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Modelling perceived service quality and turnover intentions in gender-segregated environments

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Abstract

This study extends current understanding of how gender shapes value co-creation, perceived service quality and turnover intention within health and fitness clubs. Survey responses were collected from 485 fitness club customers in Iran. Partial least squares structural equation modelling (PLS-SEM) was deployed to demonstrate the effects of predictor variables while fuzzy-set qualitative comparative analysis (fsQCA) was used to identify combinations of value co-creation behaviours capable of predicting model outcomes. Necessary condition analysis (NCA) was also employed to identify the value co-creation factors required to achieve low turnover intentions and high service quality perceptions. Results reveal the moderating role of gender in shaping the complex combinations of value co-creation factors leading to low turnover and high perceived quality; fsQCA findings demonstrate how this differs between male and female consumers. NCA findings suggest that fitness club managers should foster an interactive environment through advocacy programmes, promoting responsible behaviours andwboosting tolerance, to encourage both male and female customers to participate in co-creation processes. This is the first empirical study to apply complexity theory to explore whether service quality perceptions and turnover intentions vary across gender via structural *and* configurational modelling.

KEYWORDS
advocacy, complexity theory, gender, sports marketing, value co-creation

1 | INTRODUCTION

Over the past four decades, the health and fitness club sector has matured into a core component of the global leisure industry (Andreasson & Johansson, 2018). The International Health, Racquet and Sportsclub Association (IHSRSA) estimate that in 2015 alone the sector generated worldwide revenues of US$81 billion from around 180,000 health clubs, serving over 150 million customers in the process (International Health, Racquet, and Sportsclub Association (IHRSA), 2016). Consistent with the industry's general growth, an increasing number of health and fitness club members are women

(Mullen & Whaley, 2010), with *women-only* fitness clubs proving popular (Lim et al., 2016). This is unsurprising given the physical needs, requirements and interests of men and women often differ (Haro-González et al., 2018). However, extant understanding of gender differences in relation to health and fitness consumption remains under-researched, despite its potential importance to today's increasingly competitive health and fitness industry, where member attraction and retention strategies are essential in ensuring profitability (Lim et al., 2016; Polyakova & Mirza, 2016). This has challenged the sector, with efficient service management processes crucial for health and fitness providers hoping to improve service

quality and foster customer loyalty (Tsitskari et al., 2017). Within this context, value co-creation—stimulated both by customers and service providers—has emerged as a promising mechanism to improve service development, underpinned by a range of potential benefits (Vargo & Lusch, 2004) and buttressed by the cooperative nature of sport and fitness participation more generally (Polyakova & Mirza, 2016). Accordingly, value co-creation could be inherently linked to successful sport and leisure business management (Chiu et al., 2019).

Coined by Prahalad and Ramaswamy (2004), *value co-creation* highlights the importance of mutual collaboration in the marketplace. Embody by collective, collaborative processes where firms and customers produce value through interaction (Galvagno & Dalli, 2014; Taheri et al., 2020), value co-creation is widely endorsed in consumer environments, with emphasis often placed on its utility within the service industries. Thus, firms must understand *how* customers can contribute to service delivery in order to design offerings that facilitate successful value co-creation, with extant literature eager to shed light on value co-creation patterns, antecedents and consequences (Cossío-Silva et al., 2016; Revilla-Camacho et al., 2015; Yi & Gong, 2013).

Within the context of sport and leisure consumption, value co-creation has been examined within the relatively passive spectator sport setting (Cordina et al., 2018; Hewer et al., 2017), with scholars recently identifying its utility to health and fitness services (Chiu et al., 2019; Polyakova & Mirza, 2016). Yet, value co-creation is crucial to the industry, as health and fitness clubs bear the core characteristics of service-dominant logic; the service is the fundamental unit of exchange and is co-created by multiple actors, including customers (Polyakova & Mirza, 2016). Further, the fitness club service experience occurs within a collective social context, characterized inherently by customer participation and interaction (Afthinos et al., 2017; Chiu et al., 2019; Polyakova & Mirza, 2016). Health and fitness clubs are therefore *high involvement*; customers must be physically present (Chiu et al., 2015), often sharing the service environment with others, with value co-creation offering opportunities to shape service offerings and outcomes therein in a participative manner (Polyakova & Mirza, 2016).

Thus, value co-creation within the fitness club context has the potential to positively influence customer satisfaction and retention through improved service provision and more meaningful customer-employee interactions (Chiu et al., 2019). Yet, there remains a 50% dropout in membership after the first year of joining a fitness club (MacIntosh & Law, 2015). Previous studies acknowledge that variance in service quality evaluations may be underpinned by socio-demographic characteristics (Afthinos et al., 2005; Avourdiadou & Theodorakis, 2014), with gender serving to influence fitness club members' intentions, perceptions and behaviours (Mullen & Whaley, 2010). Nonetheless, the moderating role of gender on value co-creation behaviours within the health and fitness club context has yet to be fully examined.

This study therefore aims to examine the effects of customer participation and customer citizenship behaviours on perceived service quality and turnover intentions for male and female consumer groups. In doing so, it focuses on perceived service quality and customer turnover intentions; concepts under-examined in studies investigating value co-creation within the health and fitness club context, despite proving important determinants of participative leisure consumption more generally (Revilla-Camacho et al., 2015; Xu et al., 2018). Perceived service quality is a key indicator of customer satisfaction, loyalty and purchase intentions (Mohamed et al., 2020), with this intensified within environments, such as health and fitness clubs, characterized by high levels of competition and the ongoing incorporation of technical advancements into service delivery mechanisms (Andreassen et al., 2016). Further, turnover intention can predict a customer's decision to leave a firm. Thus, developing greater insight into the factors which encourage customers to switch service providers may help industry managers to identify more effective customer retention strategies (Anvari & Amin, 2010).

In doing so, this study draws upon a combination of 'co-creation of value' and 'complexity' theories (Taheri et al., 2020; Vargo & Lusch, 2004; Woodside, 2017). Value co-creation represents a dynamic framework, redesigning the role of customers by creating a complex environment of interactions. Complexity theory complements value co-creation theory by encouraging richer insight into how causal antecedents interact to stimulate high/low scores in desired outcomes. Complexity theory, a nonlinear and heterogonous approach, can thus identify interactions between customer participation, customer citizenship behaviours, perceived service quality and turnover intentions. Finally, as extant research indicates that gender differences can influence consumer decision making and behaviours (Barari et al., 2020; Sharma et al., 2012), we anticipate that men and women may exhibit different value co-creation behaviours within the health and fitness club context.

