



University of HUDDERSFIELD

University of Huddersfield Repository

Polyakova, Olga and Mirza, Mohammed T.

Service quality models in the context of the fitness industry

Original Citation

Polyakova, Olga and Mirza, Mohammed T. (2016) Service quality models in the context of the fitness industry. *Sport, Business and Management: An International Journal*, 6 (3). ISSN 2042-678X

This version is available at <http://eprints.hud.ac.uk/id/eprint/28545/>

The University Repository is a digital collection of the research output of the University, available on Open Access. Copyright and Moral Rights for the items on this site are retained by the individual author and/or other copyright owners. Users may access full items free of charge; copies of full text items generally can be reproduced, displayed or performed and given to third parties in any format or medium for personal research or study, educational or not-for-profit purposes without prior permission or charge, provided:

- The authors, title and full bibliographic details is credited in any copy;
- A hyperlink and/or URL is included for the original metadata page; and
- The content is not changed in any way.

For more information, including our policy and submission procedure, please contact the Repository Team at: E.mailbox@hud.ac.uk.

<http://eprints.hud.ac.uk/>



University of HUDDERSFIELD

University of Huddersfield Repository

Polyakova, Olga and Mirza, Mohammed T.

Service quality models in the context of the fitness industry

Original Citation

Polyakova, Olga and Mirza, Mohammed T. (2016) Service quality models in the context of the fitness industry. *Sport, Business and Management: An International Journal*, 6 (3). ISSN 2042-678X

This version is available at <http://eprints.hud.ac.uk/28545/>

The University Repository is a digital collection of the research output of the University, available on Open Access. Copyright and Moral Rights for the items on this site are retained by the individual author and/or other copyright owners. Users may access full items free of charge; copies of full text items generally can be reproduced, displayed or performed and given to third parties in any format or medium for personal research or study, educational or not-for-profit purposes without prior permission or charge, provided:

- The authors, title and full bibliographic details is credited in any copy;
- A hyperlink and/or URL is included for the original metadata page; and
- The content is not changed in any way.

For more information, including our policy and submission procedure, please contact the Repository Team at: E.mailbox@hud.ac.uk.

<http://eprints.hud.ac.uk/>

'This article is © Emerald Group Publishing and permission has been granted for this version to appear here. Emerald does not grant permission for this article to be further copied/distributed or hosted elsewhere without the express permission from Emerald Group Publishing Limited.'

Service quality models in the context of the fitness industry

ABSTRACT

Purpose: This paper reviews the concept of perceived service quality in the fitness industry by considering the service-dominant logic (Vargo and Lusch, 2004) and examining existing service quality models in the context of sport and fitness.

Methodology: The paper critically reviews generic and industry-specific models of service quality in the fitness industry. The examination of the models is intended to identify the role that the perspective of customers and the dynamics of service co-creation play in these models.

Findings: Consideration of the context in a particular industry plays an important role in the development of service quality models. If underestimated, it can result in a model being inadequate or having limited explanatory potential. The review shows that both generic and fitness industry-specific models have methodological and conceptual limitations. This requires researchers to consider developing new contextual models that acknowledge a) service as co-creation of experience/value between suppliers and customers; and, b) the goal of this co-creation as fulfilment of customers' aspirations. Such an approach brings a new light to the meaning of 'a customer's perspective' and emphasises the dynamics of service co-creation in the fitness industry.

Practical implications: The study provides an agenda for future research to consider perceived service quality models from the customers' perspective. It suggests researchers to

take into account various factors of consumer behaviour (e.g. motivation) which are unique to sport and fitness services. Also, managers of fitness facilities need to revisit their tools for capturing customers' perceptions and to update the areas included in customer satisfaction surveys.

Originality/value: The paper provides an insight into the role of co-creation for service quality in fitness services. It contributes towards establishing revised relations between service quality in fitness and contextual industry-specific factors suggested by numerous studies previously.

SERVICE QUALITY MODELS IN THE CONTEXT OF THE FITNESS INDUSTRY

1. Introduction

The needs of customers and their perspectives on service quality is a research issue which has moved to the forefront of the agenda for fitness organisations operating in an increasingly competitive environment. According to Walsh (2013), consumers in the fitness industry are now more demanding, and clubs are faced with the challenge of meeting their high expectations. In line with global trends, the UK fitness market is still expanding despite the economic slowdown. Over the last five years total market value of the UK fitness industry has grown by 4%, the member base by 8.3% and the number of fitness facilities by 3.9% (Leisure Database Company, 2013).

In this market environment fitness clubs inevitably seek methods of both retaining existing customers and attracting new customers. Research provides evidence that delivering high quality service brings benefits of profitability and customer retention (Parasuraman *et al.*, 1988; Philip and Hazlett, 1997). Previous studies investigated relationships between service quality, customer satisfaction, loyalty and behavioural intentions. For example, it has

been found that the effect of service quality on behavioural intentions is mediated by a consumer's level of satisfaction (Brady and Robertson, 2001). On other hand, some facets of quality can influence customer satisfaction in the health and fitness sector, and this in its turn leads to increased word-of-mouth communications (Alexandris *et al.*, 2004). Moreover, the combination of service elements and corporate values is significantly associated with members' satisfaction levels and their intentions to stay (Macintosh and Doherty, 2007).

The twin challenges of expansion of the current UK fitness market and the competitive race for customers place a significant focus on service quality and the identification of what customers actually perceive as quality. In an attempt to discover this latter point, researchers have proposed a multitude of service quality models over the past 25 years. Some studies focused on general models (e.g. Cronin and Taylor, 1992; Grönroos, 1988; Parasuraman, Zeithaml and Berry, 1988); others developed or revised models for particular industries (Aldlaigan and Buttle, 2002; Ko and Pastore, 2004; Lam and Zhang, 1999; Martinez and Martinez, 2007). Various published studies have emphasised the need for developing industry specific service quality models. The argument is that industry-specific attributes could assist researchers in producing service-quality dimensions and scales for measuring perceived service quality in a particular industry (Brady and Cronin, 2001; Ladhari, 2008; Martinez and Martinez, 2008, 2010). Certain service industry sectors have attracted the most attention from researchers: banking (Aldlaigan and Buttle, 2002; Karatepe *et al.*, 2005; Sureshchandar *et al.*, 2002), hospitality (Akbaba, 2006; Getty and Getty, 2003; Wilkins *et al.*, 2007), health care (Shemwell and Yavas, 1999; Tomes and Ng, 1995), IT and technology-based systems (Parasuraman *et al.*, 2005; Wolfinbarger and Gilly, 2003) and travel agency sectors (Lam and Zhang, 1999; Martinez and Martinez, 2007).

It has been long established that perceived service quality stems from customers and is determined by them (Grönroos, 1982; Parasuraman *et al.*, 1991). Several studies have

developed models to explain and measure service quality in the fitness industry (e.g. Kim and Kim, 1995; Chang and Chelladurai, 2003; Ko and Pastore, 2003; Lam *et al.*, 2005; Yildiz, 2011). Previous research (Arnould and Price, 1993; Kupers, 1998; Schembri and Sandberg, 2011) has confirmed that consumers do not passively receive service quality but actively co-construct the quality of the service they experience. In the context of physical fitness, consumers participate in exercise and through this co-create service guided by a reason for the involvement. This reason, or motive, can be formed by various factors (Ryan *et al.*, 1997; Afthinos *et al.*, 2005; Mullen and Whaley, 2010) and may have an impact on the ultimate experience of a service. Indeed, Zeithaml and Bitner (2003) suggested that psychological factors such as an individual's motivations and self-competence also influence customers' perceptions of service quality and their satisfaction.

