
Complaint behaviour by third parties: exploring service quality, customer satisfaction and word-of-mouth in health clubs

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Abstract: In recent years, in the services market, we have witnessed a growing importance of concepts such as service quality, satisfaction, word-of-mouth and complaint behaviour. The proposed conceptual model aimed to examine the existing relationships among these dimensions in the context of health clubs. Data was collected through questionnaires and analysed using structural equations modelling (SEM) to simultaneously test all the relationships in the model. Overall, the results suggest that quality is assessed through staff, programme and facilities evaluation, and that service quality is crucial for both satisfaction and word-of-mouth generation. Customers do not complain to third parties, i.e., to external parties that are not involved, but have some influence on the service provider even when low quality is delivered or they are dissatisfied.

Keywords: health clubs; service quality; word-of-mouth; WOM; satisfaction; complaint behaviour.

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1 Introduction

Leisure and sports are among the biggest social events in the world and their practice brings uncountable benefits. The increase of competitiveness among service providers has made today's customers more demanding with service quality and less tolerant with the provision of poor services. In highly competitive service sectors, delivering exceptional services is a prerequisite for the survival and success of an organisation (Parasuraman et al., 1985). If satisfaction, loyalty and commitment have been extensively used as customer retention measures in goods as well as in services, dissatisfaction and complaint behaviour have not been deeply studied. For example, the antecedents of complaint behaviour have been addressed in the telecommunications and home utilities services (de Matos and Leis, 2013), in the hospitality services (Lee et al., 2011; Hussain et al., 2015), in online services (Bach and Kim, 2012; Matute-Vallejo et al., 2015), in the airlines industry (Chow, 2014) and in restaurants (Moliner-Velázquez et al., 2008a, 2008b, 2008c). However, according to our knowledge, they have not been studied in health clubs (although customer retention and complaint behaviour are intrinsically related to health club management), as they are strongly influenced by customer (dis)satisfaction. In health clubs, dissatisfaction is not uncommon; even when customers are satisfied, they can still leave the club for several reasons. Clearly, dissatisfaction is an under-researched topic when compared with satisfaction in services management in general, especially in sports and fitness services.

When customers decide to abandon the health clubs they attend, a loss in the client base and the loss of the opportunity to solve the problem that created the dissatisfaction are some of the consequences health clubs must face. Moreover, not all dissatisfied customers complain to the service provider (Colgate and Hedge, 2001). Beyond any doubt, health clubs need to develop a more relational perspective, not only to increase their customer's commitment in order to survive, but also to analyse customers' complaint behaviour so that a product/service failure can be promptly addressed, and customer dissatisfaction diminished. Also, the negative word-of-mouth (WOM) created by dissatisfied customers who do not complain can be worse, as they may negatively influence a great number of people and customers (Colgate and Hedge, 2001; McAllister and Erffmeyer, 2003). Regardless of the negative consequences an unfavourable WOM may have on business in general, the concept has been addressed in financial services (Eisingerich et al., 2014), online services (Matute-Vallejo et al., 2015; Bach and Kim, 2012) and hospitality services (Hudson et al., 2015; Kim et al., 2009; Macintosh, 2007). Nevertheless, WOM has not been studied in health clubs so far.

Complaint behaviour is an interesting field in the consumer behaviour research if one wishes to broaden the theoretical framework of the concept and origins of complaint behaviour in health clubs, as well as to address its relationship with service quality and satisfaction. Complaint behaviour is normally associated with the outcome of

dissatisfaction (Day, 1984; Crié, 2001; Singh, 1988). In general, most of the studies identify three groups of responses (Hirschman, 1970; Singh, 1988): public response, private response and third parties' complaint, all of which have different consequences for service providers. Private actions include decisions to stop further purchases, warnings to friends, or ceasing to patronise a retail outlet. Public responses comprise redress-seeking efforts towards the seller. Third party response refers to complaints expressed to external parties that are not directly involved with the offending service provider but have some influence/legal consequences (e.g., taking legal actions or complaining to external institutions or associations).

There is a myriad of variables proposed as antecedents of dissatisfaction and most of the studies have partially identified the origin of complaint behaviour (Morel et al., 1997; Moliner-Velázquez et al., 2008a, 2008b; Kolodinsky, 1995).

While some studies have addressed complaint behaviour in several different provisions of services, no concrete study has been carried out in health clubs, which are quite specific when compared with the provision of services in the retailing industry, in airlines services, in restaurants or in e-services, due to the unique relational involvement and regular participation of health club customers.

Health clubs are different when compared with the aforementioned services owing to their high degree of contact with service employees, who play a key role in the creation of strong interpersonal relationships with clients. Moreover, according to the service quality assessment scale (SQAS) (Lam et al., 2005) the six dimensions of service quality – staff, programme, locker room, physical facility, workout facility and child care – are quite intensive on what pertains to contact service employee. Although Lam et al. (2005) developed this instrument for evaluating service quality of health clubs, little is known regarding how satisfaction, WOM and complaint behaviour are influenced by service quality in health club environments.

Most of the existing research examines inequality, dissatisfaction levels, attributes, negative affection or the importance of the situation as antecedents of complaint behaviour, setting aside the service quality/customer satisfaction relationship and its influence on complaint behaviour or WOM. Accordingly, by addressing customers directly from a health club, this research has as its main focus to examine the relationship between service quality, satisfaction, WOM generation and third parties complaint behaviour. Using a scale developed for health and fitness clubs, this study aims to:

- understand which service quality factors are the most relevant to customers
- identify the impact of service quality on satisfaction and WOM generation
- evaluate the impact of satisfaction on WOM
- measure the impact of satisfaction and loyalty on complaint behaviour to third parties.