More specifically, the effects of value co-creation on male and female customers' perceptions of service quality and turnover intentions may vary. Accordingly, this study first tests a newly-developed structural model in order to investigate the net effect of individual variables on model outcomes (i.e. a symmetrical approach), before deploying fuzzy-set qualitative comparative analysis (fsQCA) and necessary conditions analysis (NCA) in order to identify the combinations of variables (e.g. recipes) that produce model outcomes (i.e. an asymmetrical approach) (Coelho et al., 2021; Gannon et al., 2019). In doing so, this study investigates the conditions that stimulate high perceived service quality and low customer turnover intentions (i.e. the model outcomes) across two gender groups, motivated by the following questions:

- What value co-creation factors influence customer perceptions of service quality and turnover intentions?
- Do the effects of value co-creation factors on customers' perceptions of service quality and turnover intentions differ across two gender groups?
- How do combinations of value co-creation factors (i.e. recipes) explain the conditions leading to high levels of perceived service quality and low turnover intention?

- What are the necessary conditions to gain high levels of perceived service quality and low turnover intention scores for both gender groups?

The next section details the theoretical underpinning of the study, with this subsequently followed by the method and research design section, which explains how we address the above research questions using a multi-analytical approach. From there, the results of the measurement, structural and configurational models are discussed. The paper concludes by highlighting a range of theoretical, practical and future research implications stemming from the study findings.

2 | THEORETICAL BACKGROUND

2.1 | Co-creation of value: Customer citizenship and participation

Value co-creation is a joint participatory process involving both supplier and customer (Revilla-Camacho et al., 2015), where both parties derive value from the production and consumption of products and/or services (Vargo & Lusch, 2008). In the inherently interactive fitness club setting (Afthinos et al., 2017), value co-creation can be particularly beneficial thanks to the frequency of customer-employee and customer-customer service encounters. Structured exercise is also underpinned by motives centred on physical, psychological, and social benefit (Chen et al., 2020; Polyakova & Mirza, 2016). This includes general enjoyment and interest in sports; a desire to lose weight and/or improve one's physical appearance; and recognition of the social value of exercise (Pandey & Kumar, 2020). Yet, as individuals from diverse backgrounds participate in co-creation practices therein, it is difficult to predict fitness club customer behaviour (Chiu et al., 2019). As such, understanding how fitness club customers co-create value within this context may prove critical for firms hoping to effectively design and promote their services.

In attempting to understand customer value co-creation behaviours, studies typically adopt a multidimensional (Bove et al., 2009; Groth, 2005) or unidimensional approach (Fang et al., 2008). However, Yi and Gong (2013) argue that this overlooks the relationship between the construct and its underlying dimensions. As such, this study identifies two types of value co-creation behaviour: customer participation and customer citizenship (Yi & Gong, 2013). Customer participation refers to the required (in-role) behaviours necessary for service co-creation, which customers undertake to achieve their consumption goals (Revilla-Camacho et al., 2015). Examples of the necessary conditions for service delivery include service payment, describing consumption needs and being punctual (Revilla-Camacho et al., 2015). Customer citizenship represents the voluntary (extra-role) behaviours of customers that provide additional value to the firm, but which are not necessary conditions underpinning value co-creation (Yi & Gong, 2013). Customer citizenship is based on voluntary action, such as suggesting service improvements and spreading positive word-of-mouth (Bove et al., 2009; Curran et al., 2018; Thompson et al., 2018). Thus, customer citizenship provides added value to firms and may positively influence their performance (Assiouras et al., 2019; Groth, 2005).

These behaviours were conceptualized by Yi and Gong (2013) as higher-order factors, comprised of underlying dimensions. For example, *customer participation* is underpinned by information seeking, information sharing, responsible behaviour and personal interaction (Revilla-Camacho et al., 2015). As such, customers often require guidance regarding their role in the value co-creation process, but must also share information with service providers to ensure their needs are met (Ennew & Binks, 1999). To this end, Xu et al. (2018) suggest that service delivery failure can stem from customer misunderstandings, particularly if their role as value co-creators is unclear. Thus, for co-creation to occur, customers must be cooperative, adhere to the rules and policies of the firm, and foster meaningful interpersonal relations within the service setting (Yen et al., 2020; Yi & Gong, 2013). Similarly, the high-order *customer citizenship* dimension consists of customer feedback (which may improve service quality); advocacy (recommending firms to others); helping fellow customers to behave in line with expected roles; and tolerance of service encounter failure (Yi & Gong, 2013). Collectively, customer participation and customer citizenship combine to underpin the co-creation of value.

2.2 | Perceived service quality

The concept of perceived service quality is ubiquitous across service management literature, with its importance also recognized throughout sports and leisure marketing (Polyakova & Mirza, 2016). In essence, service quality denotes the perceptions customers hold with regard to overall service excellence, with focus on *what* the customer has experienced during *service delivery* (Jung et al., 2017). As such, several models (e.g. SERVQUAL) have been developed in an attempt to identify the core dimensions comprising service quality. However, existing models face criticism due to their over-reliance on technical and functional attributes (Kasiri et al., 2017), which has led to difficulty in operationalizing and applying them within service settings (Cronin & Taylor, 1992). This study therefore conceptualizes perceived service quality broadly, as 'a general perception of overall service excellence in the form of what a customer has experienced in service deliverables' (Jung et al., 2017, p.431).

Despite increased academic attention on service quality in fitness club settings, its antecedents in relation to value co-creation are often overlooked. Nevertheless, Polyakova and Mirza (2016, p.374) argue that cognizance of value co-creation may 'bring a new light in the conceptualization of service quality in the fitness industry'. Indeed, customer participation in value co-creation may positively influence service quality perceptions (Bench et al., 2018; Dong et al., 2008) by shaping customer motivations, loyalty and propensity to recommend firms and services to others (Assiouras et al., 2019; Revilla-Camacho et al., 2015; Torkzadeh et al., 2020).

Within this context, interactions perceived as empathetic, responsive and friendly serve to underpin perceptions of service quality, contributing to the development of a participatory consumption environment (Meesala & Paul, 2018). As such, fitness club customers may seek and share information about the nature of the service and the skills required to perform co-creation tasks, give feedback to employees about their consumption needs and adopt supportive behaviours that may lead to higher overall perceptions of service quality (Jung et al., 2017).

