

# A loyalty model according to membership longevity of low-cost fitness center: quality, value, satisfaction, and behavioral intention

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*A LOYALTY MODEL ACCORDING TO MEMBERSHIP LONGEVITY OF LOW-COST FITNESS CENTER: QUALITY, VALUE, SATISFACTION, AND BEHAVIORAL INTENTION*

KEYWORDS: Perceived quality, Perceived value, Satisfaction, Loyalty, Fitness center.

ABSTRACT: Client loyalty is crucial to fitness centers. Studies have analyzed the relationship between different subjective variables and consumer behavior intentions in these types of sport services within fitness centers. Nevertheless, few are those who have studied the influence of such variables on objective measures like membership longevity. For this reason, the objective of this study was to examine a loyalty model by means of the relationship between perceived quality, satisfaction, and future intentions with regard to client loyalty. The study counted with 15820 client (8462 women and 7358 men) participants who answered an online questionnaire. A descriptive analysis, factorial confirmatory and multi-group analysis were conducted. The findings demonstrate a valid and reliable model where relationships among the variables are positive and significant, with differences among the groups according to the longevity of membership.

The fitness industry continues to grow worldwide as indicated by IHRSA (2014). Comprehensively, Europe is the most rentable market with the largest growth in practitioners. Furthermore, Europe is among the markets with most growth, having Spain as one of the countries with the greatest growth in consumers of fitness centers and with the greatest penetration in the industry (European Commission, 2014; IHRSA, 2014; Ministerio de Educación, Cultura, y Deporte, 2015). Yet the principle problem of this market lies in the poor loyalty of its clients (García-Fernández, Bernal-García, Fernández-Gavira and Vélez-Colón, 2014) understanding that the stronger the loyalty the greater financial expense for the client (García-Fernández, Gálvez-Ruiz, Bernal-García and Vélez-Colón, 2016). Precisely, to examine loyalty, studies have been conducted utilizing subjective measurements of behavior (Theodorakis, Howat, Ko and Avourdiadou, 2014) however, there is a dearth studies with objective measures.

Among the variables proven to be precursors of client loyalty are quality, perceived value and satisfaction. Precisely in the fitness sector some studies have positively related perceived quality with perceived value; as is the case of Theodorakis et al. (2014) and Nuviala, Grao-Cruces, Pérez-Turpin and Nuviala (2012). Other works have related perceived quality to satisfaction, such as the research of Avourdiadou and Theodorakis (2014), Hsueh and Su (2013), and Tsitskari, Antoniadis and Costa (2014).

Similarly, satisfaction has also been positively related with perceived value evidenced by testing with clients from Greek

(Theodorakis et al., 2014) and Australian fitness centers (Murray and Howat, 2002). Theodorakis et al. (2014) and Avourdiadou and Theodorakis (2014) tested positively the relationship between satisfaction and future intentions. Lastly, there are positive evidences between perceived value and loyalty of clients of fitness centers. This is evidenced in the work of Murray and Howat (2002) and Calabuig, Núñez-Pomar, Prado-Gascó and Año (2014). Nevertheless, although in this sector the mentioned relationships have been measured, the model of loyalty according to client membership longevity, an objective measure of loyalty, has yet to be assessed. Based on these evidences, the objective of the current work was to examine a model of loyalty by means of the relationship between perceived quality, perceived value, satisfaction, and future intentions, according to the longevity of membership of the clients.

## Method

### Participants

The sample was composed of 15.820 clients (8.462 women and 7.358 men) from 54 low-cost fitness centers, where 5.7% ( $n = 908$ ) were less than 20 years old; between 21-30 years of age were 33.6% of the participants ( $n = 5313$ ); 29.7% ( $n = 4698$ ) were between 31-40 years; participants of 41-50 years occupied 21% ( $n = 3316$ ) of the population, and 10.1% ( $n = 1585$ ) were over 50 years old. Participants were grouped according to the longevity of their membership in the fitness center yielding five groups.

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The first group (G1) was made up of those with less than three months of membership ( $n = 3.466$ ), the second group (G2) consisted of those with a membership duration ranging from three months to six months ( $n = 2,308$ ), the third group (G3) clustered participants whose membership ranged from six to 12 months ( $n = 3.040$ ), group four (G4) represented with a membership range of one to two years ( $n = 4,111$ ), and finally the fifth group (G5) was made up of participants with membership greater than two years ( $n = 2.895$ ).

**Instrument**

An online *ad hoc* questionnaire was used including longevity of membership in months, eight items for perceived quality (Q) (Brady and Cronin, 2001), two items for perceived value (PV) (Zeithaml, 1988), one item for satisfaction (S) (Cronin, Brady and Hult, 2000), and one item for future intentions (FI) (Zeithaml, Berry and Parasuraman, 1996). A ten point Likert scale was used (1, completely disagree; 10, completely agree). All items have been utilized in related studies in clients of fitness centers. (Avourdiadou and Theodorakis, 2014; Theodorakis et al., 2014).

**Procedure**

Managers of all low-cost fitness centers in Spain were contacted via email (Valcarce, López and García, 2016). In order to increase the number of participating centers the contact was repeated after two weeks. Sixty fitness centers demonstrated an interest in participating. Initially, the researchers sent each center the objectives of the study and the protocol to follow. The protocol consisted of the administrator with the highest position to send the questionnaire via email to all clients. Finally 54 fitness centers participated in the study. Once administrators sent the emails, the responses to the online questionnaires were directed to a data base created specifically for this study. The data was collected from October 1, 2015 through November 30, 2015 and obtained a response rate of 9.7% of the total number of questionnaires sent.

**Data analysis**

First, a descriptive analysis of the measures of the items for each group was conducted (G1, G2, G3, G4, G5). Second, the reliability and validity of the scale of perceived quality and value were tested through the composite reliability (CR), average

variance extracted (AVE), and the discriminant validity. A confirmatory factor analysis (CFA) was conducted to assess the structural model for each group, using the ratio of chi-square to its degrees of freedom, Tucker-Lewis Index (TLI), comparative-of-fit index (CFI), goodness-of-fit index (GFI), and root mean error of approximation (RMSEA). Third, a structural multigroup model was estimated to test the research hypotheses, comparing the relationships working with membership longevity taking into account the five groups previously described.

**Results**

Descriptive results, in general, did not demonstrate high values (Table 1). These were similar among the five groups with regards to longevity of membership although it is important to state that the lowest valuation came from the group with the longest membership (G5).

The composed reliability scored at .96 for the perceived quality as well as for the value scale while the median extracted variance was of .74 and .92, respectively. The square correlation was of .88, thus accepting the discriminant validity. Furthermore, the results of the structural model showed an acceptable fit to the data. The TLI, CFI and GFI values in all models were greater than recommended threshold .90 (Hair, Black, Babin and Anderson, 2009), and RMSEA index results suggesting good fit too, with values under .06 (Byrne, 2000). Finally, in regards to the hypothesized relationships, all demonstrated a significant linear effect. The relationships of the standardized solutions among the latent variables were positive and significant in all groups. Specifically, the standard coefficients of regression demonstrating a stronger relationship between perceived quality and perceived value, with values ( $\beta$ ) between .93 (G4 and G5) and .95 (G1). With regard to the relationship between these two variables with satisfaction, they demonstrated to be very similar. Looking at the relationship with perceived quality (see Table 2), the strongest relationship was found in G3 ( $\beta = .54$ ). In the case of perceived value the strongest relationship was in G2 and G4 ( $\beta = .48$ ). Yet, the influence on future intention, satisfaction had a stronger relationship than value. Satisfaction obtained values between .64 (G4) and .74 (G2) while value obtained lower values ranging from .22 (G2) and .31. (G4).

Scales	Items	G1	G2	G3	G4	G5
		<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Q	I1	6.55 (2.83)	6.35 (2.79)	6.35 (2.75)	6.37 (2.72)	5.90 (2.78)
	I2	6.79 (2.67)	6.64 (2.62)	6.58 (2.59)	6.60 (2.55)	6.07 (2.62)
	I3	6.02 (2.74)	5.89 (2.71)	5.82 (2.69)	5.78 (2.67)	5.57 (2.62)
	P1	6.37 (2.89)	6.25 (2.97)	6.41 (2.89)	6.46 (2.88)	6.31 (2.88)
	P2	6.68 (2.80)	6.56 (2.88)	6.67 (2.77)	6.70 (2.74)	6.47 (2.78)
	PR1	5.96 (2.82)	5.78 (2.82)	5.82 (2.82)	5.85 (2.76)	5.63 (2.76)
	PR2	5.99 (2.73)	5.81 (2.72)	5.85 (2.67)	5.79 (2.65)	5.49 (2.68)
	M1	6.56 (2.69)	6.42 (2.66)	6.35 (2.65)	6.30 (2.60)	5.65 (2.71)
	PV	V1	6.89 (2.81)	6.66 (2.83)	6.78 (2.76)	6.71 (2.73)
V2		6.95 (2.92)	6.72 (2.96)	6.88 (2.90)	6.88 (2.83)	6.50 (2.94)
S	S	6.81 (2.82)	6.61 (2.88)	6.72 (2.81)	6.63 (2.79)	6.35 (2.89)
FI	FI	6.84 (2.78)	6.64 (2.80)	6.72 (2.75)	6.67 (2.70)	6.32 (2.80)

Note: *M* = Median; *SD* = Standard deviation

Table 1. Descriptive statistics (median and typical deviation)

Path	$\beta G1$	$\beta G2$	$\beta G3$	$\beta G4$	$\beta G5$
C -> PV	.95**	.94**	.94**	.93**	.93**
C -> S	.50**	.45**	.54**	.45**	.46**
PV -> S	.44**	.48**	.39**	.48**	.46**
PV -> FI	.25**	.22**	.23**	.31**	.28**
S -> FI	.70**	.74**	.72**	.64**	.68**

Note:  $p < .001$ \*\*\*;  $p < .01$ \*\*;  $p < .05$ .\*

Table 2. Coefficients of standardized regression

## Discussion

The objective of the study was to examine a model of loyalty by means of the relationship between perceived quality, perceived value, satisfaction, and future intentions according to the client's membership longevity. The results show a positive and significant relationship between quality and perceived value (Nuviala et al., 2012; Theodorakis et al., 2014) and satisfaction (Avourdiadou and Theodorakis, 2014; Hsueh and Su, 2013; Tsiskari et al., 2014). Perceived value also obtained positive and significant values (Murray and Howat, 2002; Theodorakis et al., 2014), and future intentions (Calabuig et al., 2014) and satisfaction with future intentions (Avourdiadou and Theodorakis, 2014).

The findings indicate that the model of loyalty is significant and different in every case according to longevity of membership. Precisely, the strength of the relationship depends on the relationship among the variables and the longevity of the client's membership. As explained, the findings show that the

strongest relationships are found first among quality and perceived value, second, among satisfaction and future intentions. Interestingly, the groups of participants with the shortest membership time showed the strongest relationship among the variables. The present study fills a void in the literature of fitness center client loyalty, however it has some limitations. Among the limitations is not have used a greater number of items to evaluate the different variable analyzed. Furthermore, the study examines consumers of a specific model in the fitness sector for which it cannot be extrapolated to all models within this sector. These limitations offer more possibilities for investigation. First, increasing the number of questions per variable which may allow the incorporation of more variables which could result in client loyalty. Second, the investigation and analysis of the model and methodology in other emerging models within the fitness sector such as research on personal training, or premium fitness centers characterized by high monthly fees.

### UN MODELO DE FIDELIDAD SEGÚN LA PERMANENCIA DE CLIENTES EN CENTROS DE FITNESS LOW-COST: CALIDAD, VALOR, SATISFACCIÓN E INTENCIONES DE COMPORTAMIENTO

PALABRAS CLAVE: Calidad percibida, Valor percibido, Satisfacción, Fidelidad, Centro de fitness.

RESUMEN: Debido a que la fidelidad del cliente es un tema crucial en los centros de fitness, algunos trabajos han analizado la relación entre diferentes variables subjetivas y las intenciones de comportamiento del consumidor en estos servicios deportivos. No obstante, son pocos los que han estudiado cómo repercuten dichas variables según medidas objetivas como la permanencia. Por esta razón, el objetivo de este trabajo fue examinar un modelo de fidelidad mediante la relación entre la calidad percibida, el valor percibido, la satisfacción y las intenciones futuras según la permanencia de los clientes. Para ello se contó con la participación de 15820 clientes (8462 mujeres y 7358 hombres) que contestaron a un cuestionario on-line. Se realizaron análisis descriptivos, factorial confirmatorio y análisis multigrupo. Los hallazgos muestran un modelo válido y fiable donde las relaciones entre las variables son positivas y significativas, existiendo diferencias entre los diferentes grupos según la permanencia.

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