

*Original article (short paper)*

## The role of emotions on consumers' satisfaction within the fitness context

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**Abstract**—Previous studies have suggested that consumption-related emotions are important to understand post-purchase reactions. This study examines the relationship between fitness consumers' emotions and overall satisfaction. After an initial step of free-thought listing and content validity, followed by a pre-test, a survey was conducted among consumers of five different fitness centers ( $n=786$ ). The questionnaire included measures to assess positive and negative emotions, as well as overall satisfaction with the fitness center. The results gathered through a structural equation model provide evidence that negative emotion experienced by consumers impacts negatively overall satisfaction, while positive emotion have a positive effect on overall satisfaction. These findings suggest managerial implications, such as the need to collect consumers' perceptions of both tangible and intangible aspects of the services, listen costumers' opinions in a regular basis, and provide regular training to staff members, in order to identify the triggers of positive emotions and contribute to increased levels of overall satisfaction. Guidelines for future research within the fitness context are also suggested.

Keywords: emotions, satisfaction, fitness consumers, fitness centers

**Resumo**—“O papel das emoções na satisfação dos consumidores no contexto do fitness.” Estudos precedentes sugerem que as emoções relacionadas com o consumo são importantes para compreender as reações dos consumidores após a compra. Este estudo analisa a relação entre as emoções dos consumidores de *fitness* e satisfação global. Depois de uma etapa inicial de listagem de pensamento-livre e validade de conteúdo, seguido de um pré-teste, foi realizada uma pesquisa entre os consumidores de cinco centros de *fitness* diferentes ( $n = 786$ ). O questionário incluiu medidas para avaliar as emoções positivas e negativas, bem como a satisfação global com o centro de *fitness*. Os resultados obtidos através de um modelo de equações estruturais forneceram evidências de que as emoções negativas vivenciadas pelos consumidores impactam negativamente a satisfação global, enquanto as emoções positivas têm um efeito positivo sobre a satisfação global. Estes resultados sugerem implicações para os gestores, tais como a necessidade de recolher informação sobre a percepção dos consumidores dos aspetos tangíveis e intangíveis dos serviços, ouvir regularmente as opiniões dos consumidores e facultar formação regular aos colaboradores. Isto permitirá identificar os aspetos que desencadeiam emoções positivas e contribuir para o aumento dos níveis de satisfação global. Orientações para futuras pesquisas no contexto de *fitness* também são sugeridas.

Palavras-chave: emoções, satisfação, consumidores de *fitness*, centros de *fitness*

**Resumen**—“El papel de las emociones en la satisfacción de los consumidores en el contexto de fitness.” Investigaciones precedentes sugieren que las emociones relacionadas con el consumo son importantes para comprender las reacciones de los consumidores después de la compra de un producto o servicio. En el presente trabajo se propone el análisis de la relación entre las emociones de los consumidores de *fitness* y su satisfacción global. Tras una etapa inicial de estructuración del pensamiento libre y validez de contenido acompañada de un teste previo, se realizó una investigación entre los consumidores de cinco centros *fitness* diferentes ( $n = 786$ ). El cuestionario incluyó medidas para evaluar las emociones positivas y negativas, así como la satisfacción global con el centro de *fitness*. Los resultados obtenidos a través de un modelo de ecuaciones estructuradas, proporcionaron evidencias de que las emociones negativas experimentadas por los consumidores impactan negativamente sobre la satisfacción global, a la vez que las emociones positivas tienen un efecto positivo sobre la satisfacción global. Los mencionados resultados sugieren diversas implicaciones para los gestores, tales como la necesidad de recabar información sobre la percepción de los consumidores en lo referente a aspectos tangibles e intangibles de los servicios, monitorizar con regularidad las opiniones de los consumidores y facultar formación adecuada a sus colaboradores. A través de estas medidas pondrán identificarse los aspectos que desencadenan emociones

positivas en los consumidores y contribuir para un aumento de los niveles de satisfacción global. Por último, también se sugieren orientaciones para líneas de investigación futuras.

Palabras clave: emociones, satisfacción, consumidores de *fitness*, centros de *fitness*

## Introduction

Fitness activities are very well established in European countries, with the overall market of this industry appealing to millions of consumers. A recent report from International Health, Racquet & Sportsclub Association (IHRSA, 2013) refers that, altogether, the global health club industry currently generates an estimated \$75.7 billion in annual revenue from more than 150,000 clubs. Roughly 132 million members belong to health clubs worldwide. Similarly, the European fitness market generates about €25 billion in revenue from more than 48,000 clubs with nearly 44 million members (IHRSA, European Health Club Report, 2013). In Portugal, for example, according to *Associação de Empresas de Ginásios e Academias de Portugal* (AGAP, 2013), the fitness market generates roughly €290 million in revenue from more than 1200 clubs with nearly 635,000 members.

Achieving consumer satisfaction is a pivotal issue for sport organizations providing fitness-related services (Alexandris, Zahariadis, Tsorbatzoudis, & Grouios, 2004; Bodet, 2006; Ferrand, Robinson, & Valette-Florence, 2010; Theodorakis, Alexandris, Rodriguez, & Sarmento, 2004), given that satisfied consumers tend to repeat the consumption experience, which have a subsequent positive impact on the economic profits of an organization (Cronin, Brady, & Hult, 2000; Ferrand, & Vecchiattini, 2002; Yoshida & James, 2010). Cronin and Taylor (1992) refer to satisfaction as the consumer experience emerging as a reaction of the service encounters. The analysis of satisfaction can be undertaken either with a transaction-specific measure or as an overall level (Jones & Suh, 2000; Pedragosa & Correia, 2009). Transaction-specific satisfaction is related to a single service encounter, while overall satisfaction refers to the cumulative evaluation of all encounters between the consumer and the organization (Jones & Suh, 2000; Pedragosa & Correia, 2009). Previous studies suggest that the analysis of consumer satisfaction should take into account the emotions experienced during the consumption episodes (Biscaia, Correia, Rosado, Marôco, & Ross, 2012; Kang, Bagozzi, & Oh, 2011; Mano & Oliver, 1993; Martin, O'Neil, Hubbard, & Palmer, 2008; Oliver, 1997). Consistently, Oliver (1997) highlight that satisfaction requires experience-dependency and involves emotions, while Mano and Oliver (1993) point that consumption-related emotions represent an important antecedent to understand consumer satisfaction.

A great stream of research is focused on consumption-related emotions, but there is no agreement around the definition of the concept of emotion (Jones, Lane, Bray, Uphill, & Catlin, 2005; Scherer, 2005; Vallerand & Blanchard, 2000). Notwithstanding, it is commonly accepted that an emotion reflects a person's response to a stimulus event (Deci, 1980; Lazarus, 1991; Scherer, 2005) involving three components:

cognitive component (i.e., subjective experience) arousal component (i.e., physiological changes), and motivational component (i.e., action tendencies) (Robazza, Pellizzari, Bertollo, & Hanin, 2008). In addition, it is important to note that an emotion is different than affect, mood, or attitude (Jones *et al.*, 2005; Oatley & Jenkins, 1996). The term affect covers a set of mental processes including emotions, affects and moods (Rosenberg, 1998), while these three terms differ in several aspects. In concrete, emotions are often expressed physically through gestures, postures or facial features, and may induce a specific action. Also, emotions are shorter and more intense than moods and attitudes (Lane & Terry, 2000). Another distinction is that emotions arise as a response to a stimulus event, while moods are elicited by the effect of an emotions or general environmental conditions (Frijda, Kuipers, & ter Schure, 1989) and represent an enduring state. In turn, an attitude does not depend on arousal, which is a necessary condition for an emotion (Bagozzi, Gopinath, & Nyer, 1999).

The study of emotions in sport scenarios is a growing paradigm. There are studies focusing on the importance of emotions for understanding sport spectators' post-purchase reactions (e.g., Biscaia *et al.*, 2012; Madrigal, 2003; Martin *et al.*, 2008) or athletes' performance (e.g., Jones *et al.*, 2005; Uphill, Groom, & Jones, 2012). However, little is known about the emotions experienced by consumers of fitness centers and the associated consequences on their evaluation of the consumption experiences. Of the few studies focusing on the analysis emotions within the fitness context, Collishaw, Dyer and Boies (2008) examined the effects of instructors' facial expressions on consumers' satisfaction with the staff performance. Sabiston *et al.* (2010) studied how emotions such as body-related pride, shame and guilt, as well as motivational regulations and leisure-time physical activity are linked with women participation in fitness activities. These studies were important for the continued understanding of the role of emotions during fitness activities. Still, it is also important to understand the role of the emotions experienced by the consumers on their post-purchase reactions. Consistent with this idea, Kang *et al.* (2011) focused on emotions as antecedents of behavioral decisions in fitness centers. However, this study was conducted in a controlled environment and the authors did not test the actual emotions experienced by the members during their consumption episodes in fitness centers. This fact represents a limitation to understand the actual value of emotions among fitness centers consumers.

Emotions are frequently mentioned as antecedents of satisfaction (Biscaia *et al.*, 2012; Edvardsson, 2005; Zeelenberg & Pieters, 1999), and a wide range of emotions can emerge during consumption episodes. In line with this idea, Edvardsson (2005), and Otnes, Lowrey and Shrum (1997) mention that several positive and negative emotions can be experienced by the con-

sumers during service encounters. For example, Zeelenberg and Pieters (1999) refer that negative emotions can lead to consumer dissatisfaction. Contrarily, positive emotions tend to induce high levels of satisfaction among the consumers (Biscaia *et al.*, 2012; Madrigal 2003). For example, White (2010) conducted a study to understand the role of consumer's emotions on reactions towards service providers and noted that both positive and negative emotions have an impact on the satisfaction levels with service delivery, while Biscaia *et al.* (2012) highlight that joy is a significant predictor of sport spectators' satisfaction.

This tendency is observed in the general service-related literature (e.g., Wong, 2004), as well as on studies with sport spectators (e.g., Martin *et al.*, 2008). That way, it is crucial analyze the consumers' experiences with the service provider and to examine the simultaneous role of positive and negative emotions in the context of fitness centers. This will aid managers to increase satisfaction levels among their consumers, and thus, contributing to understand how to reinforce the link between fitness centers and consumers.

Based on previous literature about the role of consumption-related emotions on consumer satisfaction (e.g., Martin *et al.*, 2008; Wong, 2004), and remaining limitations of the studies with sport consumers (e.g., Kang *et al.*, 2011), the purpose of the current study was to examine the relationship between consumers' emotions and overall satisfaction within fitness centers. The option for overall satisfaction was due to the fact that it represents a better indicator of the continued performance of an organization (Bolton & Drew, 1991; Vilarés & Coelho, 2005). Thus, two hypotheses were established to guide this study. The first hypothesis (H1) suggests that consumers' overall satisfaction is negatively influenced by the negative emotions experienced during the consumption episodes. In turn, the second hypothesis (H2) suggests that positive emotions experienced by consumers during consumption episodes have a positive influence on their overall satisfaction levels.

## Method

This research was completed through a three-step multi-stage procedure and it was approved by the ethic committee of the researchers' institution (#28/2014). First, a group of respondents completed a free-thought listing procedure in order to identify the specific emotions that are held by consumers during their consumption episodes in their fitness centers, and ultimately, to formulate the initial items for the scale. The second step consisted of a pre-test followed by an exploratory factor analysis (EFA) on the initial instrument items in order to identify emotional constructs and their reliability. Finally, the third step evaluated the proposed model using structural equation modelling (SEM) in order to test the research hypotheses.

### *Step 1: Free-thought listing*

The choice to use a free-thought listing technique was based on the work of Ross, James and Vargas (2006), with the intent

of identifying the specific emotions that individuals experience during service delivery. With the support of the top manager of a high-sized fitness center located in Lisbon, Portugal, the thought-listing form was administered to 50 consumers randomly selected and who voluntarily accepted to participate under the guarantee of anonymity of their responses. The option for a random sample is often suggested in previous studies in social sciences due the difficulties in obtaining samples that are representative of the overall population (Marôco, 2010). The participants were given a form at the end of their training (i.e., group classes, exercise room and swimming pool-related activities) and asked to list the emotions experienced in regards to the just-finished physical activity in the fitness center. All forms distributed were self-administered by participants in the presence of two experienced interviewers. The form was completed at that moment and returned to the interviewer after completion. Of the 50 forms administered, four were not completed and were eliminated, leaving a total of 46 forms deemed usable for data analysis (92% effective response rate). Given the exploratory nature of this stage of the study, the 46 completed forms were appropriate for data further analysis allowing capturing 90-95% of consumer responses (Griffin & Hauser, 1992). More than half of the participants were male (68.1%). The majority were in the 31-40 age range (42.6%) with a mean age of 34 years old (SD=9.25). About one-third of the participants (29.8%) listed between two and five thoughts, while 35.1% listed six thoughts. The remaining participants listed between seven and 10 thoughts. The researchers, two coders (i.e. psychologists who work in sport environments), and the top manager of the fitness center conducted a content analysis on the specific thoughts provided in order to identify emotional constructs (i.e. relevance, meaning and similarity of participants' thoughts). Subsequently, a panel of three experts (two university professors of sports management and one of sport psychology) 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: Pre-test*

A pre-test was conducted with the consumers of the same fitness center mentioned in step 1, and using the items identified through analysis of the thoughts listed by respondents at the earlier step. The participants were randomly selected using the same procedure as in step 1, and no repeat participants were included. All items of the questionnaire were measured utilizing a 5-point Likert-type scale, anchored by 'not at all' (1) and 'extremely' (5), in order to assess how consumers felt in the fitness center. A total of 160 questionnaires were collected and questionnaires from individuals less than 16 years old, and those that were not fully completed were excluded. After these procedures, 147 surveys were deemed usable for data analysis (91.8% effective response rate). More than half of the participants were male (55.8%).

The mean age was 33 years-old ( $SD=11.49$ ), with about half of participants in the 16-30 age range (49.7%). The items of this survey were submitted to an exploratory factor analysis (EFA), using SPSS 20.0. The EFA method was conducted using the maximum likelihood with varimax rotation (Marôco, 2010). The Kaiser criterion (Kaiser, 1970) was used to decide appropriate number of factors to retain, and the factors retained were those with an eigenvalue above 1. This analysis was complemented by scree-plot test (Zwick & Velicer, 1982). Internal consistency was estimated through Cronbach's alpha coefficients, and values above .70 were considered indicative of good internal consistency (Marôco, 2010; Nunnally & Berstein, 1994).

### *Step 3: Hypotheses testing*

After the refinement derived from the pre-test, the final version of the questionnaire was tested including items to assess positive and negative emotions, and demographic questions. The items related to emotions were measured utilizing a 5-point Likert-type scale, anchored by 'not at all' (1) and 'extremely' (5). At this time, the questionnaire also included four items to assess consumer overall satisfaction based on Hennig-Thurau (2004), which proved to be reliable in other studies related to participatory sports (e.g., Javadein, Khanlari, & Estiri, 2008). These items were also measured using a 5-point Likert-type scale, but anchored by 'totally disagree' (1) and 'totally agree' (5). The sample was composed by consumers of five high-sized fitness centers located in Lisbon, Portugal. A meeting with each of the top managers of these fitness centers was carried out to show the final version of the questionnaire and to explain the goals of the study. All club managers accepted to participate in the study, and thus, the questionnaires were distributed among their consumers. The procedures were similar to the previous steps of the study. At this time, a total of 1000 surveys were distributed and we used the same criteria described in step 2 for data screening (i.e. elimination of questionnaires from individuals less than 16 years old, and incomplete questionnaires). After these procedures, 786 were deemed usable for data analysis. Similar to the sample in step 2, more than half were male (57.1%) with 42.9% of female participants. The mean age was 34 years-old ( $SD=13.19$ ), with 47.85% in the 16-30 age bracket.

Data were submitted to a two-step maximum likelihood structural equation model (SEM) using AMOS 20.0 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; Marôco, 2010). Convergent validity was evaluated through average variance extracted (AVE). Complementary, discriminant validity was assessed by comparing the AVE value for each construct with the squared correlations between the respective constructs (Fornell & Larcker, 1981). Second, the SEM was estimated to 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), Tucker-Lewis Index (TLI), and 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.

## **Results**

### *Step 1: Free-thought listing*

The respondents provided a total of 288 individual thoughts regarding the specific emotions experienced during service delivery. The two coders identified a list of 27 different items based on the thoughts provided by the respondents. Next, these items were analyzed through discussion among the two coders, the researchers, and the top manager of the fitness center. At this time, no changes were included. The large discrepancy between the number of thoughts provided by the respondents and the number of items selected derived from the multiple listings of the same thought. For example, a total of 40 respondents listed the specific term "excited". Subsequently, the panel of experts provided suggestion to eliminate 5 items deemed irrelevant in the study context and to maintain the remaining items in their original form. The suggestions were accepted and following this procedure, the items were randomly placed on a questionnaire for the pre-test. This questionnaire included 22 items to assess consumer emotions and 2 demographic questions.

### *Step 2: Pre-test*

The results of the EFA using the Kaiser criterion and the scree-plot test allowed identifying 2 factors with eigenvalues greater than 1.0. These two factors explained 63.38% of the total variance in the factor model. Additionally, the KMO value (.90) and the Bartlett's test of sphericity ( $p < .01$ ) suggested the appropriateness of the factor analysis. The two factors identified through the EFA are related with positive emotion and negative emotion, which is consistent with previous studies in sport scenarios using a valence-based approach to examine the consequences of consumers' emotions (e.g., Kang, *et al.*, 2011; Madrigal, 2003). The items with factor loadings greater than the conservative threshold of .70 (Fornell & Larcker, 1981) were selected in order to ensure reliability and further parsimony of the model (Table 1). After this scale refinement, the Cronbach's alpha coefficients were above the .70 criterion (Hair *et al.*, 2009), with .85 for the positive emotion construct and .95 for the negative emotion construct. These values provided evidence of internal consistency in both factors. The revised model including the final items to assess emotions experienced by consumers during service delivery is presented in Table 1.



Table 1. Results of the exploratory factor analysis.

Factor/Item	Factor Loading	Eigenvalue	Cumulative %	$\alpha$
<i>Negative emotion</i>		9.57	43.49	.95
Frightened	.91			
Nervous	.82			
Wobbly	.88			
Regretful	.88			
Angry	.90			
Repulsion	.87			
Abandoned	.86			
Unsettled*	.61			
Tormented*	.56			
Scared*	.66			
Guilty*	.64			
Lonely*	.59			
<i>Positive emotion</i>		4.38	63.38%	.85
Enthusiastic	.76			
Excited	.70			
Inspired	.72			
Proud	.70			
Delighted	.79			
Hearty	.74			
Interested*	.67			
Determined*	.60			
Active*	.59			
Surprised*	.63			

\* Item eliminated after scale refinement.

### Step 3: Hypotheses testing

**Measurement model.** Table 2 shows the results of the CFA including negative emotion, positive emotion, and overall satisfaction. All factor loadings were above the recommended cut-off point of .50 (Hair *et al.*, 2009), ranging from .60 to .88. Additionally, the *z*-values ranged from 17.34 to 30.92. These results indicate that each item loaded significantly on its construct. Composite reliability values ranged from .82 (overall satisfaction) to .95 (negative emotion) indicating the constructs

were reliable. The AVE values were above the .50 criterion, ranging from .51 to .72 and providing evidence of convergence validity (Fornell & Larcker, 1981). Descriptive statistics and correlations among constructs are presented in Table 3. The mean score for the negative emotion was 1.24 (SD=.67), while the positive emotions had a mean score of 3.18 (SD=.98). In addition, the mean score of overall satisfaction was 4.30 (SD=.77). 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, 1981).

Table 2. Factor loadings, Z-values, composite reliability (CR), and average variance extracted (AVE).

Constructs	Factor loading	Z-value	CR	AVE
<i>Negative Emotion</i>			.95	.72
Frightened	.86	30.10		
Nervous	.83	28.08		
Wobbly	.88	30.92		
Regretful	.85	29.49		
Angry	.82	27.65		
Repulsion	.87	30.49		
Abandoned	.84	29.04		
<i>Positive Emotion</i>			.86	.51
Enthusiastic	.73	22.70		
Excited	.76	23.81		
Inspired	.74	23.12		
Proud	.69	21.08		
Delighted	.77	24.08		
Hearty	.60	17.34		
<i>Overall Satisfaction</i>	.71	20.91	.82	.53
I am fully satisfied with my fitness center	.76	22.92		
My fitness center always fulfills my expectations	.70	20.37		
My experiences with my fitness center are excellent	.74	22.13		
My fitness center has never disappointed me so far				

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

Construct	M	SD	Correlation matrix		
			1	2	3
1. Negative Emotion	1.24	.67	1.00		
2. Positive Emotion	3.18	.98	.14	1.00	
3. Overall Satisfaction	4.30	.77	-.13	.56	1.00

In addition, the results of the measurement model indicated an acceptable fit to the data [ $\chi^2(116) = 679.71$  ( $p < .001$ ),  $\chi^2/df = 5.86$ , CFI = .93, GFI = .91, TLI = .92, RMSEA = .08 (CI = .073, .084)]. The  $\chi^2$  statistic was significant, and the ratio of  $\chi^2$  to its degree of freedom was above the usually accepted range of 3.0 (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 ( $n=786$ ) and the  $\chi^2/df$  just evaluates the model *per se* (Arbuckle, 2008; Marôco, 2010). The CFI, GFI, and TLI values were greater than the .90 criteria suggesting good fit. Additionally, RMSEA was indicative of an acceptable 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 [ $\chi^2(130) = 720.23$  ( $p < .001$ ),  $\chi^2/df = 5.40$ , CFI = .93, GFI = .91, TLI = .92, RMSEA = .08 (CI = .067, .077)]. Figure 1 shows the path coefficients in the model. The negative emotion showed a significant negative effect on overall satisfaction ( $\beta = -.21$ ,  $p < .001$ ) supporting H1. On the contrary, positive emotion showed a positive significant effect on overall satisfaction ( $\beta = .58$ ,  $p < .001$ ), and thus, H2 was supported. Jointly, the positive emotion and the negative emotions accounted for approximately 35% of the variance of overall satisfaction ( $R^2 = .35$ ).

## Discussion and conclusions

This research examined role of consumers' emotions on their overall satisfaction with the fitness centers. Given the lack of empirical research assessing consumer emotions in the

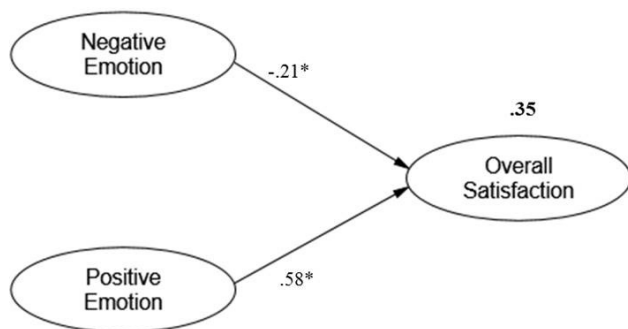


Figure 1. Estimated standardized direct effects for the structural model.  
Note: \* $p < .001$ .

context of fitness centers, this study extends previous literature by contributing to the understanding of the effects of consumers' emotions during service delivery on their post-purchase reactions. The results of the factorial structure obtained for the measurement model are consistent with previous studies indicating that consumption episodes can trigger both positive and negative emotions among consumers (Otnes *et al.*, 1997; White, 2010; Zeelenberg & Pieters, 2004). Complementarily, positive and negative emotions showed different roles on post-purchase reactions highlight the idea that service-related emotions can either damage or enhance the consumer's evaluation of the service provided by sport organizations (Biscaia *et al.*, 2012; Collishaw *et al.*, 2008; Javadein *et al.*, 2008).

The analysis of the structural model indicates that the negative emotion had a significant negative impact on overall satisfaction, which is consistent with previous literature (Biscaia *et al.*, 2012; Mano & Oliver, 1993; White, 2010). In this sense, fitness managers should try to minimize negative emotions during consumption experiences. Previous studies have suggested that negative emotions can be triggered by consumers' subjective experiences perceived as being unfavorable (Bagozzi *et al.*, 1999; Zeelenberg & Pieters, 2004). In the fitness context, these negative subjective experiences may be related to the consumers' perceptions of both tangible and intangible aspects of the services (Dave, Sam, & Duncan, 2005). For example, schedules for group classes perceived to be inappropriate, or a bad opinion of the ambiance-related aspects such as the music, temperature, comfort or cleanliness of the facilities may trigger negative emotions (Koenigstorfer, Groeppel-Klein, & Kunkel, 2010; Pedragosa & Correia, 2009). Similarly, the interaction with frontline employees (Wong, 2004), the interaction with other consumers (Kuenzel & Yassim, 2007), and peripheral services (e.g., snack bar, SPA, hairdresser, baby-sitter, parking, car-washer) may also generate unfavorable emotional reactions (Chelladurai & Chang, 2000). In this sense, it could be argued that by improving peripheral services and the ambience of the fitness centers, managers will potentially improve consumption-related emotions (Biscaia *et al.*, 2012; Collishaw *et al.*, 2008).

On the other hand, findings of this study showed that the positive emotion have a positive effect on overall satisfaction suggesting that favorable emotional reactions are important to consumers' overall evaluation of the services (Madrigal, 2003; Wong, 2004). Numerous studies (e.g., Lazarus, 2000; Kwak, Kim, & Hirt, 2011) have highlighted that context analysis is pivotal when studying emotions. Positive emotions are often derived from consumer's gratifying experiences with the service provider (Focht, 2011; Wong, 2004) meaning that peripheral services and the ambience of the service facilities may also trigger positive emotional reactions among consumers (Koe-

nigstorfer *et al.*, 2010). Notwithstanding, extant studies have also suggested that positive emotions such as joy or excitement are related to the positive expectations of obtaining previously set goals (Jones *et al.*, 2005; Lazarus, 2000). Thus, it could be argued that good expectations about the quality of the core product are important to trigger favorable emotional reactions, and thus increasing overall satisfaction levels among consumers (Madrigal, 2003). This highlights the importance of having a wide range of fitness classes and competent fitness instructors, as well as always being in accordance with the fitness trends (e.g., Zumba, Cross Fit and other group classes) in order to increase consumer satisfaction. Achieving costumers' satisfaction is vital, because satisfied consumers are often likely to repeat the consumption experiences (Biscaia, Correia, Yoshida, Rosado, & Marôco, 2013; Cronin & Taylor, 1992; Leeweun, Quick, & Daniel, 2002), and thus, fitness managers should work hard to provide gratifying experiences to the consumers. For example, aspects such as collecting regular data about consumers' opinion of their experiences with the fitness center may prove to be an important managerial action for identifying the triggers positive emotions, as well as negative emotions. The use of communication channels such as informal interviews, online suggestion boxes as well as inside the facilities may also be important in order to collect real time data regarding consumers' experiences. Complementarily, this type of information could be used to provide regular training to all staff members, and thus contributing to increase consumers' subjective experiences inside the fitness centers with the subsequent advantages of raising their satisfaction levels.

In summary, findings from this study indicate that negative emotion has a negative impact on consumer overall satisfaction with the fitness centers, while positive emotion has a significant positive effect for enhancing the level of overall satisfaction. These findings highlight the emotional value of the services provided by fitness centers (Kang *et al.*, 2011; Varghese, 2014) and should be take into account by club managers when designing strategies for reinforce the link with current consumers.

### Limitations and future research

As with any research, there are limitations in this study that should be taking into account for future investigations. First, data were collected in five fitness centers, but from one single city and, thus, the findings may lack generalizability to other contexts. Additional samples from other regions should be collected in order to further understand the role of emotions in fitness scenarios. Second, the relationship between emotions and overall satisfaction was based on a valence-based approach (Zeelenberger & Pieters, 2004). That is, emotions were summed up in one single currency according to its positive or negative valence. Although this is a parsimonious approach, previous studies refer that a great amount of positive and negative emotions can be experienced during a consumption episode (Lerner & Keltner, 2000; Otnes *et al.*, 1997). Thus, future research could build on this model and focus on the contribution of each specific emotion from each valence on consumer satisfaction. For

example, studying the role of specific emotions with positive valence that were previously mentioned in the service-related literature such as joy, excitement and love (Biscaia *et al.*, 2012; Madrigal, 2003; Richins, 1997), as well as specific negative emotions such as disappointment, regret, anger, worry and anxiety (Richins, 1997; Zeelenberger & Pieters, 1999) may represent an important step for a deeper understanding of the relationship between emotions and overall satisfaction within fitness contexts. Third, previous literature suggests that emotions coexist alongside with cognitive judgments of the service, and thus are essential for understanding consumer's experiences with the service provider (Edvardsson, 2005; Wong, 2004). In this sense, additional research could examine the simultaneous role of consumer emotions and their perceptions of service quality as a way to improve the understanding of overall satisfaction levels. Fourth, while the focus of this study was to examine the effect of emotions on overall satisfaction, future research could also investigate the link with other outcome variables such as behavioral intentions (Martin *et al.*, 2008; Pedragosa & Correia, 2009; Wong, 2004). Finally, although this study was focused on the emotions experienced by fitness consumers, controlling variables that could influence these emotions were not included. In the sporting event context, Koenigstorfer *et al.* (2010) suggest three types of stimuli for emotional reactions: organizer-induced, consumer-induced, and game induced. This approach may represent an interesting basis for future studies, given that by understanding the stimuli that cause consumer emotions, fitness managers will improve the ability to better design the service delivery.

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