2.3 | Customer turnover intention

Customer turnover intention is considered a customer's self-reported likelihood of terminating an existing service relationship. It refers to the propensity customers have with regards to leaving their current service provider in favour of another (Chuang & Tai, 2016). While echoing some aspects of customer loyalty, customer turnover intention differs as customers may switch providers even if they are satisfied with products or services (Chuah et al., 2017). Various antecedents stimulate customer turnover, including regret, variety seeking, loss of trust and more attractive alternate options (Revilla-Camacho et al., 2017). Customer turnover impacts firms negatively as they lose existing revenue streams and must bear the cost of attracting new customers (Revilla-Camacho et al., 2015). Customer turnover intention can therefore serve as a suitable predictor for actual customer turnover (Revilla-Camacho et al., 2017) and is crucial for service firms (e.g. fitness clubs) that rely on subscriptions and memberships (Chuah et al., 2017). As a typical fitness club can lose up to half of its clientele each year (Lim et al., 2016), customer retention is particularly important within this context.

It is therefore unsurprising that fitness club customers' turnover intention has captivated researchers, with a link identified between service quality, customer satisfaction and intentions to continue membership (Chiu et al., 2019; Dias et al., 2019; Lim et al., 2016). As interactions within fitness clubs can influence customers' intentions to retain membership (Ferrand et al., 2010), it is likely that behaviours leading to value co-creation may influence turnover intentions. Indeed, Haenlein (2013) highlighted the importance of social interactions on customer retention within the services context. Likewise, Nikbin et al. (2016) argued that relationship quality impacts upon customer turnover intention, suggesting that a lack of trust and commitment to the organization encourages customers to switch providers. As co-creation fosters a participatory environment, where actors share information and support (Menguc et al., 2020; Gong), fitness club customers may be less likely to cancel their memberships under such circumstances. Overall, participation in service delivery can improve customer satisfaction and loyalty (García-Pascual et al., 2020), reducing the likelihood of switching providers (Revilla-Camacho et al., 2015, 2017). Yet here, some factors influencing attitudes (e.g. gender) may become more relevant, particularly within the

fitness industry where gender differences are found to influence customer motives and behaviours (Ulseth, 2004).

2.4 | Role of gender in co-creating value

In an attempt to develop more efficient segmentation strategies, research into gender's role as an important moderator of consumer behaviour has flourished (Sharma et al., 2012; Vilches-Montero et al., 2018). Generally, men are considered more task-focussed and self-oriented consumers (Mattila et al., 2003), concerned with peripheral cues such as price, reliability and the efficiency of products/services (Spathis et al., 2004). As such, men are more likely to buy impulsively (Dittmar et al., 1995), although switching costs tend to hold greater influence over their repurchase intentions (Frank et al., 2014). Conversely, women are considered more emotionally and socially oriented consumers (Fan et al., 2018; Govind et al., 2020), more sensitive to the relational aspects of service interaction, and exhibiting greater loyalty to individuals than organizations (Melnyk et al., 2009). As such, brand image holds greater influence on the satisfaction and repurchase intentions of females (Frank et al., 2014), who are often more concerned with the central cues of product/service quality (Haj-Salem et al., 2016) alongside the hedonic attributes of service environments (Borges et al., 2013).

Fitness literature confirms the moderating role of gender on customers' motives, perceptions and behaviours (Clevinger et al., 2020; Lim et al., 2016; Mullen & Whaley, 2010), suggesting that women rate the physical and aesthetic aspects of fitness clubs higher in terms of their intention to revisit (Afthinos et al., 2005; Lee et al., 2011; Mullen & Whaley, 2010). Further, the atmosphere of the fitness club and any relationships with employees therein largely influences satisfaction (García-Fernández et al., 2018; Trail et al., 2005). Indeed, for women, interpersonal interaction serves as an important motive for, and characteristic of, fitness consumption (Kim et al., 2013; Ulseth, 2004). Generally, as women engage in information processing more than men, they tend to give lower service quality evaluations or have lower satisfaction (Snipes et al., 2006). Women were also found to complain more, even though their behaviour tends to be driven by their motivation to help others (Fan et al., 2018).

Women can also be driven by 'others-orientation', where emphasis is placed on supportive and nurturing behaviour (Fan et al., 2018); behaviours conducive to value co-creation. For instance, women are more likely to participate in value co-creation behaviours by offering support to fellow fitness club members, sharing information with them in the process (Dedeoğlu et al., 2020). Likewise, as female consumers can be more expressive than men (Hwang et al., 2015), female fitness club customers may be more likely to give feedback to employees and seek information with regard to their role in the consumption process, co-creating value as a result. Nonetheless, the role of gender in relation to value co-creation behaviours and

subsequent outcomes on fitness consumption are yet to receive sufficient academic attention.

2.5 | Theory and conceptual model

This study examines the effects of customer value co-creation behaviours on perceived service quality and customer turnover intentions, with emphasis on gender differences therein. In doing so, it focuses on the health and fitness club context in Iran, an interesting setting for researching gender's influence on value co-creation. Specifically, the Iranian fitness club context offers a complex socio-cultural research environment, where religion and gender intertwine, influencing the daily lives of citizens and shaping their participation in sports and leisure activities therein.

While Muslim women are not prohibited from undertaking physical activity (Kahan, 2003), they tend to engage in sports and leisure activities less than non-Muslim women (Maxwell & Taylor, 2010; Summers et al., 2018), particularly in countries like Iran where there are strict gender-segregation policies (The Guardian, 2015). However, female participation in physical activity within Iran has grown in recent years, stimulated in part by the rise of women-only fitness clubs and the provision of infrastructure that allows female customers to participate in sports within culturally acceptable parameters (Sfeir, 1985), such as training separately from men (Devito, 2014). Even so, participation in physical activity remains comparatively low compared to their spending on other lifestyle products and services (Melewar & Alwi, 2017). Summers et al. (2018) attribute the low participation in physical activity to socio-cultural and religious barriers such as cultural bias and stereotyping. As such, fitness clubs present complex social settings in Islamic societies where 'symbolically conveyed gender duality determines social structures and everyday life, as well as ways of thinking and of understanding things' (Pfister, 2003, p.220).

Therefore, this study posits that customer value co-creation behaviour is not sufficient in explaining the conditions that lead to high perceived service quality and low customer turnover intention within the complex Iranian fitness and health industry setting. Value co-creation thus represents a dynamic framework, reshaping the role of actors by creating a complex environment of interactions. As such, no single actor can realize the co-creation experience by itself (Polese et al., 2017). Studies highlight that a multiplicity of actors are involved in the service exchange and that value is derived from both the offering *and* the interaction of different actors in terms of producing, processing or using products and/or services (Katzan, 2008). Consequently, this study adopts complexity theory as the sufficient and necessary framework to underpin the proposed research model (Figure 1) and to predict customer co-creation behaviour.