This paper reviews the concept of perceived service quality in the fitness industry and examines the existing service quality models in the context of sport and fitness. Current developments in marketing research suggest that the organisational focus of creating brands has shifted to building customer relationships through service marketing and creating compelling customer experiences (Maklan and Klaus, 2011). As customer experience is a very personal construct at the rational, emotional, physical and other levels (Gentile *et al.* (2007), it becomes important to explore whether existing quality models for the fitness industry accurately reflect the concept from the perspective of customers.

The concept of 'service experience' has been referred to as a key concept in the service-dominant logic, which places a service experience at the core of all business (Lusch and Vargo, 2006; Schembri, 2006; Vargo and Lusch, 2008). According to Maklan and Klaus (2011), through engaging in service experiences and co-creating them, customers aim to fulfil their aspirations and achieve a higher-order goal, that is 'value-in-use'. An understanding of how to provide value-in-use requires consideration of customers' experiences and

investigation into the guiding factors behind these experiences. In this regard, the paper makes some suggestions on how to develop future service quality in the fitness industry.

2. Service quality and fitness industry context

Service quality in the sport and leisure industry emerged as a recognised research stream in the late 1980s. To date, numerous studies have focused on identifying dimensions of quality in the sport and fitness industries (Chang and Chelladurai, 2003; Alexandris *et al.*, 2004; Ko and Pastore, 2005; Lagrosen and Lagrosen, 2007; Moxham and Wiseman, 2009). The identification of key dimensions is important for encapsulating all the main components of service quality in the fitness industry. However, there is still no agreement in the literature as to what those dimensions are.

As service-oriented entities, fitness organisations inherited the unique service characteristics of intangibility, perishability, inseparability and heterogeneity (see more on the characteristics in Ghobadian *et al.*, 1994; Fitzgerald *et al.*, 1993). However, due to some specific features of sport, there are significant differences between sport and other service based offerings. Relevant studies suggest that the unique motivations of those who consume sport (McDougall and Levesque, 1994; Rust and Oliver, 1994; Ko and Pastore, 2004; Szabó, 2010) are: human performance (as an important “core product”); high involvement of consumers in co-producing a sport service (Lovelock, 1996); the social nature of the service; ‘excruciating’ participation, or habit towards the service (Schneider and Bowen, 1995); valence, or factors out of the control of a service provider (Brady and Cronin, 2001; Alexandris, 2004); evaluation of the immediate outcome of service (i.e. experience); and, after-use benefits (Hu *et al.*, 2009). All these factors contribute towards the uniqueness of the nature of taking part in sport and fitness activities.

Producing the fitness service (e.g. personal training sessions, group exercise classes or, individual sessions in the gym) together with the service provider is the central activity of customers in both public sector and private sector sport centres. This represents the cooperative nature of participation in sport and fitness where organisations and customers act together to create value (Prahalad and Ramaswamy, 2004; Vargo and Lusch, 2004).

2. Co-creation of service in fitness industry

The characteristics of a sport and fitness service form strong links with the service-dominant logic (Vargo and Lusch, 2004) which suggests that a customer always co-creates a value in service transactions. Service-dominant logic argues that value is created in the interaction process between the company and the customer rather than exclusively in the provision of service (Gronroos, 1997; Etgar, 2008). Previously, the terms '-co-creation' and 'co-production' have been used seemingly interchangeably and researchers did not differentiate the concepts. Thus, Vargo and Lusch (2004) initially assigned the same meaning to the terms co-creation and co-production; at a later stage co-creation was divided into two components - co-creation of value (i.e. value is jointly created by the customer and the supplier during consumption) and co-production (i.e. the customer's participation in the core offering itself). By contrast, co-creation and co-production were presented as completely different concepts by Ballantyne and Varey (2006). They argued that although the desired result of cooperation between the customer and the supplier in both cases is the same (i.e. unique value), the two terms are not connected because co-creation is based on collaboration and dialogical interaction, whereas meaningful co-production is not possible without certain prerequisites (e.g. resources, capabilities).

Various authors have attempted to approach co-creation as a continuum based on the extent of a customer's involvement in the process. Ives and Olson (1984) proposed a user involvement continuum that included six categories of customers' input (Figure 1):

[Figure 1]

The higher the level of customers' involvement, the greater input customers make to the service delivery process and, therefore, the final outcome. Although, it represents an increased level of customers' control over the process, the positive or negative input largely depends on customers' expertise in co-creation and the value that they see in it. Schembri and Sandberg (2011) describe different levels of customer's involvement by referring to the three types of experiential meaning of service quality held by customers: a passive experiential meaning; a monitoring meaning; and, a partnering experiential meaning. These three meanings drive customers' evaluations of service quality and can be used by service providers to adjust the service offered accordingly. Yi and Gong (2013) proposed two factors in customer value co-creation behaviour: participation behaviour, which is essential for value co-creation; and extra-role citizenship behaviour, which is voluntary. Participation behaviour includes information seeking, information sharing, responsible behaviour and personal interaction, whereas customer citizenship behaviour includes feedback, advocacy, helping other customers and tolerance. The customer citizenship behaviour factors represent additional features of customers' expertise in co-creation. Yet, despite the fact that customers' expertise may positively or negatively influence the service outcome, there is evidence from other industries (in particular the ones related to hospitality and travelling) that the degree of co-creation affects customer satisfaction with service company, customer loyalty, and service expenditures (Grissmann and Stokburger-Sauer, 2012); and therefore appears to be an antecedent of competitive advantage (Chathoth *et al.*, 2013).

To date, research on service co-creation in sport related industries has been limited. Mainly, the focus has been on sporting events, sport spectators and sport fans (e.g. Funk and James, 2001; Mahony *et al.*, 2000; McDonald and Karg, 2014). There is evidence of evolving academic discussion on the concept of value co-creation in sport management (e.g.

Woratschek et al., 2014). Studies by Chelladurai (2013) and Cunningham (2013) suggested that further development of theories and models used in sport management was needed. This is in line with recognising the fact that the service-dominant logic and the concept of co-creation "have yet to be sufficiently applied in practice, and empirical studies are few and far between as a result" (Woratschek et al., 2014, p. 2).

In the fitness industry, consumers' participation in exercise, engagement with specific sport centre and involvement in service co-creation implies the existence of a reason or motive for this involvement. Roberts (1992) describes a motive as a drive, stimulus or reason why people do something. In the context of exercise participation, motives are regarded as reasons that individuals give for engaging in physical activity: the terms 'participation motives' and 'reasons for exercising' are suggested as being interchangeable (Markland and Ingledew, 2007). There are different factors that influence motives for participating in sport and fitness exercise, e.g. gender (Biddle and Bailey, 1985; Mullen and Whaley, 2010), age (Kremer *et al.*, 1997), experience (Ryan *et al.*, 1997) and type of sport centre (Afthinos *et al.*, 2005). In addition to the fact that motives can vary greatly from individual to individual, people may have more than one motive for participation in a fitness activity; these motives can also be coming either from within the person (intrinsic motives) or from the outside (extrinsic motives) (Thatcher *et al.*, 2009).

Motivations for participation in exercise may revolve around physical, psychological, social and generic wellbeing benefits (Alexandris *et al.*, 2004; Ko and Pastore, 2005; Lagrosen and Lagrosen, 2007). The nature of customers' motivations creates the context for the interactional dialogue with a service provider that is to take place for any type of collaboration. Also, the fitness club resources and initial capabilities of the customers (i.e. physical, mental, and financial) will determine the need or level of involvement in co-

creation. The combination of these co-creational factors at the core of the service will shape the customers' experience and essentially their experiential meaning of service quality.

