physical activity programs. *Psicothema*, 17(2), 311-317.
- Murray, D., & Howat, G. (2002). The relationships among service quality, value, satisfaction, and future intentions of customers at an Australian sports and leisure centre. *Sport Management Review*, 5(1), 25-43.
- Nuviala, A., Grao-Cruces, A., Tamayo, J.A., Nuviala, R., Álvarez, J., & Fernández-Martínez, A. (in press). Diseño y análisis del cuestionario de valoración de servicios deportivos (EPOD2). [Design and analysis of the valuation questionnaire of sports services (EPOD2).] *Revista Internacional de Medicina y Ciencias de la Actividad Física y del Deporte*.
- Nuviala, A., Tamayo, J.A., Fernández, A., Pérez-Turpin, J.A., & Nuviala, R. (2011). Calidad del servicio deportivo en la edad escolar desde una doble perspectiva. [Sport service quality at school age from a double perspective]. *Revista Internacional De Medicina y Ciencias de la Actividad Física y el Deporte*, 11(42), 220-235.
- Nuviala, A., Tamayo, J.A., Iranzo, J., & Falcón, D. (2008). Creación, diseño, validación y puesta en práctica de un instrumento de medición de la satisfacción de usuarios de organizaciones que prestan servicios deportivos. [Creation, design, validation and implementation of an instrument measuring user satisfaction of organizations providing sports services.] *Retos. Nuevas Perspectivas De Educación Física, Deporte y Recreación*, 14, 10-16.
- Oliver, R. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17, 460-469.
- Olsen, L. L., & Johnson, M.D. (2003). Service equity, satisfaction, and loyalty: from transaction-specific to cumulative evaluation. *Journal of Service Research*, 5(3), 184-195.



- Rial, J., Varela, J., Rial, A., & Real, E. (2010). Modelización y medida de la calidad percibida en centros deportivos: La escala QSport-10. [Modelling and measuring perceived quality in sports centres: QSport-10 scale.]. *RICYDE. Revista Internacional De Ciencias Del Deporte*, 6(18), 57-73.
- Sanz, E., Ponce, L.E., & Rhoden, I. (2006). Satisfaction according to the physical sport activities service of free time. the specific case of the community of the university of La Rioja (Spain). *Movimento (Porto Alegre)*, 12(3), 13-42.
- Sanz, I., Redondo, J.C., Gutiérrez, P., & Cuadrado, G. (2005). La satisfacción en los practicantes de spinning: Elaboración de una escala para su medición. [Satisfaction in the spinning athletes: Development of a scale for measurement.] *Motricidad. European Journal of Human Movement*, 13, 17-36.
- Shonk, D.J., & Chelladurai, P. (2008). Service quality, satisfaction, and intent to return in event sport tourism. *Journal of Sport Management*, 22(5), 587-602.
- Shonk, D.J., & Chelladurai, P. (2009). Model of service quality in event sport tourism: Development of a scale. *International Journal of Sport Management and Marketing*, 6(3), 292-307.
- Szabó, Á. (2010). Leisure sport services quality. In 7<sup>th</sup> International Conference on Service Systems and Service Management, ICSSSM'10, Tokyo (pp. 821-826).
- Tsitskari, E., Tsiotras, D., & Tsiotras, G. (2006). Measuring service quality in sport services. *Total Quality Management and Business Excellence*, 17(5), 623-631.
- Tsitskari, E., Vernadakis, N., Tzetsis, G., Aggeloussis, N., & Costa, G. (2009). Expected and perceived service quality at basketball stadiums in Greece. *World Leisure Journal*, 51(2), 94-104.
- Unruh, S., Unruh, N., Moorman, M., & Seshadri, S. (2005). Collegiate student-athletes' satisfaction with athletic trainers. *Journal of Athletic Training*, 40(1), 52-55.
- Varela, J., Rial, A., & García, E. (2003). Presentación de una escala de satisfacción con los servicios sanitarios de atención primaria. [Introducing a scale of satisfaction with health services of primary care.] *Psicothema*, 15(4), 656-661.
- Westerbeek, H.M., & Shilbury, D. (2003). A conceptual model for sport services marketing research: Integrating quality, value and satisfaction. *International Journal of Sports Marketing & Sponsorship*, 5(1), 11-31.
- Yildiz, S.M., & Kara, A. (2009). The PESPERF scale: An instrument for measuring service quality in the school of physical education and sports sciences (PESS). *Quality Assurance in Education*, 17(4), 393-415.
- Yoshida, M., & James, J.D. (2011). Service quality at sporting events: Is aesthetic quality a missing dimension? *Sport Management Review*, 14(1), 13-24.

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## PROCIJENJENA KVALITETA, ZADOVOLJSTVO I PROCIJENJENA VRIJEDNOST U SKUPINAMA KORISNIKA SPORTSKIH ORGANIZACIJA U ŠPANJOLSKOJ

Cilj je ovog istraživanja bilo vrednovanje procijenjene kvalitete, zadovoljstva i procijenjene vrijednosti među korisnicima javnih i privatnih profesionalnih sportskih ustanova u Španjolskoj te formiranje modela predviđanja zadovoljstva i procijenjene vrijednosti. Uzorak ispitanika činilo je 2.027 korisnika španjolskih sportskih ustanova (66,1% muškaraca i 33,9% žena). Svi korisnici samostalno su ispunili upitnik. Psihometrijske karakteristike upitnika osigurale su valjanost mjerenja procijenjene kvalitete, zadovoljstva i procijenjene vrijednosti. Dobiveni rezultati otkrili su da je kvaliteta korištenih sportskih usluga procijenjena dobrom te da su tehnički faktori i osoblje bili najbolje ocijenjeni, ali i to da je kvaliteta informacija koje se nude korisnicima sportskih usluga njihova najslabija točka. Zadovoljstvo korisnika i procijenjena vrijednost usluge također su ocijenjene

pozitivno. Statistički značajne razlike bile su zabilježene u tri dimenzije između grupa koje su prakticirale različite aktivnosti. Grupa korisnika borilačkih aktivnosti najbolje je ocijenila kvalitetu, a najlošije zadovoljstvo korisnika, dok su korisnici individualnih sportova popularnih u Španjolskoj bili najzadovoljniji i ti su korisnici dali najvišu ocjenu procijenjene vrijednosti, za razliku od sportova reketom, korisnici kojih su zabilježili najlošije rezultate u sve tri mjerenje dimenzije. I zadovoljstvo uslugom i procijenjena vrijednost usluge znatno je ovisila o faktoru na koji nije moguće utjecati kao što je aktivnost.

**Ključne riječi:** sportske usluge, sportski menadžment, aktivni sportski korisnici, organizirana tjelesna aktivnost