Complexity theory has been used in several disciplines to explain the nonlinear, heterogeneous and dynamic process of complex phenomena, including gender-related issues (Marra, 2015; Mehran & Olya, 2020). It provides in-depth understanding of the relationship
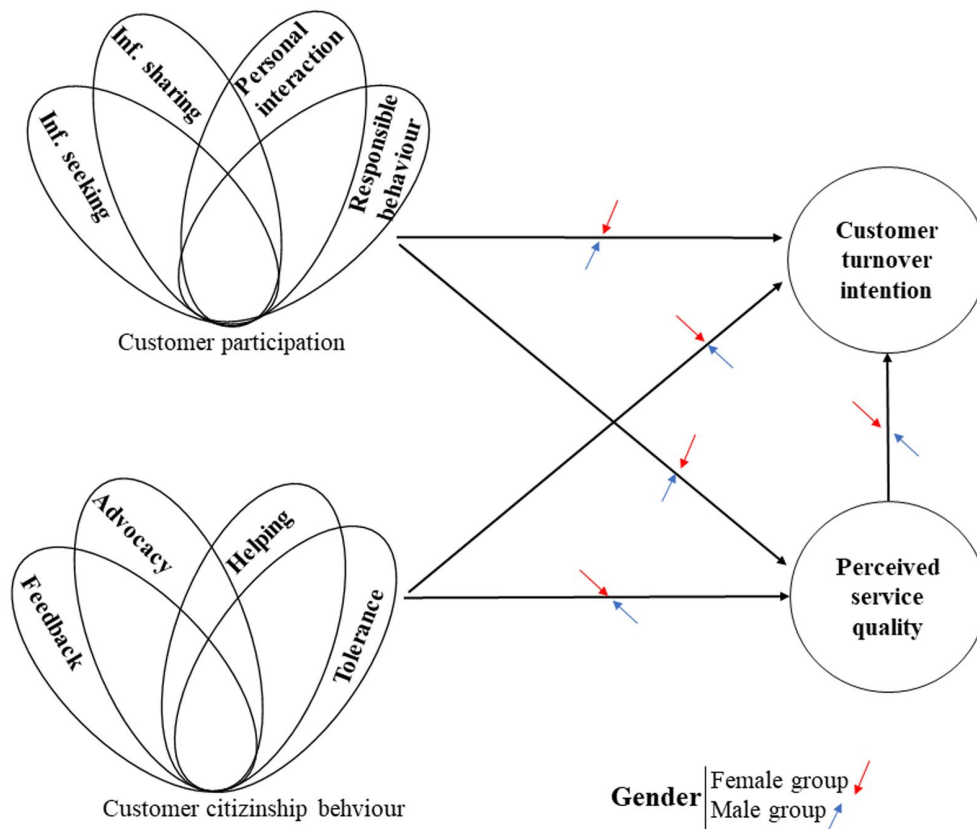

FIGURE 1 Conceptual model

between causal antecedents and outcome conditions as it suggests that a single antecedent is rarely sufficient for predicting a high or low score in desired outcomes. For instance, multiple causal configurations may occur that are sufficient to predict an outcome (Woodside, 2017). Another tenet of complexity theory is that it can identify both the positive and negative roles of individual factors in causal configurations (Woodside, 2017). Overall, complexity theory provides richer insights into how causal antecedents interact to stimulate a high or low score in desired model outcomes.

3 | METHODOLOGY

3.1 | Data collection and sample

Data were collected from health and fitness club customers over a 5-month period in one of Iran's major cities in 2016. During this period, the health and fitness club hosted over 100 classes and activities (e.g. weightlifting, aerobics, yoga, swimming lessons, Pilates). This club was selected for two reasons. First, customers frequently interact with service providers and other customers when undertaking fitness activities (Jung et al., 2017). Second, both female and male customers attend different classes within the same physical service setting due to Islamic beliefs and the underlying values of the Iranian context.

The questionnaire was self-administrated, with instructions provided by the research team; using paper-and-pencil in various high-traffic locations across the fitness club to collect response. The questionnaire was translated into Farsi and successively back-translated into English to ensure the meaning of all scale items was retained. All participants were informed that the questionnaire concerned the overall service experience during recreational fitness classes. The final sample consisted of 485 customers; 54.8 *per cent* were female. Overall, 31.1 *per cent* of participants were aged 16–34, 18.8 *per cent* were 35–44, 21.4 *per cent* were 45–54, with the rest 55+. Regarding education, 24.3 *per cent* held post-graduate degrees; 33 *per cent* were either college graduates or held undergraduate degrees; 33.2 *per cent* were high school graduates or had basic education; and 9.3 *per cent* held professional qualifications.

3.2 | Measures

The measures and underlying items employed within this study are adapted from extant research (Gannon et al., 2021). To measure customer participation, four underlying first-order reflective constructs from Yi and Gong were used (2013): information seeking (three-items), personal interaction (five-items), information sharing (four-items) and responsible behaviour (four-items). To measure customers' citizenship behaviours, this study employed four underlying first-order reflective constructs also adapted from Yi and Gong (2013): feedback (three-items), advocacy (three-items), helping

(four-items) and tolerance (three-items). This study operationalizes customer participation and customer citizenship behaviour as reflective indicators in a composite model (Henseler et al., 2016; Segarra-Moliner & Moliner-Tena, 2016). Customer turnover intention was measured with five-items adapted from Revilla-Camacho et al. (2015), and perceived service quality was measured with three-items, borrowed from Jung et al. (2017). Seven-point Likert scales (1 = 'Strongly Disagree' to 7 = 'Strongly Agree') were used to measure participant responses to all items.

3.3 | Tests for non-response and common methods bias

To evaluate non-response bias, we compared early and late participant responses (Armstrong & Overton, 1977). Using the non-parametric Mann Whitney *U*-test, we identified no significant differences across all variables in our model. Thus, non-response bias was not a concern. Moreover, we used several techniques to mitigate the potential for common method bias (CMB) (Liang et al., 2007; Podsakoff et al., 2003). First, the questionnaire responses were anonymized in order to reduce participants' evaluation apprehension. Second, independent and dependent constructs were placed in different areas of the questionnaire. Third, Harman's single-factor test was used to test CMB by entering all principal constructs into a principal component analysis (PCA). The unrotated solution with a number of extracted factors fixed to 1 condensed a component explaining 39.762 of the overall variance, with the Eigenvalue of the seven factors achieving 0.858. Fourth, we used the unmeasured method factor approach to further investigate CMB. Following Liang et al.'s (2007) recommendation for partial least squares structural equation modelling (PLS-SEM), a common method factor was presented to the structural model. We calculated method factor and average variance of indicators. The average variance demonstrated by indicators was 62 *per cent*, whereas the average method-based variance was 1.3 *per cent* (47:1). Thus, CMB was not a concern.