3. Service quality models

Traditionally, the disconfirmation paradigm has been the basis for service quality conceptualisations (i.e. where quality is viewed as the result of comparing performance with a set standard). According to Grönroos (1984), perceived service quality is “the outcome of an evaluation process where the customers compare their expectations with service they have received” (Grönroos, 1984, p.37). Parasuraman *et al.* (1988) support the same view, defining the concept of service quality as “a form of attitude related to but not equivalent to satisfaction that results from a comparison of expectations with perceptions and performance” (p.15).

The first service quality models emerged in the 1980s and originated from the Nordic (Grönroos, 1984) and American schools of thought (Parasuraman *et al.*, 1985; 1988). The Nordic perspective suggested two service quality dimensions - functional quality and technical quality. According to the American model, or SERVQUAL, service quality is the difference between the expected level of service and customer perceptions of the level received (Parasuraman *et al.*, 1985). Subsequent critiques of the American model led to the emergence of the SERVPERF model (Cronin and Taylor, 1992). Unlike SERVQUAL, SERVPERF is a performance only measure of service quality and excludes consumers' expectations due to them being consistently high. In 1994, the Nordic perspective triggered the development of a three-component model (Rust and Oliver, 1994) with three distinct components - service product, service delivery and service environment. The work by Grönroos (1982) and Bitner (1992) formed the basis for this model which focused on the

relationships existing between service quality, service value and satisfaction. Another two models by Dabholkar *et al.* (1996) and Brady and Cronin (2001) added more levels to overall service quality suggesting a multilevel nature of service quality (i.e. higher order factor, dimensions level, and sub-dimensions level) and expanded the number of sub-dimensions for service quality accordingly.

In their model, Brady and Cronin (2001) combined the three-component model by Rust and Oliver (1994) and the multilevel conceptualization of service quality by Dabholkar *et al.* (1996). As a result, service quality is formed by three primary dimensions (interaction quality, physical environment quality and outcome quality) and three corresponding sub-dimensions in each dimension. Martinez and Martinez (2010) noted that in the model sub-dimensions influence quality dimensions, i.e. sub-dimensions directly contribute to perceptions of quality dimensions. Nevertheless, Brady and Cronin's (2001) model is operationalised in a different way such that dimensions are variables that influence sub-dimensions. This contradiction has not been addressed and presents a concern for interpretation of the model. Another study by Dagger and Sweeney (2006) utilized Brady and Cronin's work (2001) for producing a model to measure the impact of service evaluations on customers' behavioural intentions and their quality of life. The model focused on the social and economic outcomes of service provision within the context of the health care sector. It adapted dimensions of functional and technical quality from Brady and Cronin (2001) and added customer satisfaction, behavioural intentions and quality of life. The model suggested that dimensions of technical and functional quality affect the level of customer satisfaction differently; and in turn, these two service quality dimensions, together with customer satisfaction, influence the behavioural intentions and quality-of-life perceptions of customers.

Although Brady and Cronin's (2001) model was argued to have superiority with respect to earlier models (Ko and Pastore, 2005; Martinez and Martinez, 2010), it has contradictions

that have not been addressed (such as direction of influence between levels of quality). To overcome these issues, Martinez and Martinez (2010) suggested using Brady and Cronin's (2001) model alongside the identification of the dimensions of service quality in the context of a particular industry.

Over time, the nature and number of service quality dimensions (or attributes) differed depending on the approach of the various authors. In addition to the differences in authors' approaches, Dagger and Sweeney (2007) suggested that service attributes can vary amongst groups of customers with different consumption characteristics. For example, service attribute weights differ between across new customers and those who have been using service for a while (Dagger and Sweeney, 2007). Along similar lines, Bogomolova (2011) found that solely loyal customers give about 10% more positive service quality evaluations than customers using more than one provider. However, the latter study did not look into the relationships between service quality evaluations of those two groups of customers and service attribute weights.

4. Service quality models in the fitness industry

Similar to generic service quality models, the first service quality models for sport and recreation were created in the form of scales in order to measure the quality of services in a quantitative way. The models inherited conceptual and structural ideas from their predecessors (e.g. thematic areas of service quality, attributes of service quality); and influential approaches such as SERVQUAL also had an impact on the development of quality measures for the sport and fitness.

In this paper, the structured literature review (Petticrew, 2001; Petticrew and Roberts, 2006; Tranfield et al., 2003) focused on empirical and conceptual research that proposed new or adapted service quality models for the sport and fitness industry. The principles of meta-synthesis (Tranfield et al., 2003) and meta-interpretation (Weed, 2005a; Weed, 2005b) were

utilised for the research synthesis. Search terms included combinations of the following: (1) service quality, (2) model, (3) scale, (4) fitness industry, (5) health and fitness, (6) leisure club or centre, and, (7) recreational sport. Searches included peer-reviewed articles between the years 1980 and 2014. To be considered for further consideration, studies had to satisfy the following criteria: (1) propose a new (or adapted) model of service quality for the context of sport and fitness; (2) include a model designed to consider service quality from the perspective of customers; and, (3) include a model that considers perceived service quality phenomenon in a systematic manner. Nine articles (Table 1) were identified as appropriate to be included in the review. Further, thematic analysis of service quality dimensions was performed across seven models that can be operationalised for explaining or measuring customer perceptions of service quality (Appendix 1).

[Table 1]

Chelladurai *et al.* (1987) became pioneers and proposed the first scale for measuring service quality in fitness centres, namely Scale of Attributes of Fitness Services (SAFS). The scale included five dimensions: professional, consumer, peripheral, facilitating goods, and goods and services. Later, this scale was re-developed into the Scale of Quality in Fitness Services (SQFS) by Chang and Chelladurai (2003).

As the 1990s saw further critique focused on the SERVQUAL instrument (it generally started to be considered inadequate for specific industries), Kim and Kim (1995) developed the Quality Excellence of Sports Centers (QUESC) scale, which consisted of 33 items. Initially, the QUESC instrument consisted of 45 items of which 33 stayed in the final version of the scale. These 33 items fall under 11 dimensions identified by exploratory factor analysis. However, three of eleven dimensions (price, privilege, stimulation) included only one item. Research carried out by Papadimitriou and Karateroliotis (2000) in Greece did not support the dimensions of QUESC based on a sample of Korean respondents. Instead, Papadimitriou and

Karteroliotis (2000) proposed a 4-dimensional model that included Instructor Quality, Facility Attraction and Operation, Program Availability and Delivery, and Other Services. Also, Lam *et al.* (2005) questioned the statistical stability of QUESC single-item dimensions and questioned the generalizability validity of the scale due to the unique nature of the Korean context in which fitness centres operate. Afthinos *et al.* (2005) applied the QUESC model in Greek fitness centres in their research; however they did not critique the instrument.

Based on SERVQUAL (Parasuraman *et al.*, 1988), RECQUAL measuring quality in recreational services (Crompton *et al.*, 1991), and the Scale of Attributes of Fitness Services (SAFS) (Chelladurai *et al.*, 1987); Chang and Chelladurai (2003) developed the Scale of Quality in Fitness Services (SQFS).

SQFS included items from previous models and items generated by the authors themselves. The content validity of the items belonging to the different dimensions was assessed by a panel of 15 experts and 4 faculty members. The nine dimensions were confirmed through confirmatory factor analyses and proved to be independent of each other. As SAFS (1987) formed the basis for SQFS development, Lam *et al.* (2005) critiqued SAFS on the methodological rigour of its scale development, in particular the lack of qualitative research as well as the lack of statistical procedures in the examination of the SAFS' factor structure. Although, the version of SQFS (2003) employs a panel of experts and faculty members, there is a still lack of qualitative research involved to obtain the customers perspective on service quality. This major limitation of the scale was recognised by Chang and Chelladurai (2003) themselves, who suggested that future research should involve fitness club members as well to add additional relevant dimensions.

Another scale with six dimensions - Service Quality Assessment Scale (SQAS) - was developed by Lam *et al.* (2005) via the employment of rigorous methodological procedures. Lam *et al.* (2005) recommended that other researchers should re-examine the SQAS using

different samples to study further factor structure. The comparison to another scale has been suggested “if the scale was developed with the same degree of emphasis on scale construction and specificity for the health–fitness setting, for convergent validity” (Lam *et al.*, 2005, p. 106). Yet, the scale does not offer the measurement of overall perceived service quality (Martinez and Martinez, 2010) or the measurement of perceived quality of individual dimensions. The model also does not include the outcome quality proposed by Brady and Cronin (2001) and Ko and Pastore (2004).

Brady and Cronin’s (2001) model served as the basis for study by Alexandris *et al.* (2004), whose model is based on three dimensions (interaction quality, physical environment, outcome quality) and nine sub-dimensions of service quality. Unlike in Brady and Cronin’s (2001) model, the sub-dimensions of waiting time, tangibles and valence were excluded from the model with no explanation provided by the authors. While some of items were adapted from Brady and Cronin (2001) (e.g. most of items in interaction quality), some were left out or totally new ones were developed (e.g. in outcome quality). The structure of items proposed by Alexandris *et al.* (2004) does not reflect a reliability item, a responsiveness item, or an empathy item as suggested by Brady and Cronin (2001). Moreover, no qualitative techniques were employed to discover new items; confirmatory activities (such as expert opinion) have not been utilized either. Also, the model does not consider overall measurement of individual dimensions or overall service quality. Alexandris *et al.* (2004) recognized the limitations of the model relative to the sample (n=175 members of a single private fitness club in Greece) and suggested testing the model with bigger sample sizes from different sport service organisations. Therefore, there are issues with statistical validity of the second-order factors (sub-dimensions) and the overall generalisability of the model.

Similar to the previous model by Alexandris *et al.* (2004), Ko and Pastore (2005) utilized several aspects of the work of Brady and Cronin (2001) and Dabholkar *et al.* (1996) within

the context of recreational sport; which led to the Scale of Service Quality in Recreational Sport (SSQRS) being developed. It included dimensions of program quality, interaction quality, outcome quality and physical environment quality. On the basis of a review of literature on service quality, the researchers generated an initial pool of 77 items that explained the 11 sub-dimensions of service quality. Multiple measures for each of the sub-dimensions were developed and modified from the items of existing scales (e.g. Brady and Cronin, 2001; Crompton *et al.*, 1991; Howat *et al.*, 1996; Kim and Kim, 1995; Parasuraman *et al.*, 1988). Statistical tests supported the model and it has been argued that SSQRS fills the gaps in service quality conceptualization in the recreational sport industry (Brady and Cronin, 2001). However, the major limitation is the generalizability of the scale as it has been tested on the sample of “sport participants within the Department of Recreational Sports at a large university located in the Midwest region in the US” and “a majority of the respondents were university students between the age of 18-22 (46%) and between the age of 23-30 (35%)” (p. 90). Ko and Pastore (2005) proposed to carrying out further analysis of the items in different industry segments in order to determine the reliability and validity of the scale. Furthermore, the applicability of the conceptual framework in other sport industry segments is yet to be tested.

Some other studies (e.g. Lagrosen and Lagrosen, 2007; Moxham and Wiseman, 2009) used case-studies to explore service quality; however, the case-study approach led to limitations of generalisability of their findings. The most recent study by Study by Yildiz (2011) proposed Service Quality Scale for Fitness Centres (SQS-FC). The study employed a two-stage methodology that included qualitative convergent in-depth interviews and a quantitative scale application.

The main limitation of the model is the relatively small sample derived from a private fitness club in Turkey. Yildiz (2011) mentions that the Turkish market is emerging (p.7033),

therefore the results of the study might not be generalized to other fitness clubs in European or Asian markets, or to clubs in other sectors (i.e. non-profit). Also, the scale by Yildiz (2011) does not consider outcome quality and elements of interaction quality related to other members. Overall, the items on SQS-FC closely resemble those on SQAS by Lam *et al.* (2005), with the main difference being in the breakdown of dimensions. Still, the scale by Lam *et al.* (2005) employs a more comprehensive methodology, i.e. a literature review, field observations, interviews, modified application of the Delphi technique, a pilot study and exploratory factor analysis.

The authors of the reviewed studies suggested various dimensions of service quality which led to the different ways of explaining the concept (Table 2).

[Table 2]

Despite this, the models in Table 2 embrace traditional conceptualisations that present service quality as a set of fixed service dimensions. As with service quality models in other industries, the development of quality models for fitness have been influenced by the positivist approach to measuring quality, however none of the models clarify their philosophical stance (Polyakova and Mirza, 2015). Over time, the models have improved the conceptualisation of service quality and its dimensions. All of them have several service quality dimensions and, therefore, are multidimensional (Martinez & Martinez, 2010). In practical terms, these dimensions represent a measurement tool for service quality. However, perceived service quality itself is a theoretical construct which represents a phenomenon of theoretical (i.e. not applied) interest (Edwards & Bagozzi, 2000). Discussion of different philosophical approaches to viewing service quality goes beyond the scope of this paper; however the work of Martinez and Martinez (2010) provides further detail as it provides an explanation of why philosophical considerations are important to maintain a constructive dialogue between researchers in the contemporary service quality field.

5. Discussion

As mentioned previously, service quality models in fitness industry have been conceptualised in different ways and their authors suggested various dimensions of service quality. However, some dimensions cannot be directly applied to measure perceived service quality from the perspective of customers (e.g. in Chang and Chelladurai (2003), Lagrosen and Lagrosen, (2007), and Moxham and Wiseman (2009)).

The dimensions that are most common across service quality models fall into main six groups, namely Personnel, Physical environment, Social environment, Program, Supporting services, and Outcome (Appendix 1). These dimensions include sub-dimensions that can be directly experienced and evaluated by customers. Several distinct elements of service quality that exist in some models are absent in others (e.g. pleasant social environment, wide range of services, operating time etc.). On the other hand, some sub-dimensions appeared to be in other models under different dimensions. For example, Kim and Kim's (1995) dimension of employee attitude exists within Chang and Chelladurai's (2003) Interpersonal Interactions with Employees, Alexandris *et al.*'s (2004) Interaction quality, Lam *et al.*'s (2005) Personnel, and Lagrosen and Lagrosen's (2007) relational competence.

The analysis showed that considerable attention across the models is paid to the sub-dimensions of Personnel, Physical environment and Social environment whereas Program, Supporting services and Outcome have received relatively less attention (Table 3).

[Table 3]

The studies considering Outcome as a dimension of service quality included 'softer' factors related directly to an individual's perception of the benefit they get from the service and indirectly to the role they play in the process. The qualitative study by Lagrosen and

Lagrosen (2007) proposed three service quality dimensions (Physical change, Mental Change and Pleasure) linked to an individual's intrinsic characteristics. This is in line with the theory (e.g. Dabholkar, 1995) suggesting that the intrinsic characteristics of a population determine the nature of the service quality-satisfaction link. Similarly to Ko and Pastore (2005) who included dimensions of Physical change and Valence in their model, Alexandris *et al.* (2004) considered some physiological factors in the Outcome dimension.

It appears that the models that eliminate Outcome as a service quality dimension (e.g. Kim and Kim, 1995; Lam *et al.*, 2005; Yildiz, 2011) tend to consider the dimensions that can be directly controlled by the organisation. However, the Personnel dimension that is present in all models inevitably leads to interactions with customers and, therefore, is of an inherently less controllable nature. Customers do take part in the service and also become the co-creators; which results in either two-way or one-way communication that forms customers' perceptions of facility staff. However, to what extent is it advantageous to describe perceived service quality with dimensions that are predominantly controllable by organisations, whilst not taking into account the very reasons for these perceptions? Also, to what extent is the true emphasis on the customers' perspective and the dynamics of service co-creation reflected in existing models of service quality?

Figure 2 proposes a new scope for the development of future service quality models in the fitness industry. It stems from service-dominant logic that encompasses the idea of collaboration between a service provider and its customers. The scope includes customer motivations, resources and capabilities as prerequisites for the service of co-creation. For instance, customers come to fitness centres with different motivations. In order to translate this factor into the language of co-creation, it is necessary to draw on the perceptions that customers might have about the fitness club's contribution to supporting their initial motivations for exercise (e.g. how the business helped them to generate and/or maintain

motivation). Similarly, in case of customer resources and capabilities, how customers derive their judgements about service quality should be identified, that is, an assessment of how competent customers consider themselves to be; what their perceived level of control is (in terms of the service process and final outcome); and, how they evaluate their personal contribution to the service quality. Consideration of customers' competence, control and their personal contribution to the service will identify specific inputs which influence perceived quality. In turn, the fitness club's resources and capabilities for offering specific types of value need to be taken into account by asking the following questions: what are the business priorities, i.e. standardised value that benefits all customers; mass customisation of services or personalised value; and whether the business has resources for this. Such analysis will facilitate a conceptual mind shift from the culture of providing/consuming quality to a collaborative framework with the responsibility shared between the customer and the service provider.

[Figure 2]

The extant literature gives a good insight into the service quality dimensions that currently exist in the sport and fitness industry. In order to provide a clear scope for the co-creation encounters in relation to the service quality dimensions, the potential opportunities for customers' contributions to the service need to be formulated. Also, the level of customer collaboration and involvement in the co-creation encounters will explain which of the quality dimensions are controllable by the fitness club to a greater or lesser extent. Finally, what service quality means for customers in terms of the experience they are taking part in needs to be identified to produce a more complete picture of customer perceptions the context of fitness clubs.

The need for developing industry specific service quality models has been recognised by numerous studies (Brady and Cronin, 2001; Ladhari, 2008; Martinez and Martinez, 2008,

2010). Indeed, insufficient attention to the specific context in which models were developed can have implications for adaptations or modifications of the models for use in different contexts, i.e. inadequacy or limited explanation potential (Carrillat *et al.*, 2007; Kaul, 2007; Keillor *et al.*, 2004; Kim and Jin, 2002). Moreover, the social world and the historical meaning of that world serve as departure points for consumers in forming their complexity of views. In turn, a precise consumption context leads to the emergence of salient meaning for the consumer in that context (Thompson, 1997). This forms a wider argument for future service quality models to consider the context of the specific industry to which they are applied (Polyakova and Mirza, 2015). Careful consideration of the unique characteristics shaping the sport and fitness industry, such as consumer motivations, high involvement of consumers in production of the service, perceived value of service experiences and after-use benefits for consumers, will create an improved link to a customer perspective on a service offered.

In the area of general service quality research, Zeithaml and Bitner (2003) suggested that psychological factors such as customers' motivations and self-competence, influence their perceptions of a service and their satisfaction with it. In sport-related industries, the results of studies showed that motivation influences participation levels in recreational sports (Tsorbatzoudis *et al.*, 2006). Taking into account customers' motivation for obtaining the potential benefits from a service, Lagrosen and Lagrosen (2007) identified factors of physical change, mental change and pleasure as service quality dimensions in the health and fitness industry. By contrast, the study by Afthinos *et al.* (2005) suggested that motivation is not important in determining customers' desires for service provided by fitness centres. However, Afthinos *et al.* (2005) did not investigate whether motivations influence assessing the perceived importance of desired service aspects. This provides an argument for researchers to explore customers' motivations and the role that these motivations play in service co-creation.

This in turn can shed the light on the degree of responsibility that customers are willing to take for the creation of service. Apart from establishing a new platform for discussion of service co-creation in perceived quality models in the fitness industry, the proposed approach provided a basis for applying motivational theories to service quality in the fitness industry. The impact that initial motivations of customers have on their perceptions of service quality and the value that customers with different motivations put on their own input into co-creating service quality, can provide managers of fitness facilities with a framework for the development of annual customer satisfaction surveys and customer relationship strategies.

Another suggestion that comes from the service quality research is to follow service-dominant logic and explore what role consumers play in service quality co-creation (Polyakova and Mirza, 2015). Studies by Arnould and Price (1993), Kupers (1998) and Schembri and Sandberg (2011) confirmed that consumers actively co-construct the quality of their service experience. This calls for the scope to go beyond a set of fixed service quality dimensions. Discovering the experiential meaning of service quality (Schembri and Sandberg, 2011) for the customers of fitness clubs can be a tool for drawing on service-dominant logic as well as value/quality co-creation process. The approach would include understanding the principles of collaboration and the dialogical interaction between a fitness club and its customers (co-creation) as well as identifying prerequisites (i.e. resources and capabilities) for effective collaboration (co-production) (Ballantyne and Varey, 2006).

6. Conclusion

The first purpose of this paper was to examine the concept of perceived service quality in the fitness industry. The review of service quality models showed that there is a range of approaches to investigating and measuring service quality in the sport and fitness industry. The model by Brady and Cronin (2001) has been utilized in several studies of service quality in fitness activity (e.g. Alexandris *et al.*, 2004; Ko and Pastore, 2005). The model was

recommended by Martinez and Martinez (2010) as “an excellent basis for proposing the attributes of service quality that can be measured” (p.110). However, it has contradictions that have not been addressed (such as direction of influence between levels of quality). To overcome these issues, Martinez and Martinez (2010) suggested using Brady and Cronin’s (2001) model alongside the identification of the dimensions of service quality in the context of a particular industry. Another model (SQAS) developed by Lam *et al.* (2005) specifically addresses the health–fitness setting and presents a strong basis (from the methodological point of view) for measuring perceived service quality. Yet, Lam *et al.* (2005) recommended that other researchers should re-examine the SQAS using different samples to study factor structure further and potentially to compare the results with another similar scale. Moreover, the scale does not offer the measurement of overall perceived service quality and does not include the outcome quality proposed by several other service quality models.

Various studies (e.g. Brady and Cronin, 2001; Ladhari, 2008; Martinez and Martinez, 2008, 2010) suggest the development of industry-specific models as they could be more appropriate for the context of a particular industry. There are also examples of enriching generic service quality models with the attributes specific to the fitness industry (e.g. Alexandris *et al.*, 2004; Ko and Pastore, 2005). However, both generic and industry-specific models currently have various types of limitations that have been reviewed in this paper. Some of limitations are of a methodological character, others are more of a conceptual nature.

The second purpose of the paper was to make some suggestions on how to develop future service quality models in the fitness industry. While several recommendations for overcoming the limitations of service quality models for the fitness industry were proposed (Polyakova *et al.*, 2012), there is a need for a wider approach to the service quality conceptualisation in the area. The critique of generic service quality models and subsequent call for industry-specific models suggest development of principally new contextual models. Acknowledging service as

co-creation of experience and value between suppliers and customers (Arnould and Price, 1993; Kupers, 1998; Vargo and Lusch, 2008; Schembri and Sandberg, 2011) and the goal of this co-creation as fulfilment of customers' aspirations (Maklan and Klaus, 2011) can bring a new light to the conceptualisation of service quality in the fitness industry. Service quality research needs to re-discover the meanings of service quality elements, such as outcome or valence, and establish conceptually new relationships between service quality in physical fitness and contextual industry-specific factors (McDougall and Levesque, 1994; Rust and Oliver, 1994; Schneider and Bowen, 1995; Lovelock, 1996; Brady and Cronin, 2001; Alexandris *et al.*, 2004; Ko and Pastore, 2004; Hu *et al.*, 2009; Szabó, 2010). In order to facilitate the shift to service-dominant logic, managers of fitness facilities need to revisit their tools for capturing customers' perceptions and to update the areas included in customer satisfaction surveys as well as looking closely at the wording used in the survey questions. Semantics presents a great tool that can be utilised by managers to create a sense of collaborative culture and shared responsibility with their customers. This is a practical implication for a reconceptualisation of service quality in action as well as a culture change in sport and fitness services with the final aim to embrace genuinely the customers' perspective.

The research community needs to reach a consensus about approaches for updating the models. One of the ways could be an interpretivist approach in which the focus is placed on consumers lived experiences as a source of service quality (Schembri and Sandberg, 2011). This will allow to update the literature on service quality with studies that use phenomenographic techniques and ethnographics in order to 're-discover' the meaning of quality (Martinez and Martinez, 2010).

Future research needs to explore motivations of customers and their role in fitness service co-creation. It has been previously suggested that the degree of co-creation can act as an antecedent of competitive advantage as it affects customer satisfaction, customer loyalty and

service expenditure (Grisseemann and Stokburger-Sauer, 2012, Chathoth *et al.*, 2013). Therefore, it is important to investigate the impact of customers' co-creation across individual fitness service dimensions on overall service quality perceptions. This will fill the theoretical gap in the existing body of literature and serve as a basis for the future research on the impact of co-creation in other sectors of sport services. It will also provide managers of fitness facilities with the tools to capture the value that customers assign to their role in terms of co-creating service quality in the context of fitness activity.

References

- Afthinos, Y., Theodorakis, N. D. and Nassis, P. (2005), "Customers' expectations of service in Greek fitness centers: Gender, age, type of sport center, and motivation differences", *Managing Service Quality*, Vol. 15 No. 3, pp. 245-258.
- Akbaba, A. (2006), "Measuring service quality in the hotel industry: a study in a business hotel in Turkey", *International Journal of Hospitality Management*, Vol. 25 No. 2, pp. 170-192.
- Aldlaigan, A.H. and Buttle, F.A. (2002), "SYSTRA-SQ: a new measure of bank service quality", *International Journal of Service Industry Management*, Vol. 13 No. 4, pp. 362-381.
- Alexandris, K., Zahariadis, P., Tsorbatzoudis, C. and Grouios, G. (2004), "An empirical investigation of the relationships among service quality, customer satisfaction and psychological commitment in a health club context", *European Sport Management Quarterly*, Vol.4 No.1, pp. 36-52.
- Arnould, E. J. and Price, L.L. (1993), "River Magic: Extraordinary Experience and the Extended Service Encounter", *Journal of Consumer Research*, Vol. 20, pp. 24-35.
- Ballantyne, D. and Varey, R.J. (2006), "Creating value-in-use through marketing interactions: The exchange logic of relating, communicating, and knowing", *Marketing Theory*, Vol. 6 No.3, pp. 335-348.
- Biddle, S.J.H. and Bailey, C.I.A. (1985), "Motives for participation and attitudes toward physical activity of adult participants in fitness programmes", *Perceptual and Motor Skills*, Vol. 61, pp. 831-834.
- Bogomolova S. (2011), "Service quality perceptions of solely loyal customers", *International Journal of Market Research*, Vol. 53 No. 6, pp 793-810.
- Brady, M. K. and Cronin, J. J. Jr. (2001), "Some New Thoughts on Conceptualizing Perceived Service Quality: A Hierarchical Approach", *Journal of Marketing*, Vol. 65, pp. 34-49.
- Brady, M.K. and Robertson, C.J. (2001), "Searching for a consensus on the antecedent role of service quality and satisfaction: An exploratory cross-national study", *Journal of Business Research*, Vol. 51 No.1, pp. 53-60.
- Carrillat, F. A., Jaramillo, F. and Mulki, J. P. (2007), "The validity of the SERVQUAL and SERVPERF scales: A meta-analytic view of 17 years of research across five continents", *International Journal of Service Industry Management*, Vol. 18, pp. 472-490.
- Chang, K. and Chelladurai, P. (2003), "System-Based Quality Dimensions in Fitness Services: Development of the Scale of Quality", *The Service Industries Journal*, Vol. 23 No. 5, pp. 65-83.
- Chathoth, P., Altinay, L., Harrington, R.J., Okumus, F., and Chan, E. S. W. (2013) "Co-production versus co-creation: a process based continuum in the hotel service context", *International Journal of Hospitality Management*, Vol. 32, p. 11-20.
- Chelladurai, P., Scott, F. L. and Haywood-Farmer, J. (1987), "Dimensions of fitness services development of a model", *Journal of Sport Management*, Vol. 1, pp. 159-172.
- Crompton, J.M., MacKay, K.J. and Fesenmaier, D.R. (1991), "Identifying dimensions of service quality in public recreation", *Journal of Park and Recreation Administration*, Vol. 9 No. 3, pp.15-28.
- Cronin, J. J. Jr., and Taylor, S. A. (1992), "Measuring service quality: a re-examination and extension", *Journal of Marketing*, Vol. 56, pp. 55-68.
- Dabholkar, P. (1995), "A contingency framework for predicting causality between customer satisfaction and service quality", *Advances in Consumer Research*, Vol. 22, pp. 101-106.

- Dabholkar, P. A., Thrope, D. I., and Rentz, J. O. (1996), "Measure of service quality for retail stores: Scale development and validation", *Journal of the Academy of Marketing Science*, Vol. 24, No. 1, pp. 3-16.
- Dagger, T. and Sweeney, J.C. (2006), "The Effect of Service Evaluations on Behavioural Intentions and Quality-of-Life", *Journal of Service Research*, Vol. 9 No1, pp. 3-18.
- Dagger, T. and Sweeney, J.C. (2007), "Service quality attribute weights: How do novice and long-term customers construct service quality perceptions?", *Journal of Service Research*, Vol.10 No.1, pp. 22-42.
- Etgar, M. (2008), "A descriptive model of the customer co-production process", *Journal of the Academy of Marketing Science*, Vol. 36 No. 1, pp. 97-108.
- Fitzgerald, L., Johnston, R., Brignall, S. and Voss, C. (1993), *Performance measurement in service businesses*, CIMA, Cambridge.
- Funk, D. C. and James, J. D. (2001), "The Psychological Continuum Model: A conceptual framework for understanding an individual's psychological connection to sport", *Sport Management Review*, Vol. 4 No. 2, pp. 119-150.
- Getty, J.M. and Getty, R.L. (2003), "Lodging quality index (LQI): assessing customers perceptions of quality deliver", *International Journal of Contemporary Hospitality Management*, Vol. 15 No. 2, pp. 94-104.
- Ghobadian, A., Speller, S., and Jones, M. (1994), "Service Quality: Concepts and Models", *International Journal of Quality & Reliability Management*, Vol. 11 No. 9, pp.43-66.
- Grissemann, U.S. and Stokburger-Sauer, N.E. (2012), "Customer co-creation of travel services: The role of company support and customer satisfaction with the co-creation performance", *Tourism management*, Vol. 33, pp. 1483-1492.
- Grönroos, C. (1997), "Value-driven relational marketing: from products to resources and competencies", *Journal of Marketing Management*, Vol. 13, pp.407-419.
- Grönroos, C. (1984), "A Service Quality Model and its Marketing Implications", *European Journal of Marketing*, Vol. 18 No.4, pp. 36-44.
- Gummesson, E. (2007), "Exit services marketing - enter service marketing", *Journal of customer behaviour*, Vol. 6, pp. 113-141.
- Howat, G., Absher, J., Crilley, G. and Milne, I. (1996), "Measuring customer service quality in sports and leisure centres", *Managing Leisure*, Vol. 1, pp. 77-89.
- Hu, H.-H., Kandampully, J., and Juwaheer, T. D. (2009), "Relationships and impacts of service quality, perceived value, customer satisfaction, and image: an empirical study", *The Service Industries Journal*, Vol. 29 No. 2, pp. 111-125.
- Ives, B. and Olson, M. H. (1984), "User involvement and MIS success: a review of research", *Management Science*, Vol. 30, pp. 586-603.
- Karatepe, O., Yavas, U., and Babakus, E. (2005), "Measuring service quality of banks: scale development and validation", *Journal of Retailing and Consumer Services*, Vol. 12 No. 5, pp. 373-83.
- Kaul, S. (2007), "Measuring retail service quality: examining applicability of international research perspectives in India", *Vikalpa: The Journal for Decision Makers*, Vol. 32, pp. 15-26.
- Keillor, B.D., Hult, G.T.M., and Kandemir, D. (2004), "A study of the service encounter in eight countries", *Journal of International Marketing*, Vol. 12, pp. 9-35.
- Kim, S. and Jin, B. (2002), "Validating the retail service quality scale for US and Korean customers of discount stores: an exploratory study", *Journal of Services Marketing*, Vol. 16, pp. 223-237.
- Kim, D., and Kim, S. Y. (1995), "QUESOC: An Instrument for Assessing the Service Quality of Sport Centers in Korea", *Journal of Sport Management*, Vol. 9, pp. 208-220.

- Ko, Y. J. and Pastore, D. L. (2005), "A Hierarchical Model of Service Quality for the Recreational Sport Industry", *Sport Marketing Quarterly*, Vol. 14, pp. 84-97.
- Ko, Y. J. and Pastore, D. L. (2004), "Current Issues and Conceptualizations of Service Quality in the Recreation Sport Industry", *Sport Marketing Quarterly*, Vol. 13, pp. 158-166.
- Kremer, J., Trew, K. and Ogle, S. (Eds.) (1997), *Young people's involvement in sport*, Routledge, London.
- Kupers, W. (1998), "Phenomenology of Embodied Productivity in Services", *International Journal of Service Industry Management*, Vol. 9, pp. 337-358.
- Ladhari, R. (2008), "Alternative measures of service quality: a review", *Managing Service Quality*, Vol. 18, No. 1, pp. 65-86.
- Lagrosen, S. and Lagrosen, Y. (2007), "Exploring service quality in the health and fitness industry", *Managing Service Quality*, Vol. 17 No. 1, pp. 41-53.
- Lam, E. T. C., Zhang, J.J. and Jensen, B. E. (2005), "Service Quality Assessment Scale (SQAS): An Instrument for Evaluating Service Quality of Health-Fitness Clubs", *Measurement in Physical Education and Exercise Science*, Vol. 9 No. 2, pp. 79-111.
- Lam, T. and Zhang, H.Q. (1999), "Service Quality of Travel Agents: The Case of Travel Agents in Hong Kong", *Tourism Management*, Vol. 20, pp. 341-349.
- Lovelock, C.H. (1996), *Service Marketing, 3rd edition*, Prentice-Hall, Upper Saddle River, NJ.
- Macintosh, E. and Doherty, A. (2007), "Reframing the service environment in the fitness industry", *Managing Leisure*, Vol. 12 No.4, pp. 273-289.
- Mahony, D., Madrigal, R. and Howard, D. (2000), "Using the psychological commitment to teamscale to segment sport consumers based on loyalty" *Sport Marketing Quarterly*, Vol. 9 No.1, pp. 15-25.
- Maklan, S. and Klaus, Ph. (2011), "Customer Experience: Are We Measuring the Right Things", *International Journal of Market Research*, Vol. 53 No. 6, pp. 771-792.
- Markland, D. and Ingledew, D. K. (2007), "Exercise participation motives: A self-determination theory perspective", in Hagger M.S. & Chatzisarantis N.L.D. (Eds), *Self-determination theory in exercise and sport*, Human Kinetics, Champaign, IL, pp. 23-24.
- Martinez, J. A. G. and Martinez, L. C. (2010) "Rethinking perceived service quality: An alternative to hierarchical and multidimensional models", *Total Quality Management & Business Excellence*, Vol. 21 No.1, pp. 93-118.
- Martinez, L. C. and Martinez, J. A. G. (2008), "Developing a multidimensional and hierarchical service quality model for the travel agency industry", *Tourism Management*, Vol. 29, pp. 706 -720.
- Martinez, L. C. and Martinez, J. A. G. (2007), "Cognitive-affective model of consumer satisfaction. An exploratory study within the framework of a sporting event", *Journal of Business Research*, Vol. 60, pp. 108-114.
- McDonald, H. and Karg, A. J. (2014), "Managing co-creation in professional sports: The antecedents and consequences of ritualized spectator behavior", *Sport Management Review*, Vol. 17 No.3, pp. 292-309.
- McDougall, G. H. G. and Levesque, T. (1994), "A revised view of service quality dimensions: An empirical investigation", *Journal of Professional Service Marketing*, Vol. 11 No. 1, pp. 189-209.
- Moxham, C. and Wiseman, F. (2009), "Examining the development, delivery and measurement of service quality in the fitness industry: A case study", *Total Quality Management & Business Excellence*, Vol. 20 No. 5, pp. 467-482.

- Mullen, S.P. and Whaley, D. E. (2010), "Age, gender, and fitness club membership: Factors related to initial involvement and sustained participation", *International Journal of Sport and Exercise Psychology*, Vol.8 No.1, pp. 24-35.
- Papadimitriou, D. A. and Karteroliotis, K. (2000), "The Service Quality Expectations in Private Sport and Fitness Centers: A Reexamination of the Factor Structure", *Sport Marketing Quarterly*, Vol. 9, No. 3, pp. 157-164.
- Parasuraman, A., Zeitzmal, V. A. and Berry, L. L. (1988), "SERVQUAL: a Multiple-Item Scale for measuring consumer perceptions of service quality", *Journal of Retailing*, Vol. 64 No. 1, pp. 12-40.
- Parasuraman, A., Zeitzmal, V. A. and Berry, L. L., (1985), "A Conceptual Model of Service Quality and Its Implications for Future Research", *Journal of Marketing*, Vol. 49, pp. 41-50.
- Philip, G. and Hazlett, S.A. (1997), "The measurement of service quality: a new P-C-P attributes model", *International Journal of Quality & Reliability Management*, Vol. 14 No. 3, pp. 260-286.
- Polyakova, O. and Mirza, M. (2015), "Perceived service quality models: Are they still relevant?", *The Marketing Review*, Vol. 15 No. 1, pp.59-82.
- Polyakova, O., Mirza, M. and Jackson, H. (2012), "Service quality in fitness centres: literature review and further research", paper presented at the Academy of Marketing Conference, 2nd – 5th July 2012, Southampton University, Southampton, available at: http://marketing.conference-services.net/resources/327/2958/pdf/AM2012_0312_paper.pdf (accessed 07 April 2014).
- Prahalad, C. K. and Ramaswamy, V. (2004), "Co-creation experiences: The next practice in value creation", *Journal of Interactive Marketing*, Vol. 18 No. 3, pp. 5–14
- Roberts, G.C. (1992), *Motivation in sport and exercise*, Human Kinetics, Champaign, IL, pp. 3-29.
- Rust, R. T. and Oliver, R. L. (1994), "Service Quality: Insights and Managerial Implications from the Frontier", in Rust, R. T. and Oliver, R. L. (Eds.), *Service Quality: New Directions in Theory and Practice*, Sage Publications, Thousand Oaks, CA, pp.1-19.
- Ryan, R. M., Frederick, C. M., Lipes, D., Rubio, N., and Sheldon, K. M. (1997), "Intrinsic motivation and exercise adherence", *International Journal of Sport Psychology*, Vol. 28, pp. 335-354.
- Schembri, S. and Sandberg, J. (2011), "The experiential meaning of service quality", *Marketing Theory*, 11, pp. 165-186.
- Schneider, B. and Bowen, D. (1995), *Winning the Service Game*, Harvard Business, School Press, Boston, MA.
- Sureshchandar, G.S., Rajendran, C. and Anantharaman, R.N. (2002), "Determinants of customer-perceived service quality: a confirmatory factor analysis approach", *Journal of Services Marketing*, Vol. 16 No. 1, pp. 9-34.
- Szabó, A. (2010), "Leisure sport services quality", paper presented at 7th International Conference on Service Systems and Service Management (ICSSSM), 28-30 June 2010, Tokyo, pp. 1-6.
- Thatcher, J., Thatcher, R., Day, M., Portas, M., and Hood, S. (2009), *Sport and Exercise Science*, Learning Matters, Exeter.
- Thompson, C.J. (1997), "Interpreting Consumers: A Hermeneutical Framework for Deriving Marketing Insights from the Texts of Consumers' Consumption Stories", *Journal of Marketing Research*, Vol. 34, pp. 438-456.
- The Leisure Database Company (2013), "Fitness industry improves growth at a price", available at: <http://www.theleisuredatabase.com/news/news-archive/fitness-industry-improves-growth-at-a-price> (accessed 07 April 2014).

- Tomes, A.E. and Ng, S.C.P. (1995), "Service quality in hospital care: the development of an in-patient questionnaire", *International Journal of Health Care Quality Assurance*, Vol. 8 No. 3, pp. 25-33.
- Tsorbatzoudis, H., Alexandris, K., Zahariadis, P. and Groiuos, G. (2006), "Examining the relationship between recreational sport participation and intrinsic and extrinsic motivation and amotivation", *Perceptual and Motor Skills*, Vol.103, pp.363-374.
- Tranfield, D., Denyer, D. and Smart, P. (2003), "Towards a Methodology for Developing Evidence-Informed Management Knowledge by Means of Systematic Review", *British Journal of Management*, Vol. 14, pp. 207–222.
- Vargo, S.L. and Lusch, R.F. (2008), "From goods to service(s): Divergences and convergences of logics", *Industrial Marketing Management*, Vol. 37, pp. 254-259.
- Walsh, K. (2013), "Global health club industry proves resilient", IHRSA Global Report, available at: http://download.ihrsa.org/press/2013_IHRSA_Global_Report_Feature.pdf (accessed 07 April 2014).
- Weed, M. E. (2005a), "Research Synthesis in Sport Management: Dealing with "Chaos in the Brickyard", *European Sport Management Quarterly*, Vol. 5 No. 1, pp. 77-90.
- Weed, M. E. (2005b), "Meta-interpretation: A method for the interpretive synthesis of qualitative research", *Forum: Qualitative Social Research*, Vol. 6 No. 1, pp. 1-17.
- Wilkins, H., Merrilees, B. and Herington, C. (2007), "Toward an understanding of total service quality in hotels", *International Journal of Hospitality Management*, Vol. 26 No. 4, pp. 840-53.
- Wolfinbarger, M. and Gilly, M.C. (2003), "eTailQ: dimensionalizing, measuring and predicting etail quality", *Journal of Retailing*, Vol. 79 No. 3, pp. 183-98.
- Woratschek, H., Horbel, C. and Popp, B. (2014), "Value cocreation in sport management", *European Sport Management Quarterly*, Vol. 14 No. 1, pp. 1-5.
- Yi, Y. and Gong, T. (2013), "Customer value co-creation behaviour: scale development and validation", *Journal of Business Research*, Vol. 66 No. 9, pp. 1279-1284.
- Yildiz, S. M. (2011), "An importance-performance analysis of fitness center service quality: Empirical results from fitness centers in Turkey", *African Journal of Business Management*, Vol. 5 No. 16, pp. 7031-7041.
- Zeitzmal, V. A. and Bitner, M.J. (2003), *Services marketing: Integrating customer focus across the firm*, McGraw-Hill, New York.

Appendix 1

Analysis of service quality dimensions in various models

Dimensions	Authors						
	Alexandris et al.	Chang & Chelladurai	Kim & Kim	Ko & Pastore	Lagrosen & Lagrosen	Lam et al.	Yildiz
Employee attitude	+	+	+	+		+	+
Employee reliability, responsiveness to complaints	+	+	+	+		+	+
Privacy of members information			+				+
Presentable and neat appearance						+	+
Feedback to members about their development		+					+
Provide good motivation to members							+
Prompt service	+	+					
Personal approach	+	+		+		+	
Knowledgeable and skilful	+		+	+		+	+
Work enthusiastically	+						
Physical environment	Alexandris et al.	Chang & Chelladurai	Kim & Kim	Ko & Pastore	Lagrosen & Lagrosen	Lam et al.	Yildiz
Adequate space/layout	+		+	+	+	+	
Locker room			+			+	+
Brightness			+				

Cleanliness	+		+	+		+	+
Modern facilities/equipment	+		+	+	+	+	+
Professional looking							+
Accessibility of facility/Convenience of location			+			+	+
Security			+	+		+	+
Temperature and illumination						+	+
Attractive facilities/nice atmosphere	+					+	
Good condition/availability of equipment				+		+	
Social environment	Alexandris et al.	Chang & Chelladurai	Kim & Kim	Ko & Pastore	Lagrosen & Lagrosen	Lam et al.	Yildiz
Number of participant groups in the program						+	+
Interaction with other clients		+		+	+		
Social opportunity			+	+			
Other customers do not affect the service badly(only positive)	+			+			
Pleasant social environment					+		
Supporting services	Alexandris et al.	Chang & Chelladurai	Kim & Kim	Ko & Pastore	Lagrosen & Lagrosen	Lam et al.	Yildiz
Consultation with specialists							+
Appropriate			+			+	+

background music							
Child care						+	+
Food and drink services			+				+
First aid for ailment							+
Grooming necessities provided			+				
Diverse /up-to-date information available			+	+			
Wide range of services		+					
Availability of various methods of communication				+			
Program	Alexandris et al.	Chang & Chelladurai	Kim & Kim	Ko & Pastore	Lagrosen & Lagrosen	Lam et al.	Yildiz
Timely announcements							
Appropriate timing of programs		+		+		+	
Rich program content						+	
Program diversity		+	+	+		+	
Operating time				+		+	
Programs are attractive				+			
Program availability at appropriate level						+	
Outcome	Alexandris et al.	Chang & Chelladurai	Kim & Kim	Ko & Pastore	Lagrosen & Lagrosen	Lam et al.	Yildiz
Energy	+				+		
Health	+				+		

Psychological well-being	+				+		
Mood	+				+		
Fitness level/physical ability	+			+	+		
Valence				+			
Pleasure (social and physical)					+		
Change in appearance					+		
Service quality		+					