The article is organised as follows. After this introduction, the second section presents the literature review that substantiates the assumptions underlying the various relationships. Section 3 presents the hypotheses developed and the proposed conceptual model. Subsequently, in the fourth section, the research methodology is described, as well as the scales used, and the sample data. The results of the confirmatory factor analysis and the

estimated parameters for the model are presented in Section 5, followed by the results and implications which are discussed in Section 6. Finally, the conclusions and the limitations and future research directions are covered in section seven.

2 Theoretical background

2.1 Service quality – SQAS

Service quality has been recognised as one of the main factors that affects the retention of a customer and leads to the profitability of an organisation in the long run (Zeithaml et al., 1996). Parasuraman et al. (1988) defined service quality as a measure of discrepancy between the expectations or desires of the customer and their perceptions. Consumers form expectations based on past experiences, on WOM and on marketing communication efforts made by the company (Boulding et al., 1993). These expectations work as a reference when assessing the consumption experience. In this context, service quality is determined by the customer's overall impression of the performance of the service, the delivery system and the overall consumer experience (Ko and Pastore, 2004).

In a study conducted on health clubs, Afthinos et al. (2005) developed a rating of expectations for the relative importance given by customers to the quality of each service attribute, concluding that the most desirable aspects of the service are: modern facilities, employees' attitudes and skills, the offer of membership and price packages, the programmes, the hours of operation, the safety of the personal goods and the provision of a consistent service. Papadimitriou and Karteroliotis (2000) indicate that the tangible elements of the service and the personal attributes are crucial in providing a fitness service. Alexandris et al. (2001) concluded that the physical environment is the service quality dimension with the highest impact on satisfaction. The strong relationship between the quality of the physical environment and satisfaction in private fitness clubs is explained by the high expectations that customers have regarding the physical elements of the service. For Alexandris et al. (2001), it is also important for customers to rely on the scientific knowledge of their trainers, as their behaviour and attitude largely determine the customer experience.

Parasuraman et al. (1985, 1988) developed a model for assessing the quality of service known as SERVQUAL, which has been used by many scholars to measure service quality in sports and fitness companies. Furthermore, this tool has also served as basis for the development of new models and scales to evaluate service quality, such as the SQAS developed by Lam et al. (2005). The SQAS is based on six dimensions: staff, program, locker room, physical facility, workout facility and child care; nevertheless, they can be grouped into three main factors (i.e., personnel, programme and facility). Moreira and da Silva (2015) used four dimensions (staff, medical services, waiting rooms and consulting rooms) in the provision of healthcare services. For this research, we used the SQAS because it was an instrument which was purposely developed to evaluate the service quality in health-fitness clubs and thus stands as a more comprehensive scale than SERVQUAL.

Levesque and McDougall (2000) indicate that service quality and satisfaction are distinct constructs, nevertheless, there is a causal relationship between the two and the perception of service quality affects the sense of satisfaction, which consequently affects

the intentions of future behaviour. In the sports and leisure context, Murray and Howat (2002) claim service quality to be an antecedent of satisfaction.

Hussain et al. (2015), Moreira and da Silva (2015), Chow (2014), Lee et al. (2011) and Heskett (2002) found a strong relationship between service quality and satisfaction. In a different setting Macintosh (2007) also found a positive relation between relationship quality and satisfaction with the firm. Heskett (2002) also supports that service quality and loyalty have a negative effect on the willingness to change service provider. Headley and Miller (1993) verified that a high perception of service quality generates favourable intentions (repeated purchase and use of complementary services) and on the other hand, a low perceived service quality leads to unfavourable intentions (complaint, exchange and boycott).

2.2 Satisfaction

Hallowell et al. (1996) defined satisfaction as the customer's reaction to the state of fulfilment of its expectations and needs, i.e., the customer judgment about the service quality of the products provided. Satisfaction is the result of a process in which meeting or exceeding customer expectations determines satisfaction or dissatisfaction (Oliver, 1980). Before the 1990s, the measure for satisfaction focused primarily on a particular product or service, defined as a post-choice evaluation opinion regarding a specific transaction (Oliver, 1980). More recently, a wider concept emerged, assuming satisfaction as the sum of all experiences between the customer and a product or company. Based on this perspective, satisfaction is viewed as a cumulative evaluation of the purchase and consumption experience (Anderson et al., 1994). Oliver (1999) argues that overall satisfaction has a better performance in predicting the effect on loyalty when compared with the satisfaction of a specific transaction. Meeting customer expectations and satisfying their needs are essential elements in an organisation's efforts to retain customers and gain competitive advantages over competitors (Parasuraman et al., 1988). Satisfied customers tend to use the services more often (Bolton and Lemon, 1999), have a stronger intention to buy back, and recommend the services to their acquaintances (Zeithaml et al., 1996; Kim et al., 2009; Bodet, 2008). Furthermore, greater satisfaction among customers increases customer tolerance to higher prices (Reichheld and Sasser, 1990), generates a better reputation for the company and decreases the costs of both attracting new customers and of the resources required to manage complaints (Parasuraman et al., 1988). The recognition of the existence of a positive relationship among satisfaction, retention and repurchase intentions emphasises the importance of identifying and explaining the conditions in which satisfaction is developed (Jones and Suh, 2000).