3.4 | Data analysis

We used non-parametric PLS-SEM to assess the conceptual model. PLS-SEM is used within marketing management studies and is appropriate for formative, reflective and higher-order models (Hair et al., 2017). PLS-SEM is also suitable for data with both normal and non-normal distributional properties. Finally, it is appropriate when the structural model has multiple indicators. We used SmartPLS 3.2.4 to analyse the conceptual model, with 5,000 sub-samples (Ringle et al., 2014).

We used configurational modelling to identify the causal recipe conditions leading to low turnover intention and high perceived service quality. Fuzzy-set qualitative comparative analysis (fsQCA) was appropriate for this study as it is a pragmatic and powerful approach that helps to investigate combinations of customer citizenship

TABLE 1 Reliability, convergent and discriminant validity of reflective constructs

First-order constructs	Loadings range***		CR		α		AVE		ρ_A	
	M	F	M	F	M	F	M	F	M	F
Information seeking (1)	0.711;0.90	0.711;0.812	0.890	0.811	0.811	0.723	0.740	0.707	0.823	0.773
Personal interaction (2)	0.723;0.817	0.735;0.811	0.903	0.911	0.833	0.801	0.712	0.710	0.901	0.832
Information sharing (3)	0.712;0.823	0.731;0.823	0.823	0.858	0.776	0.792	0.591	0.610	0.711	0.723
Responsible behaviour (4)	0.733;0.834	0.725;0.811	0.822	0.911	0.821	0.836	0.653	0.709	0.816	0.827
Feedback (5)	0.711;0.931	0.723;0.827	0.927	0.828	0.858	0.824	0.702	0.733	0.868	0.839
Advocacy (6)	0.806;0.922	0.801;0.90	0.929	0.937	0.911	0.926	0.822	0.91	0.901	0.923
Helping (7)	0.761;0.801	0.864;0.875	0.870	0.811	0.814	0.836	0.632	0.635	0.821	0.804
Tolerance (8)	0.782;0.901	0.702;0.843	0.823	0.90	0.832	0.834	0.722	0.717	0.848	0.823
Turnover intention (9)	0.730;0.941	0.766;0.811	0.901	0.958	0.923	0.921	0.806	0.801	0.911	0.901
Perceived service quality (10)	0.827;0.893	0.789;0.838	0.898	0.811	0.829	0.826	0.745	0.712	0.834	0.816

Group		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Male	(1)	1									
	(2)	0.301	1								
	(3)	0.125	0.237	1							
	(4)	0.422	0.435	0.404	1						
	(5)	0.493	0.257	0.232	0.431	1					
	(6)	0.403	0.123	0.183	0.211	0.578	1				
	(7)	0.330	0.262	0.322	0.265	0.228	0.389	1			
	(8)	0.461	0.358	0.280	0.311	0.268	0.240	0.357	1		
	(9)	0.428	0.346	0.427	0.289	0.236	0.098	0.0561	0.135	1	
	(10)	0.111	0.201	0.522	0.200	0.403	0.239	0.307	0.534	0.409	1
Female	(1)	1									
	(2)	0.189	1								
	(3)	0.211	0.227	1							
	(4)	0.520	0.239	0.430	1						
	(5)	0.378	0.222	0.257	0.389	1					
	(6)	0.370	0.311	0.289	0.238	0.309	1				
	(7)	0.354	0.178	0.322	0.371	0.300	0.211	1			
	(8)	0.268	0.098	0.267	0.289	0.351	0.223	0.589	1		
	(9)	0.322	0.290	0.180	0.439	0.411	0.223	0.403	0.403	1	
	(10)	0.278	0.231	0.239	0.201	0.390	0.457	0.389	0.391	0.379	1

Abbreviations: F, female; M, male.

***$p < .001$.

behaviours and customer participation in predicting the desired model outcomes. While PLS-SEM shows the net effects of predictors, set-theoretic fsQCA can generate knowledge by identifying complex configurations of predictors leading to study outcomes (Olya et al., 2019; Woodside, 2017). As Douglas et al. (2020, p. 1) state: 'fsQCA reveals patterns within the data that are left hidden by traditional methods, and it accommodates data that traditional methods cannot'. We applied three stages of calibration, truth-tabulation analysis and counterfactual analysis to conduct fsQCA. Calibration is the process of transforming crisp values (Likert scales: 1: strongly disagree to 7: strongly agree) to fuzzy values (Set membership: 0: full non-membership to 1: full membership).
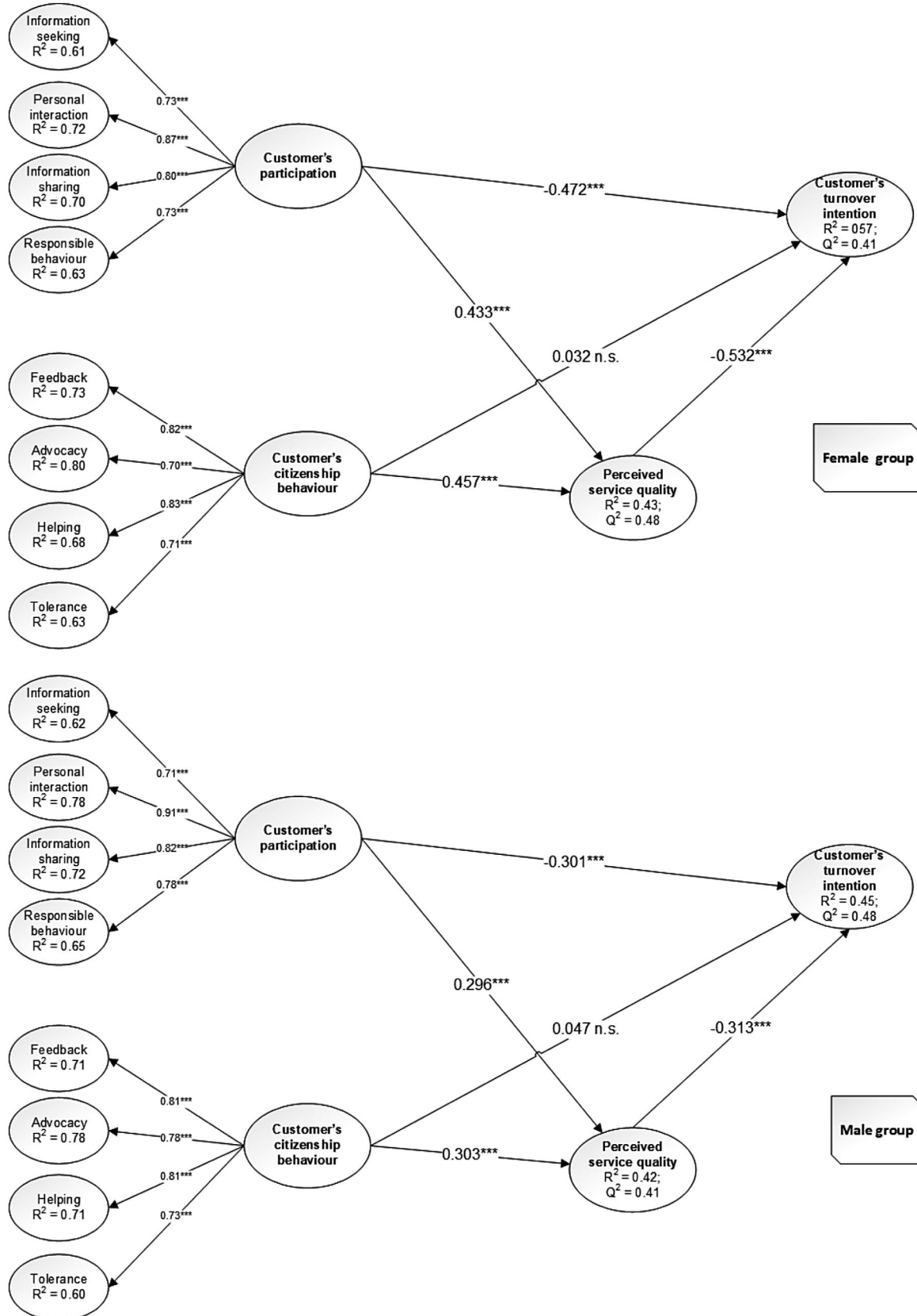
FIGURE 2 Findings of the model assessment (female and male groups); ***(*p* <.001); **(*p* <.01); *(*p* <.05)

In truth-tabulation analysis, we calculated all possible configurations. In counterfactual analysis, sufficient and consistent configurations were refined from the truth table. To do this, two measures—coverage and consistency—are used (Olya, 2021). The recommended cut-off for coverage is 1 for small sample sizes, whereas for medium to large sample sizes 2–5 can be used. A

commonly accepted level of consistency is 0.8 (Ragin, 2009) We also applied necessary condition analysis (NCA) to identify which factors of citizenship behaviour and customer participation are *necessary* to achieve low turnover intention and high levels of perceived service quality (Feng et al., 2019).

4 | RESULTS

4.1 | Assessment of measurement model and invariance measurement across male and female customers

We tested the measurement model by assessing construct reliability, convergent validity and discriminant validity for first-order reflective variables (Hair et al., 2017). The reliability of first-order constructs was assessed using composite reliability (CR), Cronbach's Alpha, and Dijkstra-Henseler's rho (ρA). CR, α and ρA values exceeded 0.70, supporting scale reliability (Table 1) (Hair et al., 2017; Henseler et al., 2016). Regarding convergent validity, Hair et al. (2010) criterion was employed: all factor loadings are > 0.7 and the average variance extracted (AVE) was > 0.5. We tested convergent and discriminant validity in two ways. First, the square roots of the average variance extracted (AVE) of all first-order constructs surpassed all other cross-correlations for PLS (Table 1) (Fornell & Larcker, 1981). Second, the correlations among all first-order constructs were < 0.70. Finally, following Henseler et al. (2015), we applied the heterotrait-monotrait ratio of correlation (HTMT).

All HTMT values for first-order constructs were below the cut-off point (0.85), supporting discriminant validity (Female: 0.247 to 0.601; and Male: 0.211 to 0.523). We used the repeated measures approach (hierarchical component model (HCM)) to test the validity of the higher-order customer participation and customer citizenship behaviour constructs (Maxwell-Stuart et al., 2016). To establish the validity of the HCM, the relationships between second-order constructs and their dimensions were strong (>0.5) and significant. Further, the R^2 of each dimension surpassed 0.5, demonstrating that each second-order construct explains more than 50 *per cent* of the variance in its dimensions (Figure 2).

4.2 | Assessment of the structural model and multi-group analysis

We assessed the hypothesized relationships among constructs through PLS via (1) cross-validation communality and redundancy indices; (2) predictive power; (3) standardized root mean square residual (SRMR) (Hair et al., 2017; Segarra-Moliner & Moliner-Tena, 2016). The results support the model's predictive power as all R^2 values for constructs exceed 0.30 for both male and female groups (Figure 2). Using the blindfolding procedure in SmartPLS (Hair et al., 2017), all Stone-Geisser's Q^2 values were greater than zero for each construct, suggesting predictive relevance (Hair et al., 2017) (Figure 2). For

male participants, SRMR was 0.06 in the first-order model and 0.07 in the second-order model. For female participants, SRMR was 0.05 in the first-order model and 0.07 in the second-order model. Thus, all were below the suggested value of 0.08 (Hair et al., 2017).

We assessed measurement invariance of composites by applying the MICOM procedure (Segarra-Moliner & Moliner-Tena, 2016) to test for multi-group differences. MICOM is a three-step process, comprised of tests of 1) configural invariance, 2) compositional invariance and 3) scalar invariance. The analysis of comparison of loadings between groups for all items under their underlying constructs indicated that the differences between all factorial loads in the male and female groups were non-significant (Welch-Statterthwaite and permutation tests *p*-value > 0.05). Table 2 demonstrates compositional and scalar invariance, guaranteeing 'full measurement invariance'.

We also conducted two non-parametric approaches to test for multi-group differences (Henseler et al., 2009): Hensler's bootstrap-based MGA and the permutation test. Both techniques use *p*-values to test the differences across two groups if *p* <.05. The results of each method show significant differences between the two gender groups (Table 3).

4.3 | Sufficient complex conditions

Configurational modelling results for predicting low turnover intention are provided in Table 4. For the customer participation configuration, the fsQCA results present two similar causal models for both female (coverage: 0.807, consistency: 0.881) and male (coverage: 0.822, consistency: 0.885) customers. Model 1 indicates that high levels of information sharing and responsible behaviour result in low turnover intentions. According to Model 2, low turnover intentions may emerge from low levels of information seeking and high levels of responsible behaviour.

In contrast with the customer participation configuration, the results from the customer citizenship behaviour configuration for females differ from that of males. Six models describe conditions leading to low turnover intentions for female customers (coverage: 0.535, consistency: 0.985), whereas only four emerge for male customers (coverage: 0.532, consistency: 0.985). The four causal recipes for low turnover intention in male customers echo the first four causal recipes for female customers (Table 4).

Table 4, Model 1 indicates that low turnover intentions in female and male customers stem from low scores pertaining to feedback and advocacy and high scores relating to helping others. Model 2 suggests that high feedback and tolerance, coupled with low helping scores, can also lead to low turnover intentions for both gender groups. According to Model 3, a low degree of advocacy and a high degree of tolerance and feedback can also result in low turnover intentions for both gender groups. Further, for both male and female customers, Model 4 shows that high tolerance and helping with low advocacy can lead to low turnover intentions. Based on Model 5, a propensity to help others alongside tolerance

TABLE 2   Results of compositional invariance and scalar invariance

Composite	c-value (0 = 1)	95% CI	Permutation p-value	Compositional invariance?
Information seeking	0.996	[0.988;1.000]	0.617	Yes
Personal interaction	0.975	[0.966,1.000]	0.222	Yes
Information sharing	0.999	[0.997,1.000]	0.459	Yes
Responsible behaviour	0.974	[0.973,1.000]	0.670	Yes
Feedback	0.999	[0.999,1.000]	0.601	Yes
Advocacy	0.999	[0.997,1.000]	0.570	Yes
Helping	0.998	[0.993,1.000]	0.379	Yes
Tolerance	1.000	[0.999,1.000]	0.567	Yes
Turnover intention	0.999	[0.998;1.000]	0.501	Yes
Perceived service quality	0.975	[0.965;1.000]	0.479	Yes
Composite	**Variance difference**	**95% CI**	**Permutation p-value**	**Equal variance?**
Information seeking	−0.018	[−0.123,0.121]	0.427	Yes
Personal interaction	−0.098	[−0.170,0.176]	0.579	Yes
Information sharing	−0.032	[−0.024,0.215]	0.527	Yes
Responsible behaviour	−0.031	[−0.051,0.175]	0.581	Yes
Feedback	−0.158	[−0.186,0.192]	0.720	Yes
Advocacy	−0.165	[−0.216, 0.150]	0.611	Yes
Helping	−0.140	[−0.236, 0.151]	0.434	Yes
Tolerance	−0.177	[−0.202,0.200]	0.536	Yes
Turnover intention	−0.147	[−0.216;0.152]	0.427	Yes
Perceived service quality	−0.144	[−0.215;0.125]	0.378	Yes
Composite	**Mean difference**	**95% CI**	**Permutation p-value**	**Equal mean value?**
Information seeking	−0.002	[−0.044,0.041]	0.433	Yes
Personal interaction	−0.003	[−0.041,0.041]	0.562	Yes
Information sharing	−0.003	[−0.045,0.037]	0.278	Yes
Responsible behaviour	0.017	[−0.123,0.121]	0.345	Yes
Feedback	−0.004	[−0.187,0.192]	0.533	Yes
Advocacy	0.001	[−0.023,0.038]	0.432	Yes
Helping	−0.040	[−0.126,0.122]	0.389	Yes
Tolerance	−0.025	[−0.045,0.043]	0.756	Yes
Turnover intention	−0.002	[−0.044;0.041]	0.538	Yes
Perceived service quality	−0.003	[−0.042;0.041]	0.523	Yes

Abbreviation: CI, confidence interval.

behaviours, coupled with low feedback, describe conditions for low turnover intention for female customers only. Likewise, Model 6 advises that high advocacy alongside low feedback, helping and tolerance can lead to low turnover intentions in female customers.

As per Table 5, the fsQCA results for predicting perceived service quality for female and male participant groups are similar. As with the aforementioned models concerning turnover intentions, two causal models describe conditions leading to high perceived service quality for female (coverage: 0.812, consistency: 0.889) and male customers (coverage: 0.769, consistency: 0.899). *Model 1* advises that high degrees of personal interaction, information sharing and responsible behaviour explain conditions leading to high

perceived service quality. Based on *Model 2*, high perceived service quality stems from high levels of information seeking, information sharing and perceived service quality.

Echoing the fsQCA results from the customer citizenship behaviour configuration for predicting low turnover intention, causal models for indicating perceived service quality differ across gender. *Model 1* suggests that female customers perceive high service quality when they indicate high levels of helping and tolerance. *Model 2* posits that when female customers experience feedback, advocacy and tolerance, they are more likely to perceive service quality as high. For male customers, a combination of low advocacy and high tolerance results in high perceived service quality (*Model 1*), whereas

TABLE 3 MGA findings

Relationships	Male	Female	β differences	Hensler's MGA p-value test	Permutation p-value test	Result
Participation → Turnover intention	−0.301[***]	−0.472[***]	0.171	0.002[***]	0.001[***]	Male < Female
Participation → Perceived service quality	0.296[**]	0.433[***]	0.137	0.004[***]	0.001[***]	Male > Female
Citizenship behaviour → Turnover intention	0.047	0.032	0.015	0.270	0.261	Male = Female
Citizenship behaviour → Perceived service quality	0.303[***]	0.457[***]	0.154	0.002[***]	0.002[***]	Male < Female
Perceived service quality → Turnover intention	−0.313[**]	−0.532[***]	0.219	0.001[***]	0.004[***]	Male < Female

**p <.01; ***p <.001.

TABLE 4 Results of fsQCA to formulate low level of turnover intention

Models of low level of turnover intention of female customer	RC	UC	C	Models of low level of turnover intention of male customer	RC	UC	C
Models from customer's participation configuration: ~tur = f(infsk, pintr, infsh, rsbvr)							
M1: infsh*rsbvr	0.688	0.233	0.874	M1: infsh*rsbvr	0.702	0.232	0.882
M2: ~infsk*rsbvr	0.573	0.118	0.874	M2: ~infsk*rsbvr	0.589	0.119	0.931
Solution coverage: 0.807				*Solution coverage: 0.822*			
Solution consistency:0.881				*Solution consistency:0.885*			
Models from customer's citizenship behaviour configuration: ~ tur = f(feedb, adv, help, tol)							
M1: ~feedb*~adv*help	0.475	0.021	0.992	M1: ~feedb*~adv*help	0.468	0.024	0.991
M2: feedb*~help*tol	0.169	0.003	0.984	M2: feedb*~help*tol	0.181	0.004	0.979
M3: feedb*~adv*tol	0.200	0.003	0.987	M3: feedb*~adv*tol	0.212	0.004	0.986
M4: ~adv*help*tol	0.482	0.015	0.992	M4: ~adv*help*tol	0.475	0.015	0.990
M5: ~feedb*help*tol	0.462	0.008	0.988	*Solution coverage: 0.532*			
M6: ~feedb*adv*~help*~tol	0.077	0.002	0.998	*Solution consistency:0.985*			
Solution coverage: 0.535							
Solution consistency:0.985							

Abbreviations: ~, represents negation condition; Adv, advocacy; C, consistency; Feedb, feedback; help, helping; infsh, information sharing; infsk, information seeking; M, model; pintr, personal interaction; RC, raw coverage; rsbvr, responsible behaviour; tol, tolerance; Tur, turnover intention; UC, unique coverage.

high feedback and tolerance may also lead to high perceptions of service quality for this gender group within the fitness club setting *(Model 2)*.

4.4 | Necessary conditions analysis

Table 6 presents the *necessary* conditions to obtain low levels of customer turnover intention and high perceived service quality. Accordingly, responsible behaviour and tolerance are two necessary conditions to attain high levels of perceived service quality for both male and female groups (consistency > 0.9). Further, to decrease turnover intentions in both gender groups, advocacy emerged as

a necessary factor. As such, necessary conditions do not differ by gender.

5 | DISCUSSIONS AND CONCLUSION

While previous studies illustrate the important role value co-creation can play in shaping customers' turnover intentions and perceptions of service quality more generally (Prayag et al., 2020), this study sought to develop a richer understanding of the role of gender therein (Fan et al., 2018; Revilla-Camacho et al., 2015). Thus, this study contributes to extant understanding of both co-creation of value and complexity theories by proposing and empirically

TABLE 5 Results of fsQCA to predict perceived service quality

Models of perceived service quality for female customer	RC	UC	C	Models of perceived service quality for male customer	RC	UC	C
Models from customer's participation configuration: psq = f(infsk, pintr, infsh, rsbvr)							
M1: pintr*infsh*rsbvr	0.792	0.228	0.896	M1: ~infsk*pintr*rsbvr	0.524	0.185	0.890
M2: infsk*infsh*rsbvr	0.583	0.019	0.924	M2: infsk*infsh*rsbvr	0.583	0.244	0.947
Solution coverage: 0.812				Solution coverage: 0.769			
Solution consistency: 0.889				Solution consistency:0.899			
Models from customer's citizenship behaviour configuration: psq = f(feedb, adv, help, tol)							
M1: help*tol	0.735	0.475	0.908	M1: ~adv*tol	0.755	0.483	0.848
M2: feedb*adv*tol	0.266	0.006	0.978	M2: feedb*tol	0.428	0.155	0.987
Solution coverage: 0.741				Solution coverage: 0.911			
Solution consistency:0.908				Solution consistency: 0.869			

Abbreviations: ~, represents negation condition; adv, advocacy; C, consistency; feedb, feedback; help, helping; infsh, information sharing; infsk, information seeking; M, model; pintr, personal interaction; psq, perceived service quality; RC, raw coverage; rsbvr, responsible behaviour; tol, tolerance; UC, unique coverage.

TABLE 6 High service quality and low turnover intention: necessary conditions

	Outcome: perceived service quality				Outcome: low turnover intention			
	Male customers		Female customers		Male customers		Female customers	
Antecedent condition	Cons.	Cov.	Cons.	Cov.	Cons.	Cov.	Cons.	Cov.
infsk	0.594	0.944	0.592	0.914	0.422	0.859	0.429	0.862
~infsk	0.613	0.677	0.616	0.672	0.658	0.931	0.649	0.923
pintr	0.867	0.889	0.863	0.871	0.642	0.844	0.641	0.844
~pintr	0.361	0.644	0.351	0.612	0.432	0.990	0.430	0.976
infsh	0.873	0.834	0.872	0.829	0.718	0.879	0.705	0.873
~infsh	0.345	0.707	0.347	0.677	0.357	0.938	0.368	0.936
rsbvr	**0.966**	0.763	**0.966**	0.754	0.871	0.882	0.864	0.878
~rsbvr	0.210	0.780	0.201	0.712	0.202	0.962	0.206	0.950
feedb	0.433	0.972	0.416	0.961	0.237	0.683	0.221	0.664
~feedb	0.712	0.654	0.731	0.647	0.837	0.985	0.118	0.512
adv	0.287	0.970	0.286	0.951	**0.946**	0.978	**0.949**	0.979
~adv	0.815	0.658	0.814	0.644	0.123	0.531	0.118	0.512
help	0.734	0.899	0.747	0.885	0.525	0.825	0.531	0.821
~help	0.503	0.700	0.487	0.676	0.553	0.986	0.544	0.985
tol	**0.931**	0.867	**0.925**	0.839	0.718	0.857	0.724	0.856
~tol	0.291	0.630	0.276	0.598	0.357	0.993	0.348	0.982
psq					0.660	0.846	0.645	0.840
~psq					0.415	0.995	0.428	0.988

Abbreviations: ~, represents negation condition; adv, advocacy; Cons., consistency; Cov., coverage; feedb, feedback; help, helping; infsh, information sharing; Infsk, information seeking; pintr, personal interaction; psq, perceived service quality; rsbvr, responsible behaviour; tol, tolerance.
Bold value shows the level of consistency with recommended cutoff (consistency > 0.9).

establishing a link between value co-creation (i.e. customer participation and citizenship behaviour) and relevant service outcomes (i.e. perceived service quality and turnover intention). Moreover, this study contributes to the field by identifying and demonstrating that gender can serve as a key moderator of value co-creation's impact upon service outcomes in a leisure consumption context (e.g. the health club setting). We posit that more research will follow this study, as attaining greater insight into the influence of gender on consumption behaviours in non-Western contexts (e.g. Iran) is the logical next step in developing wider understanding of consumer behaviour in developing economies and contexts. We combined and applied co-creation of value and complexity theories to develop

and test structural and configurational models across two gender groups, with the results evaluated based on the principles of complexity theory (Woodside, 2017).

We first evaluated how components of value co-creation influence customer perceptions of service quality and turnover intentions using a symmetric approach (PLS-SEM). We then compared differences in how male and female customers rate the effects of customer citizenship behaviours and participation on their perceptions of service quality and turnover intentions. We also confirmed customer participation and citizenship as higher-order constructs with several underlying fist-order factors (Yi & Gong, 2013). As per Table 3, the findings of a multi-method MGA showed significant differences between male and female customers with regard to a number of paths: (1) Customer participationTurnover intention (Male < Female); (2) Customer participationPerceived service quality (Male > Female); (3) Customer citizenship behaviourPerceived service quality (Male < Female); (4) