

*Original article (short paper)*

## **An examination of intentions of recommending fitness centers by user members**

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**Abstract**—The goal of this study was to examine what experiences members have with fitness centers that influence their intentions for recommendation. After item generation and content validity, as well as a pilot test, a survey was conducted among members of five different clubs ( $n=1750$ ). The questionnaire included measures of service quality attributes, accessibility, well-being in life, well-being in a club, and intentions to recommend a fitness center. Results using a structural equation model provide evidence that only service quality attributes and well-being in a club have positive effect on intentions of users to recommend it. Well-being in life has a negative effect on the intentions for recommendation, while accessibility shows no predictive effect. These findings suggest implications for the management of a club, such as the need to create a pleasant environment and to provide a personalized service directed towards the members' goals in order to improve well-being in a club and contribute to increase the intentions to recommend the fitness centers to others.

Keywords: intentions to recommend, service quality attributes, accessibility, well-being

**Resumo**—“Uma análise das intenções de usuários em recomendar serviços de centros de atividade física.” O objetivo deste estudo foi examinar como as experiências de usuários de centros de atividade física interferem nas intenções em recomendar serviços. Depois de gerar itens e validar o conteúdo, aplicou-se um pré-teste, o questionário final foi aplicado a sócios de cinco clubes de fitness ( $n=1.750$ ). O questionário incluiu atributos da qualidade do serviço, acessibilidade, bem-estar na vida, bem-estar no clube e intenção de recomendar. O modelo de equações estruturais mostrou que apenas os atributos da qualidade do serviço e bem-estar no clube têm um efeito positivo sobre as intenções de recomendar. O bem-estar na vida tem um efeito negativo sobre as intenções para recomendar, enquanto que a acessibilidade não mostra nenhum efeito preditivo. Estas conclusões sugerem a necessidade de criar um ambiente agradável nos clubes e de oferecer um serviço personalizado para os objetivos dos sócios, a fim de melhorar o bem-estar no clube e contribuir para a intenção de recomendar o ginásio.

Palavras-chave: intenção de recomendar, atributos da qualidade do serviço, acessibilidade, bem-estar

**Resumen**—“Un análisis a las intenciones de los socios para recomendar gimnasios.” El objetivo de este estudio fue examinar los antecedentes de las intenciones de los socios para recomendar su gimnasio. Después de generar ítems y validar el contenido, se aplicó un pre-test, el cuestionario final fue aplicado a socios de cinco clubes de *fitness* ( $n=1.750$ ). El cuestionario incluyó atributos de la cualidad del servicio, accesibilidad, bienestar en la vida, bienestar en el club e intención de recomendar. El modelo de ecuaciones estructurales mostró que solo los atributos de la cualidad del servicio y bienestar en el club tiene un efecto positivo sobre las intenciones de recomendar. El bienestar en la vida tiene un efecto negativo sobre las intenciones para recomendar, mientras que la accesibilidad no muestra ningún efecto predictivo. Estas conclusiones sugieren la necesidad de crear un ambiente agradable en los clubes y de ofrecer un servicio personalizado para los objetivos de los socios, con el fin de mejorar el bienestar en el club y contribuir a la intención de recomendar el gimnasio.

Palabras clave: intención de recomendar, atributos en la cualidad del servicio, accesibilidad, bienestar

## Introduction

In the sports and fitness industry, users' intentions to recommend a service are key factor to increase customer adherence, which impacts in the organizations' profitability (Ferrand, Robinson, & Florence, 2010; Theodorakis & Alexandris, 2008). This is particularly important in the fitness context, given the fact that financial reports show a decrease in the number of customers (Ferrand *et al.*, 2010). Previous studies have highlighted the difficulties faced by fitness clubs in retaining members, with high levels of dropout (Grantham, Patton, York, & Winick, 1998; Tharret & Peterson, 2006). Based on this evidence, intentions of users in recommending services are pivotal to increase memberships in fitness clubs. With the increased competition for expand membership, success of fitness clubs become increasingly influenced by rates of users adherence (MacIntosh & Doherty, 2005), and recommending services is vital for attracting new members (Theodorakis & Alexandris, 2008).