Hussain et al. (2015) found a positive relation between service quality and customer satisfaction although this relationship was mediated by the customer perceived value. However, they have not found any relationship between service quality and customer satisfaction with customers' complaints.

Macintosh (2007) claims that interpersonal relationship quality and employees predisposed to be customer-oriented are very important for customers to be satisfied. Moreover, he also claims that there is a positive link between satisfied customers and both loyalty and positive WOM about the firm. When organisations implement a competent post-service able to successfully resolve issues, customers feel trust and increase their commitment to the relationship, which may lead to positive evaluation of

service and to positive WOM (Kim et al., 2009). Customers' complaint behaviour is a field that handles and analyses all aspects involved in the customer reaction to a product failure and consequent dissatisfaction. Previous research shows that dissatisfaction leads to a behaviour complaint (Singh, 1988; Zeithaml et al., 1996). Singh (1988) identified that dissatisfaction with a certain purchase can cause complaint behaviour, adding that this process triggers multiple customer responses. Several customer complaint behaviours are antagonistic but can occur simultaneously.

Eisingerich et al. (2014) claim that customer satisfaction is very important for sales performance. They also found that satisfaction is an important antecedent of (positive) WOM, which in turn mediates the relationship between customer satisfaction and sales performance.

2.3 Word-of-mouth

Loyalty is recognised as an important strategy for the success of any organisation. Oliver (1999, p.34) defines loyalty as "a deeply held commitment to rebuy or repatronize a preferred product or service consistently in the future, thereby, causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behaviour". According to Oliver (1999), loyalty can be understood as measured by two independent dimensions, behavioural and attitudinal loyalty. Behavioural loyalty is related with the customer frequency and reuse of the same provider again (Chiou and Droge, 2006). Park and Kim (2000) consider the behavioural loyalty as the degree to which the customer purchases a service or programme repeatedly. The most common measures for behavioural loyalty are: the repetition of purchase, the frequency of use, the length of participation and duration of the membership (Bolton et al., 2000).

Attitudinal loyalty is the degree or willingness to commit oneself to a brand and its unique set of values (Chiou and Droge, 2006).

The most usual measures associated with attitudinal loyalty are the generation of WOM (Bowen and Shoemaker, 1998; Zeithaml et al., 1996), the recommendation of the service to others, the encouragement of friends and family to use the service (Zeithaml et al., 1996), the resistance to the attempts of competitors with lower prices and a clear intention to continue to reuse the service in the future (Bowen and Shoemaker, 1998). Zeithaml et al. (1996) developed a model based on four behavioural intentions that a customer can have, namely: repurchase intention, WOM, price sensitiveness and complaint behaviour. Customers with a low loyalty and a high proneness to complain are the least likely to return, to recommend the service to others and to generate a positive WOM (Namkung et al., 2010). According to Ashley and Varki (2009), customers with a high attitudinal loyalty make more complaints directly to the company management and usually generate less negative WOM after a service failure.

Hudson et al. (2015) analysed how brand relationship quality influenced WOM as a mediator between emotional attachment and WOM. They concluded that although brand relationship quality is important for positive WOM, it is the brand emotional attachment that customers develop via social media that supports the strong brand relationship with positive WOM.

Eisingerich et al. (2014) found that customer satisfaction, though important to drive sales in organisation, also needs to encourage positive WOM as well as customer

participation to increase future sales. This is in line with what Macintosh (2007) claims: high levels of positive WOM only occur when the level of relationship quality is high; however, high relationship quality does not guarantee positive WOM. As such, service firms need to be aware that stronger relationships can only be established at the interpersonal level where contact service employees are key players, which is the case in health clubs.

In online services, Matute-Vallejo et al. (2015) found that eWOM influences customer trust, customer perceived utility and the attitude towards online sellers differently.

Kandampully et al. (2015) focusing on the concept of loyalty, identify the factors that influence its development in the service industry. They clearly represent (through a customer loyalty pyramid) how quality and satisfaction are intertwined in the generation of an affective commitment that is capable of enticing customers who are more likely to repurchase and spread positive WOM than non-satisfied customers.

2.4 Complaint behaviour

Complaint behaviour research is still a non-consensual field in the marketing literature. While some authors argue that complaint behaviour is a loyalty dimension (Bloemer et al., 1999; Zeithaml et al., 1996) others suggest that it is a consequence of it (Davidow, 2000; Dick and Basu, 1994). Customer complaint behaviour is “a set of all behavioural and non-behavioural responses which involve communicating something negative regarding a purchase episode and is triggered by perceived dissatisfaction with that episode” [Singh and Howell, (1985), p.42]. Jacoby and Jaccard (1981, p.6) define complaint behaviour as an “action taken by an individual which involves communicating something negative regarding a product or service either to the firm manufacturing or marketing that product or service or to some third-party organizational entity”.

Hirschman (1970) classifies consumer reactions to dissatisfaction as exit, voice or loyalty. Thus, when customers experience a situation of dissatisfaction, the answers can be: switch to a new service provider (exit), attempt to solve the problem by complaining (voice) or stay with the same provider hoping things will improve (loyalty). According to the typology developed by Singh (1988), customer response to dissatisfaction can be grouped into three types: voice complaint behaviour, private complaint behaviour and third parties' complaint behaviour. Voice complaints include complaints to the service provider. Private complaints include WOM comments and switch to a new service provider. Finally, third parties' complaints represent complaints directed towards individuals or external organisations outside the customer social circle that are not directly involved with the situation. McAllister and Erffmeyer (2003) argue that the effort and involvement associated with complaints to third parties typically indicate a high level of dissatisfaction, answer inability from the company, or related factors that could severely threaten the quality and marketing relationship. However, a complaint behaviour involving external sources has less negative consequences than the ones involving internal sources, because the company becomes aware of the problem that led to customer dissatisfaction and has the opportunity to solve the source of dissatisfaction.

Understanding the customer's complaint behaviour involves the identification of the causes in order to discover the types of complaints requested by customers. This can turn dissatisfied customers into satisfied and loyal customers if the company handles complaints appropriately and effectively. Davidow and Dacin (1997) claim that the worst

possible customer behaviour for the organisation is the one that does not involve communication to external sources.

Moliner-Velázquez et al. (2008b) developed a scale to analyse the determinants of complaint behaviour having as antecedents the level of dissatisfaction, the probability of success of the complaint, the importance of the situation and the attitudes towards the complaint. Moliner-Velázquez et al. (2008a) analysed individuals who have experimented an unsatisfactory situation in restaurants and analysed the complaint, the complaint responses, third party responses and private responses. Finally, Moliner-Velázquez et al. (2008c) implemented a hierarchical segmentation to analyse how different complaint behaviours are. They found that complaint responses and private responses are formed differently.

Lee et al. (2011) found a negative relationship between service satisfaction and service complaints. They also verified that service satisfaction was not a significant antecedent to service loyalty, which was instead strongly influenced by a low level of complaints.

de Matos and Leis (2013) were among the first to analyse the antecedents of complaint behaviour in consumer services at international level. They conclude that customers with low levels of satisfaction are more likely to be satisfied, but also to complain to third parties and to friends and relatives.

Based on the presented review, one can conclude that there are hardly any studies examining the relationship between customer satisfaction, WOM and customer complaints in the provision of services in health clubs.

3 Hypotheses and structural model

As already mentioned, most of the studies analysing complaint behaviour tend to partially adapt its model to the type of behaviour under analysis and also to the type of service under assessment. As such, in this study third parties' complaint is used as a proxy of complaint behaviour. This stems from the relational perspective that the majority of health clubs implement to provide their services to their customers. Furthermore, attitudinal loyalty could be used as a proxy for word-of-mouth due to the willingness of someone to commit him/herself to the values associated with a service provider. Accordingly, we decided to remove the voice component of the complaint behaviour and instead use a word-of-mouth variable associated with the behavioural loyalty component.

Owing to the relational nature of the service provided by health clubs, we propose a multidimensional construct for service quality as an antecedent of both customer satisfaction and word-of-mouth, derived from Lam et al. (2005) and Moreira and da Silva (2015).

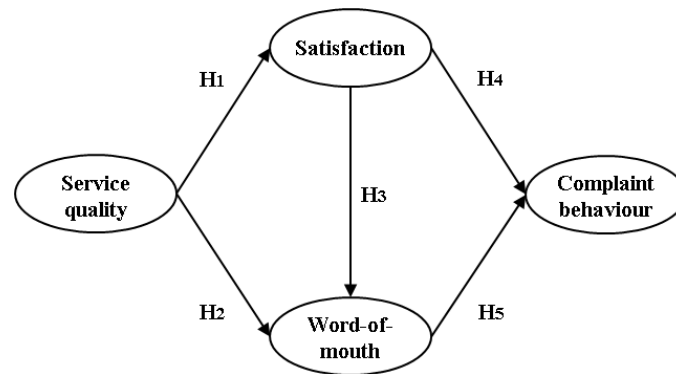
Based on the literature review discussed in the previous section, it is possible to formulate the hypotheses detailed below:

- H₁ There will be a positive relationship between service quality and customer satisfaction.
- H₂ There will be a positive relationship between service quality and the generation of word-of-mouth.

- H₃ There will be a positive relationship between customer satisfaction and the generation of word-of-mouth.
- H₄ There will be a negative relationship between customer satisfaction and customer complaint behaviours to third parties.
- H₅ There will be a negative relationship between customers' word-of-mouth and their complaint behaviour to third parties.

We establish a research model suggesting five primary links between all the constructs involved, as shown in Figure 1. The first and second links, (H₁) and (H₂), suggest that service quality is related with both satisfaction and WOM generation. The third and fourth links, (H₃) and (H₄), propose the separate effect of satisfaction on WOM and complaint behaviour respectively. Finally, the fifth link (H₅) hypothesises that WOM generation is an antecedent of the complaint behaviour.

Figure 1 Research model



4 Methodology

4.1 Measures

Developing a valid and reliable questionnaire is crucial for reducing measurement errors, which is the discrepancy between the respondents' attributes and their survey responses (Groves, 1987). While validity means that we are measuring what we claim, reliability is concerned with the consistency of the measure. In this research, the difficulty of developing a valid and reliable questionnaire was overcome by resorting to previously tested and validated scales.

The model was tested using a questionnaire. The items used to measure each of the constructs were adopted from existing studies to ensure content validity, although some were adapted to better suit the health club context. Service quality and its dimensions were evaluated using the SQAS (Lam et al., 2005). The SQAS is based on six dimensions: staff, programme, locker room, physical facility, workout facility and child care. Of the six initial dimensions proposed in the SQAS, child-care was dropped, as that service was not provided by the health club where this research was conducted. This SQAS scale was tested with positive results in the health service industry (Moreira

and da Silva, 2015). Service satisfaction was measured using six items adapted from Alexandris et al. (2004) while WOM generation was assessed with three items drawn from Bolton et al. (2000) and finally, third parties' complaint behaviour was measured using three items from Singh (1988). All items used a seven point Likert-type scale with anchors ranging from 'strongly disagree' to 'strongly agree' for all questions. The measures were translated from English to Portuguese and were assessed by two academics and members of the health club administration, so that users would understand the questions correctly. The questionnaire was pre-tested on a convenient sample of 17 club members in order to improve readability and clarity of the scales. All measures can be seen in the Appendix.

4.2 Sample and data

The data was collected from a Portuguese health club. Each questionnaire had a cover letter to explain the research purpose to users/members. The number of members of the health club is 2,525. A total number of 350 questionnaires were distributed to the club members and 204 were returned completely answered, which accounts for a response rate of 58.29%. The number of returned questionnaires represents approximately 8.1% of its population. Examination of demographic characteristics indicates a similar distribution of females and males (49.5% female, 50.5% male) with 50.5% of the sample between the ages of 25 and 45 (<25 = 14.2%, 25–35 = 30.4%, 36–45 = 20.1%, 46–55 = 13.2%, 56–65 = 14.7%, >65 = 7.4%) and with a high education level (67.6% university level, 28.9% 12th year and 3.4% ninth year).

5 Results

5.1 Measurement model

A structural equation modelling (SEM) approach is used in this study. The SEM allows us to examine and test the causal relationships among constructs and to test the model against the obtained measurement data to identify how well the proposed model fits the data (Hair et al., 2006). We conducted a confirmatory factor analysis (CFA) using AMOS 20 with maximum likelihood estimation (ML) to assess the psychometric properties of the measures including items loading, construct reliability and average variance extracted (AVE) as shown in Table 1.

All of the item loadings are greater than 0.7 which confirms the convergent validity of the measures (Verhagen et al., 2011). We dropped items, ST1, ST2, ST3, ST6, ST8 from the staff construct; P5, P6, P7 from the programme construct; LR1, LR2 from the locker room construct; WF3, WF4, WF5, WF6 from the workout facility construct and finally S4 and S5 from the satisfaction dimension due to being below 0.7. We examined AVEs and construct reliability with rules of thumb of 0.5 and 0.7 respectively (Hair et al., 2006) for convergent validity of the measures. The results show that all constructs exceeded accepted rules of thumb. Furthermore, to examine discriminant validity, we individually compared each construct squared root AVE with the correlation between each pair of constructs. For discriminant validity, no correlation should be greater than 0.9 (Hair et al., 2006) or exceed the squared root AVE of each construct. For that reason, the second-order physical facilities factor, belonging to the SQAS, has been dropped

owing to low loading items and because the construct was highly correlated with the other service dimensions, such as workout facilities and locker room. Therefore, service quality was evaluated based on four constructs only (staff, programme, workout facilities and locker room). As all construct squared root AVEs exceed the values of the correlations among the constructs columns (Table 2), discriminant validity is demonstrated.

Table 1 Dimensionality, reliability and convergent validity statistics

| <i>Variables</i> | <i>Items</i> | <i>Estimate</i> | <i>S.E.</i> | <i>Standardised estimate</i> | <i>C.R.**</i> | <i>Cronbach alpha</i> | <i>CR</i> | <i>AVE</i> |
|---------------------|------------------|-----------------|-------------|------------------------------|---------------|-----------------------|-----------|------------|
| Staff | ST4 | 1.104 | 0.073 | 0.864 | 15.179 | 0.915 | 0.916 | 0.732 |
| | ST5 ^a | 1.000 | - | 0.833 | - | | | |
| | ST7 | 1.027 | 0.068 | 0.862 | 15.129 | | | |
| | ST9 | 0.938 | 0.062 | 0.862 | 15.128 | | | |
| Programme | P1 ^a | 1.000 | - | 0.726 | - | 0.854 | 0.858 | 0.602 |
| | P2 | 1.271 | 0.113 | 0.846 | 11.264 | | | |
| | P3 | 1.329 | 0.126 | 0.786 | 10.558 | | | |
| | P4 | 1.054 | 0.106 | 0.739 | 9.946 | | | |
| Locker room | LR3 ^a | 1.000 | - | 0.784 | - | 0.849 | 0.858 | 0.668 |
| | LR4 | 0.795 | 0.069 | 0.779 | 11.532 | | | |
| | LR5 | 0.962 | 0.074 | 0.885 | 13.054 | | | |
| Workout facilities | WF2 | 0.775 | 0.065 | 0.752 | 11.938 | 0.790 | 0.797 | 0.664 |
| | WF1 ^a | 1.000 | - | 0.873 | - | | | |
| Satisfaction | S6 ^a | 1.000 | - | 0.729 | - | 0.928 | 0.937 | 0.789 |
| | S3 | 1.369 | 0.101 | 0.923 | 13.565 | | | |
| | S2 | 1.080 | 0.078 | 0.939 | 13.821 | | | |
| | S1 | 1.080 | 0.078 | 0.944 | 13.901 | | | |
| Word-of-mouth | W3 | 1.132 | 0.049 | 0.912 | 23.260 | 0.951 | 0.954 | 0.874 |
| | W2 | 1.128 | 0.041 | 0.958 | 27.588 | | | |
| | W1 ^a | 1.000 | - | 0.934 | - | | | |
| Complaint behaviour | CB3 ^a | 1.000 | - | 0.944 | - | 0.818 | 0.834 | 0.634 |
| | CB1 | 0.878 | 0.078 | 0.809 | 11.206 | | | |
| | CB2 | 0.449 | 0.053 | 0.598 | 8.545 | | | |

Notes: χ^2 : 341.852 (209), P 0.000, χ^2 /df: 1.636, NFI: 0.918, TLI: 0.959, CFI: 0.966, SRMR: 0.0449, RMSEA: 0.056.

^aReference variable.

**p < 0.01.

All fit indices demonstrated good fit with the data, the chi-square statistic is χ^2 : 341.852, $p < 0.001$, χ^2 /DF: 1.636; NFI: 0.918; TLI: 0.959, CFI: 0.966, SRMR: 0.0449 and RMSEA: 0.056 all meeting recommended criteria of Bagozzi and Yi (2012) for χ^2 /DF < 2; SRMR \leq 0.07; RMSEA \leq 0.07; CFI \geq 0.93 and TLI \geq 0.92 respectively. The results confirmed the dimensionality of the solution and suggested convergent and discriminant validity. In order to examine the importance of each of the service quality dimensions, a second order factor analysis was made. Tables 1 and 3 present the results

for the first and second order factor analysis respectively. The second order service quality factor includes four first order factors with 'workout facilities' emerging as the most important factor with a loading of 0.989, followed by 'locker rooms' with a loading of 0.806 then 'staff' (0.746) and finally 'programme' (0.746).

Table 2 Discriminant validity: squared root AVEs versus cross-construct correlations

| <i>Factors</i> | <i>Mean</i> | <i>Std. dev.</i> | <i>1</i> | <i>2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>6</i> | <i>7</i> |
|----------------------|-------------|------------------|----------|----------|----------|----------|----------|----------|----------|
| 1 Staff | 5.223 | 1.071 | 0.855 | | | | | | |
| 2 Programme | 5.325 | 0.823 | 0.596 | 0.776 | | | | | |
| 3 Locker room | 4.858 | 1.180 | 0.580 | 0.596 | 0.817 | | | | |
| 4 Workout facilities | 5.471 | 0.976 | 0.741 | 0.723 | 0.795 | 0.815 | | | |
| 5 Satisfaction | 5.250 | 1.157 | 0.783 | 0.696 | 0.695 | 0.775 | 0.888 | | |
| 6 Word-of-mouth | 5.247 | 1.292 | 0.767 | 0.667 | 0.625 | 0.748 | 0.858 | 0.935 | |
| 7 Comp. behaviour | 2.611 | 1.175 | -0.146 | -0.159 | -0.191 | -0.203 | -0.278 | -0.267 | 0.796 |

Notes: the bold scores (diagonal) are the squared root AVEs of the individual constructs. Off-diagonal are the correlations between the constructs.

The chi-square of 89.430 (df = 61, p 0.000) and the fit indices suggest a good fit of the second order model to the data (NFI: 0.949, TLI: 0.978, SRMR: 0.0393, RMSEA: 0.048) supporting our second-order model as it is overall equivalent to the first-order model. This means that in health clubs, members assess quality with four main dimensions in mind.

Table 3 Second-order factor analysis of site quality.

| <i>First-order</i> | <i>Path</i> | <i>Second-order</i> | <i>Estimate</i> | <i>Standardised estimate</i> | <i>S.E.</i> | <i>C.R. **</i> |
|--------------------|-------------|---------------------|-----------------|------------------------------|-------------|----------------|
| Staff ^a | ← | Service quality | 1.000 | 0.754 | - | - |
| Programme | ← | Service quality | 0.645 | 0.746 | 0.086 | 7.468 |
| Locker room | ← | Service quality | 1.276 | 0.806 | 0.155 | 8.257 |
| Workout facilities | ← | Service quality | 1.258 | 0.989 | 0.131 | 9.609 |

Notes: χ^2/df : 89.430(61), CMIN/DF: 1.466, NFI: 0.949, TLI: 0.978, CFI: 0.983, SRMR: 0.0393, RMSEA: 0.048.

^aReference variable.

**p < 0.01.

5.2 Structural equation modelling

Following the measurement purification, SEM was used to test the hypothesised relationships in the proposed model as shown in Figure 1, enabling the simultaneous estimation of multiple regression equations in a single framework. The proposed model was analysed via the maximum likelihood estimator of AMOS 20. The fit indices of the

research model shown are acceptable ($\chi^2(df) = 369.938(221)$, $p = 0.000$, $CMIN/DF = 1.674$, $NFI = 0.912$, $TLI = 0.957$, $SRMR = 0.0489$, $RMSEA = 0.058$).

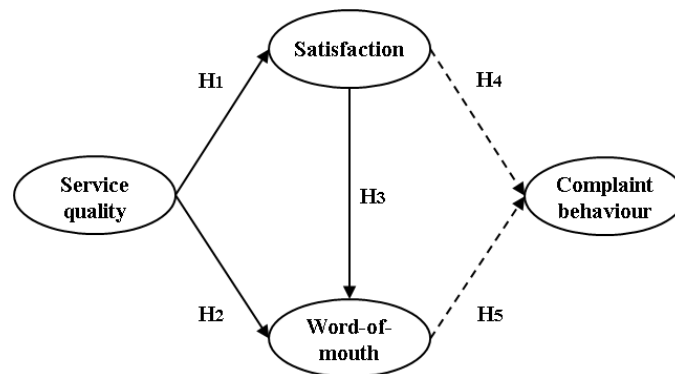
The results of the SEM shown in Table 4 provide support for three hypotheses. Service quality has an impact on satisfaction ($H_1 = 0.900$ and $p < 0.001$) and on word-of-mouth ($H_2 = 0.468$ and $p < 0.001$). Satisfaction has an effect on WOM ($H_3 = 0.438$ and $p < 0.001$). Hypotheses H_4 and H_5 were both rejected as neither satisfaction nor word-of-mouth have a statistically significant impact on the third parties' complaint behaviours. Figure 2 presents the examined research model with the non-supported hypotheses in dash arrows.

Table 4 Results of hypothesis testing

| <i>Hypothesis</i> | <i>Independent variable</i> | <i>Path</i> | <i>Dependent variable</i> | <i>Standardised estimate</i> | <i>p-value</i> | <i>Result</i> |
|-------------------|-----------------------------|-------------|---------------------------|------------------------------|----------------|---------------|
| H1 | Quality | → | Satisfaction | 0.900 | 0.000 | Supported |
| H2 | Quality | → | Word-of-mouth | 0.468 | 0.000 | Supported |
| H3 | Satisfaction | → | Word-of-mouth | 0.438 | 0.000 | Supported |
| H4 | Satisfaction | → | Comp. behaviour | -0.179 | 0.259 | Rejected |
| H5 | Word-of-mouth | → | Comp. behaviour | -0.113 | 0.474 | Rejected |

Notes: χ^2/df : 369.938(221), $p = 0.000$, $CMIN/DF = 1.674$, $NFI = 0.912$, $TLI = 0.957$, $CFI = 0.962$, $SRMR = 0.0489$, $RMSEA = 0.058$.

Figure 2 Validated model



6 Interpretation and implications

In this study, we assumed service quality as a multidimensional construct and measured it using the SQAS developed by Lam et al. (2005) in the health and fitness clubs context. Of the five initial service quality dimensions tested, only four were validated. These results demonstrate that the service quality of a health club is evaluated by its customers based on their perceptions regarding the staff, programme, locker room and workout facilities.

Regarding service quality, the results obtained are in line with the ones of Lam et al. (2005). The six quality dimensions can be grouped into three subsets, one related to the

personnel, the other to the programme and the third one to the facilities. In our research, staff; programme; locker room and workout facility are the main predictors of service quality. This result was also found by Moreira and da Silva (2015) in healthcare services in which staff; medical service; waiting and consulting rooms were the most important quality dimensions. As for health clubs' physical dimension, customers seek clean and safe locker rooms to keep their belongings; they also care for a good atmosphere and modern equipment in the workout facility space.

The results also validate previous research findings (Papadimitriou and Karteroliotis, 2000). In fact, both tangible and intangible dimensions of service quality emerge as relevant for customers to assess service quality. Moreover, the physical dimensions of the service appear to have a slightly higher importance than the intangible component but not as unequal, as found by Alexandris et al. (2001).

Concerning the intangible dimensions of quality perception, we highlight the need for the staff to be patient, courteous and show good communication and relationship skills. Additionally, health clubs should also provide a wide programme range, availability of content and schedules. As for the club overall facilities, they were split into locker rooms, workout facilities and physical facilities. The latter did not emerge as a single dimension itself, which can be explained by its similarity with both the locker room and workout facility dimensions.

This study validated Hypotheses H_1 and H_2 demonstrating that service quality is critical for both customer satisfaction and a positive WOM generation. The positive relationship between service quality and satisfaction confirms previous studies in hospitality services (Hussain et al., 2015; Lee et al., 2011), in healthcare services (Moreira and da Silva, 2015) and in airline services (Chow, 2014) that have both tangible and intangible quality dimensions. The confirmation of H_2 is tuned with the studies of Macintosh (2007), Eisingerich et al. (2014) and Hudson et al. (2015), confirming that high service quality levels are important for positive WOM.

Satisfaction also emerged as an antecedent of WOM validating H_3 and confirming the study in the hospitality industry (Kim et al., 2009) and the customer loyalty pyramid (Kandampully et al., 2015) on how customer satisfaction would lead to the spread of positive WOM. Positive WOM generation is particularly important for health clubs as it is one of the most important ways to attract and gather new customers, decreasing the marketing costs. Service quality is thus both a direct and an indirect antecedent of WOM.

Although there is a negative relationship between customer satisfaction and WOM with customer complaint behaviour to third parties, there is no statistical significance in those relationships, contrary to what was proposed and found by Lee et al. (2011) and Moliner-Velázquez et al. (2008a, 2008b). As such, hypotheses H_4 and H_5 have not been statistically validated. This can be explained by three reasons. Firstly, as proposed by the literature, complaint behaviour to third parties happens only in situations of extreme dissatisfaction or when customers expect some reward for complaining. Moreover, the service provided in health clubs is, usually, more relationship oriented than in restaurants (Moliner-Velázquez et al., 2008a, 2008b) or in the hospitality industry (Lee et al., 2011), which might explain the different results achieved. Thus, although health club customers may be dissatisfied and generating negative WOM, those conditions are not enough for them to call third parties. Secondly, as service quality, customer satisfaction and WOM are positively related, neither the customers with low level of satisfaction nor the ones dissatisfied were captured by complaint behaviour to third parties in the case of the health

club analysed, which showed high levels of service quality, service satisfaction and positive WOM. Taking into account that most services provided by health clubs involve a high level of customer involvement, a more heterogeneous sample involving a service with a low degree of customer involvement would be important to capture this heterogeneity. Finally, this behaviour can also be explained due to particular country-specific cultural aspects, as referred by de Matos and Leis (2013) who concluded that the higher the power distance the lower the likelihood of complain. Some cultures are dominated by an emphasis in the care for others and quality of life, thus, rather than complaining to third parties, they most likely accept their dissatisfaction or deal with it politely. Accordingly, it is possible to claim that Portuguese health club customers try to solve their issues avoiding direct confrontation or complaints to third parties.

7 Conclusions and future directions

This study aimed to evaluate the antecedents of third parties' complaint behaviour in the context of health clubs. SEM was used to test the relationships between service quality, satisfaction, WOM and complaint behaviour.

The results indicate service quality plays a key role if health clubs wish to satisfy their customers. Moreover, customers assess the service quality through tangible and intangible dimensions, i.e., the staff performance, the programme offers and the characteristics of the facilities (both locker room and workout spaces). The relationships between quality, satisfaction and WOM were validated, however, the relationships between satisfaction and complaint behaviour and between WOM and complaint behaviour were not.

As found in this research, although dissatisfaction and low level of service quality might tempt customers to complain to third parties and generate a negative WOM, which may build a poor reputation to health clubs, there is no statistical significance.

While it is normally defended that third parties' complaints may only be an option in extreme scenarios or exclusively when customers seek rewards, this study has opened new windows of opportunities for future research:

- a it is important to address services with low degree of customer involvement in order to capture a certain detachment of the customer with the service, which in health clubs is based on a relational involvement
- b it is important to test the same type of service in different countries in order to examine if, and how, different cultural characteristics influence customers' complaint behaviour to third parties.

As an exploratory study in the field of health clubs, this article has some limitations that should be considered in future research. The first refers to the sample size and its variety. As this study was conducted in one health club in a Portuguese city, it would be interesting to conduct it across the country, especially to examine the relationship between satisfaction, word-of-mouth and complaint behaviour. Regarding the third parties' complaint behaviour, further research must help explain the reasons behind non-complaint behaviours that customers display, in order to trace if they are due to cultural traits, reprisals fear, or if third parties' complaints are just an option if a reward is

expected. This study should be replicated in countries with different cultural traits in order to trace possible cultural explanations.

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Appendix

| <i>Construct and source</i> | <i>Item</i> |
|---|---|
| Satisfaction (Alexandris et al., 2004) | S1 I am satisfied with my decision to become this service provider member. |
| | S2 My choice to have become this service provider member was wise. |
| | S3 I am sure I made the right choice in becoming a member of this service provider. |
| | S4 If I had to do it again, I would do the same choice. |
| | S5 I regret my decision to have become a member this service provider. |
| | S6 I am unhappy to have become a member of this service provider. |
| Word-of-mouth (Bolton et al., 2000) | W1 I say positive things to others about this service provider. |
| | W2 I will recommend this service provider to someone who asks for my advice. |
| | W3 I will encourage my friends, family and acquaintances to attend this service provider. |
| Third parties' complaint behaviour (Singh, 1988) | CB1 Complain to the consumer agency and ask them to take care of the problem. |
| | CB2 Write a letter to the local newspaper regarding your bad experience. |
| | CB3 Report to the customer agency so they can warn other customers. |
| | CB4 Take legal actions against this service provider. |
| Staff (Lam et al., 2005) | ST1 Possession of required knowledge/skills. |
| | ST2 Neatness and dress. |
| | ST3 Willingness to help. |
| | ST4 Patience. |
| | ST5 Communication with members. |
| | ST6 Responsiveness to complaints. |
| | ST7 Courtesy. |
| | ST8 Provision of individualised attention by instructors. |
| | ST9 Provision of consistency of service. |

Appendix (continued)

| <i>Construct and source</i> | | <i>Item</i> |
|---|-----|--|
| Programme (Lam et al., 2005) | P1 | Variety of programmes. |
| | P2 | Availability of programmes at appropriate level. |
| | P3 | Convenience of programme time/schedule. |
| | P4 | Quality/content of programmes. |
| | P5 | Appropriateness of class size. |
| | P6 | Background music (if any). |
| | P7 | Adequacy of space. |
| Locker room (Lam et al., 2005) | LR1 | Availability of lockers. |
| | LR2 | Overall maintenance. |
| | LR3 | Shower cleanliness. |
| | LR4 | Accessibility. |
| | LR5 | Safety. |
| Physical facility (Lam et al., 2005) | PF1 | Convenience of location. |
| | PF2 | Hours of operation. |
| | PF3 | Availability of parking. |
| | PF4 | Accessibility to building. |
| | PF5 | Parking lot safety. |
| | PF6 | Temperature control. |
| | PF7 | Lighting control. |
| Workout facility (Lam et al., 2005) | WF1 | Pleasantness of environment. |
| | WF2 | Modern-looking equipment. |
| | WF3 | Adequacy of signs and directions. |
| | WF4 | Variety of equipment. |
| | WF5 | Availability of workout facility/equipment. |
| | WF6 | Overall maintenance. |