Aspinall, Nancarrow, and Stone (2001) highlight the intention to recommend an organization among a set of variables directly linked to increased adherence, while Biscaia, Correia, Yoshida, Rosado, and Marôco (2013) refer that intent-to-recommend is a measure of positive behavioral intentions. Similarly, Bowen and Shoemaker (2003) claim that intention in recommending a club is linked to the value of an experienced episode with its services. Therefore, members' recommendations are also important to increase the reliance of others on the quality of the service provided by a fitness center (Kim & Kim, 1995). With this in mind, several studies have focused on factors that influence intentions to recommend fitness centers that refer to accessibility (Pawlowski, Breuer, Wicker, & Poupaux, 2009), and to service quality attributes—often acknowledged as vital aspects in guiding behavioral intentions such as recommendations (Biscaia *et al.*, 2013; Chang & Chelladurai, 2003).

Accessibility is related by a set of conditions such as spatial, economic, and free time that affect decision of customers to attend a fitness club. Accessibility tends to be pivotal in determining customers' choice (Pawlowski *et al.*, 2009) there has been only limited empirical analysis of the determinants of time investments in recreational sports. This article focuses on revealing the determinants of sports consumers' travel time spending behaviour in recreational sports. The study is based on survey data from two studies, one in Stuttgart and the second in Cologne. By applying a Heckit model, several socio-demographic (e.g., gender, age. Consistently, MacIntosh and Doherty (2005) suggest that the location of the fitness center influences customers' choice. In turn, service quality attributes relate to customers perceptions of specific aspects of service delivery (Parasuraman, Zeithaml, & Berry, 1988), and positive perception of services is the basis for customers to continue using services and recommending them to others (Chang & Chelladurai, 2003). Several studies refer the brand status, physical environment, cleanliness, interactions with members, personnel attitude and reliability, ambience, programs offered, outcome, and extra privileges as important attributes of services (Alexandris *et al.*, 2004; Chang & Chelladurai, 2003; Ferrand *et al.*, 2010; Kim & Kim, 1995). Nonetheless, there are various conceptualizations of service quality in the fitness industry given

that service quality perceptions vary across different cultural settings (Papadimitriou & Karteliotis, 2004). Therefore, specific measures should be designed according to users' environment.

Complementary to accessibility and service quality attributes, recent studies in the fitness context have suggested that well-being in life tends to be related with levels of consumerism in a variety of settings (Diener, Suh, & Oishi, 1997; Sirgy & Lee, 2008), while well-being in a fitness club contributes to increase members' behavioral intentions (Barros & Gonçalves, 2009). Well-being denotes people's way of assessing their lives, and can include variables such as life satisfaction, lack of depression and anxiety, and positive moods and emotions (Diener *et al.*, 1997). In this sense, examining well-being among fitness members' may represent a valuable contribution to better understand how to increase their intentions to recommend a fitness club.

While previous studies have focused on measuring each of these variables separately (i.e. accessibility, service quality attributes, well-being in life and well-being in a club), there is little empirical investigation examining the simultaneous effects, which is vital to provide a global understanding of how to improve intent-to-recommend among members' of fitness clubs. Drawing on previous literature, the purpose of this study is to examine the antecedents of service recommendations, including accessibility, service quality attributes, and well-being both in life and in a club. To that extent, four hypotheses were proposed. The first hypothesis (H1) suggests that service quality attributes influence positively the intention to recommend, while the second hypothesis (H2) shows a similar effect for accessibility. Additionally, the third hypothesis (H3) proposes that well-being in a club and well-being in life contribute positively to the intention of users for recommendation (H4).

## Method

### *Step 1: Item generation*

An initial pool of 25 items was generated based on previous research and the suggestions of two club managers from a Portuguese fitness network. Specifically, ten items were used to assess the service quality attributes based on Alexandris *et al.* (2004) and Chang and Chelladurai (2003). Four items based on Pawlowski *et al.* (2009) and the suggestions made by the centers' managers were used to measure accessibility. Both, well-being in life and well-being in a club were measured with 5-item scales adapted from Diener *et al.* (1997). Finally, one item based on the work of Alexandris *et al.* (2004) was used to assess users' intentions for recommendation. The use of single items is consistent with previous studies in sport and leisure scenarios (Ferrand *et al.*, 2010; Murray & Howat, 2002). All items were measured on a 5-point Likert-type scale, ranging from strongly disagree (1) to strongly agree (5). Next, a panel of four experts including three university professors of sports management and the top manager of a Portuguese fitness network assessed the content validity of the items on the basis of their relevance and clarity of wording and context. Each expert received an e-mail containing the purpose of the study, an explanation of the procedures, a description of each construct and the list of items.

### *Step 2: Exploratory study*

With the support of the Portuguese biggest fitness network, a pilot study was conducted with 580 randomly selected members from five clubs in different cities who voluntarily accepted to participate under the guarantee of anonymity of their responses. The questionnaires were distributed by the receptionist when the members arrived to the club. All questionnaires were self-administered by members, and before leaving the club, the members dropped the questionnaires with the receptionist. After data screening, a total of 498 questionnaires were deemed usable for data analysis. More than half of the respondents were female (54.7%). The mean age was 32.75 years ( $\pm 0.90$ ), with the 57.4% of respondents in the 20-34 age range. Regarding professional status, 85.6 % were active professionals, while 24.4% were still studying in graduate or undergraduate levels. Concerning marital status, more than half were single (58.1%), with the majority living in a household with more persons (82.5%) and without minor children at their charge (79.4%).

The items were submitted to an exploratory factor analysis (EFA), using SPSS 19.0. The EFA method used the maximum likelihood with varimax rotation (Marôco, 2010a). A variety of criteria were used to decide the appropriate number of factors to retain. Specifically, the Kaiser criterion (Kaiser, 1970) was used and the factors retained were those with an eigenvalue above 1. This analysis was complemented by scree-plot test (Zwick & Velicer, 1982). Additionally, the items failing to exceed the .50 cut-off point were eliminated in order to ensure an appropriate load of each item in its respective factor (Marôco, 2010a). Internal consistency was estimated through Cronbach's alpha coefficients, and values above .60 were considered indicative of good internal consistency (Bagozzi & Yi, 1988).

### *Step 3: Assessment of the model*

After the refinement derived from the exploratory study, the final version of the questionnaire was tested including items designed to assess service quality attributes, accessibility, well-being in life, well-being in a club, intentions to recommend it, as well as demographic information. The sample was composed by members of the same fitness network, and the procedures were the same as those used in step 2. A total of 2500 questionnaires were distributed, and after data screening, a total of 1,750 were deemed usable for data analysis. Similar to the sample in step 2, more than half were females (54.6%) with 44.9% of male participants. The mean age was 31.00 years-old ( $\pm 0.92$ ), with the 55.5% in the 20-34 age range. A total of 71.7 % were active professionals, while 20.8% were graduates or undergraduate students. The marital status indicates that 57.6% of the participants were single, yet the majority was living in a household with more than one person (74.5%), and without minor children at their charge (73.3%).

Data were submitted to a two-step maximum likelihood structural equation model (SEM) using AMOS 19.0 in order to test the relationships between the proposed variables. First, a confirmatory factor analysis was performed to confirm the

measurement model. Internal consistency of the constructs was assessed through composite reliability (Hair, Black, Babin, & Anderson, 2009). Convergent validity was evaluated through average variance extracted (AVE), while discriminant validity was established when AVE for each construct exceeded the squared correlations between their construct and any other (Fornell & Larcker, 1981). Second, the SEM was estimated for test the relationships between the variables used in this study. Goodness of fit for both measurement and structural models was assessed with the ratio of chi-square ( $\chi^2$ ) for its degrees of freedom, comparative-of-fit index (CFI), goodness-of-fit index (GFI), root mean square error of approximation (RMSEA). The significance of the structural weights was evaluated using the Z tests produced by AMOS and statistical significance was assumed at a .05 level.

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## **Results**

### *Step 1: item generation*

After analyzing the information provided by the reviewers, the panel of experts provided suggestion to maintain the conceptual definitions and to eliminate one item. Also, they suggested changing the wording in five items deemed to be unclear. At this point, one item from the accessibility category was eliminated, and four items from service quality attributes were revised. The remaining items proposed by the experts were maintained in their original form. Following this procedure, the items were randomly placed on a questionnaire for a pilot test. This questionnaire included 23 questions to assess the experiences influencing recommendation and 7 demographic questions.

### *Step 2: Exploratory study*

An EFA was computed to ascertain the factor structure composed of accessibility, service quality attributes, well-being in life and well-being in a club. Consistent with the proposed model, the Kaiser criterion and the scree-plot test, assessing the number of factors with eigenvalues greater than 1.0, suggested 4 factors. These four factors explained 61.38% of the total variance in the factor model. Additionally, the KMO value (.92) and the Bartlett's test of sphericity ( $p < .01$ ) suggested the appropriateness of the factor analysis. Nevertheless, two items were eliminated due to the lack of individual reliability. Specifically, one item from service quality attributes and one item from accessibility failed to exceed the cut-off point of .50 (Marôco, 2010), and as such, were eliminated (Table 1). The Cronbach's alpha coefficients ranged from .65 (Accessibility) to .90 (Service quality attributes) providing evidence of internal consistency. The revised model including the final items to assess the antecedents of intentions to recommend is presented in Table 1.

Table 1. Main results of the exploratory factor analysis.

Factor/Item	Factor Loading	Eigenvalue	Cumulative %	$\alpha$
<i>Service quality attributes</i>		8.29	36.04	.90
Prestige	.631			
Innovative equipment	.749			
Pleasant environment	.532			
Capacity to solve problems	.706			
Good reputation	.714			
Proper facilities	.551			
Good change rooms	.544			
Design coherence in the space	.548			
Innovative services	.797			
Kind employees*				
<i>Well-being in life</i>		3.07	49.39	.87
I am satisfied with my life	.836			
So far I have gotten the important things I want in life	.784			
In most ways my life is close to my ideal	.791			
The conditions of my life are excellent	.742			
If I could live my life over, I would change almost nothing	.648			
<i>Well-being in club</i>		1.45	55.70	.88
I am satisfied with my club	.760			
I evaluate my experience at the club positively	.727			
I have achieved everything I've expected at the club	.696			
I consider myself a happy person in GHC	.678			
If I could go back I would not change club	.569			
<i>Accessibility</i>		1.31	61.38	.65
Good location	.723			
Facility of access to the club	.635			
Convenient timetable of the Club*				

\* Item eliminated due to the lack of individual reliability.

### Step 3: Assessment of the model

*Measurement Model.* As shown in Table 2, the results of the CFA showed that all factor loadings were above the recommended cut-off of .50 (Hair *et al.*, 2009), ranging from .65 to .875. Additionally, the z-values ranged from 29.390 to 44.953. These results indicate that each item loaded significantly on its construct. Composite reliability was assumed given that all values ranging from .71 to .90. The AVE values ranged from .56 to .65 providing evidence of convergence validity (Fornell & Larcker, 1981). Table 3 shows descriptive statistics and correlations among constructs are presented in Table 3. The construct of accessibility had the highest mean score (M=4.15,  $\pm$  0.75), while the construct of service had the lowest mean score (M=3.77;  $\pm$  0.68). In addition, the measure of recommendation had a mean score of 3.99 ( $\pm$  0.93). Evidence of discriminant validity was accepted given that none of the squared correlations exceeded the AVE values for each associated constructs in the model (Fornell & Larcker, 1986).

In addition, the results the measurement model indicated an acceptable fit to the data [ $\chi^2(113)=493.99$  ( $p<.001$ ),  $\chi^2/$

df=4.37, CFI=.98, GFI=.97, RMSEA=.04]. The  $\chi^2$  statistic was significant, and the ratio of  $\chi^2$  to its degree of freedom was above the usually accepted range (Hair *et al.*, 2009). However, it is important to consider other fit indices, given that the  $\chi^2$  is sensitive to sample size and the current study was conducted with a large sample. The CFI and GFI values were greater than the .90 criteria for good fit. Additionally, RMSEA was less than .06 suggesting good fit (Byrne, 2000). Overall, the measurement model showed an acceptable fit to the data, and consequently, the structural model was examined.

*Structural Model.* The examination of the structural model included a test of the overall fit and individual tests of the relationships among latent constructs. The overall assessment of the model indicated an acceptable fit to the data [ $\chi^2(126)=547.92$  ( $p<.001$ ),  $\chi^2/df=4.35$ , CFI=.98, GFI=.97, RMSEA=.04]. Figure 1 shows the path coefficients in the model. The relationship between service quality attributes and intention to recommend was significant ( $\beta=.22$ ,  $p<.01$ ) supporting H1. Accessibility did not show a significant effect on intention to recommend ( $\beta= -.01$ ,  $p>.05$ ), and thus, H2 was not supported. The path of

Table 2. Factor loadings, composite reliability and average variance extracted (AVE) for the constructs.

Factor/Item	Factor Loading	Z-value	Composite Reliability	AVE
<i>Service quality attributes</i>			.86	.56
Prestige	.772	36.786		
Innovative equipment	.662	29.845		
Pleasant environment	.728	33.849		
Capacity to solve problems	.732	34.096		
Good reputation	.830	40.907		
Proper facilities*				
Good change rooms*				
Design coherence in the space*				
Innovative services*				
<i>Well-being in life</i>			.90	.65
I am satisfied with my life	.875	44.953		
So far I have gotten the important things I want in life	.811	39.969		
In most ways my life is close to my ideal	.798	39.010		
The conditions of my life are excellent	.792	38.528		
If I could live my life over, I would change almost nothing	.737	34.790		
<i>Well-being in club</i>			.90	.65
I am satisfied with my club	.872	44.952		
I evaluate my experience at the club positively	.863	44.217		
I have achieved everything I've expected at the club	.815	40.505		
I consider myself a happy person in GHC	.761	36.597		
If I could go back I would not change club	.693	32.118		
<i>Accessibility</i>			.71	.56
Good location	.650	29.390		
Facility of access to the club	.827	24.434		

\* Item eliminated due to the lack of individual reliability.

well-being in a club was positive and significant ( $\beta = .54, p < .01$ ) providing support to H3. Finally, well-being in life showed a significant negative effect on recommendation ( $\beta = -.09, p < .01$ ), which is contrary to H4. Thus, H4 was not supported. Jointly, service quality attributes, accessibility, well-being in a club and well-being in life accounted for approximately 48% of the variance of intention to recommend ( $R^2 = .48$ ).

## Discussion

This research examined the effect of service quality attributes, accessibility, well-being in a club and well-being in life on members' intentions to recommend a fitness club. The analysis of this model makes a significant contribution to the literature

because the proposed relationships were simultaneously tested in an integrated model. The structural equation analysis indicated that well-being in a club was the strongest predictor of intention to recommend. This finding is in line with the idea that the way members feel in the club and their related achievements represent a cornerstone for guiding future behavioral intentions (Barros & Gonçalves, 2009). Consistently, some studies in the sport domain suggest that consumers' evaluation of their consumption experiences is pivotal to understand future actions (Biscaia, Correia, Rosado, Marôco, & Ross, 2012). Club members should be the core of managerial activities developed in fitness clubs. Thus, in order to increase members' well-being, fitness clubs could for example assess their levels of satisfaction with the club in a regular basis (e.g., interviews), provide a more personalized service (e.g., closer link with the gym instructors),

Table 3. Mean (M), standard deviation (SD) and correlations among the constructs.

Construct	M	SD	1	2	3	4	5
1. Service quality attributes	3.77	.68	1				
2. Accessibility	4.15	.75	.62**	1			
3. Well-being in Club	3.93	.83	.74**	.42**	1		
4. Well-being in Life	3.83	.83	.27**	.22**	.30**	1	
5. Recommendation*	3.99	.93	.59**	.33**	.67**	.14**	1

Note. \*\*  $p < .01$ .

\* Single-item measure.

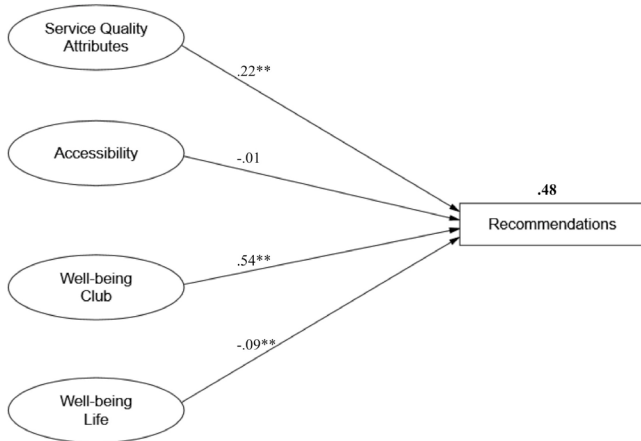


Figure 1. Estimated standardized effects for the structural model.

evaluate their commitment with the club (e.g., promotional offers to friends and family), and offer additional advantages when they achieve established goals (e.g., discounts in accessory services or voucher for products of associated firms).

The dimension of service quality attributes was the second strongest predictor, and this significant effect is consistent with previous studies in the fitness context (Chang & Chelladurai, 2003; Ferrand *et al.*, 2010). Based on the items of this study, fitness managers should keep innovating in terms of facilities and equipment and showing interest in solving member's needs. Good reputation and prestige of the club are also important aspects of the service quality attributes highlighting the role of brand status (Shank, 2002). Also, recent studies suggest that celebrity endorsement leads to favorable opinions about the endorsed brand (Spry, Pappu, & Cornwell, 2011). Thus, by engaging in deals with persons perceived as having a good image in the society, the prestige of the fitness centers may be reinforced among current members leading them to recommend the service. Notwithstanding, the findings indicate that service quality attributes plays a small role in enhancing recommendation, which is indicated by the small amount of variance (4.8%; cf Cohen, 1988) predicted by service quality attributes. It means that if well-being in a club is not strong among the members, these strategies will only have a marginal effect raising recommendation levels.

Well-being in life showed a negative effect on members' intention to recommend the club. Still, the low magnitude of this path indicates that the significant effect is only observed because of the large sample size and this relationship is meaningless (Cohen, 1988). That is, the path coefficient for well-being in life to intention to recommend (Figure 1) indicates that less than one per cent (0.81%) of the variance of intention to recommend is uniquely attributed to well-being in life. Thus, recommendations based on this relationship may lead to unnecessary financial efforts and be misleading for fitness clubs. With respect to the relationship between accessibility and recommendation, no significant effect was observed. The lack of significance may be due to the good accessibilities of the clubs from the study, as indicated by the mean values presented in Table 3. It is important to note that the five clubs where participants were recruited were located in central areas

of the cities (i.e., shopping centers or sport arenas) with good parking areas and convenient transportations. Thus, a good accessibility may be seen as pre-requisite associated to the fitness club, while other aspects related with the environment inside the club (well-being in a club and service quality attributes) tend to become more relevant to increase intentions to recommend. This finding may also be related with the fulfillment of expectations. That is, accessibility had a high mean score (Table 3), which may suggest that members' expectations are being fulfilled, yet this dimension did not show any predictive effect. However, it is possible that a low mean score in this dimension may have a negative impact on intentions to recommend, given that there is a tolerance zone between a consumer expectation and what he/she considers appropriate (Parasuraman, Zeithaml, & Berry, 1994).

In summary, findings from this study indicate that well-being in a club and service quality attributes have a positive effect on members' intention to recommend the fitness club. Accessibility shows no predictive effect, while well-being in life exhibits a negative effect but through a small effect size. The combined effects of the above mentioned variables explain almost half of the variance of recommendation, highlighting the role of consumers' positive evaluations of the consumption experiences.

### Limitation and future research

As with any study, there are limitations that should consider in future research. Firstly, the study sample consists of members from one single fitness network, and thus, the finding may prevent generalizations to other contexts. Additional samples from other fitness networks should be collected in future studies in order to continuously examine the appropriateness of the model. Secondly, this study was focused on understanding the antecedents of intention to recommend, yet other measures linked to behavioral intentions (e.g., renewal of membership status, intentions to buy additional services) have been suggested to increase adherence and profits of sport organizations (Ferrand *et al.*, 2010). Thus, future studies could include composite measures of behavioral intentions in order to better understand how to increase the link between members and fitness clubs. Thirdly, although accessibility showed good psychometric properties, only two items were used in the final model. Prior studies have used different scales to measure accessibilities in sport facilities (e.g., Greenwell *et al.*, 2002; Kelley & Turley, 2001). Thus, the addition of items regarding the time to reach the facility, the convenience of transportation or parking may contribute to better understanding the role of accessibility in future studies. Fourthly, the inclusion of additional measures proposed in the literature such as the interaction with employees (Alexandris *et al.*, 2004), secondary services (Howat, Crilley, Absher, & Milne, 1996), price (Ferrand *et al.*, 2010) or emotions during physical activities (Kang, Baggiozi, & Oh, 2011) may be important to improve our understanding of members' future actions towards fitness clubs. This will likely contribute to aid fitness managers at developing management strategies directed to retain members. In

conclusion, this study represents an initial effort to understand members' intentions to recommend fitness clubs. The findings and suggestions provide numerous opportunities to continue advancing the knowledge of how to improve management strategies in fitness clubs.

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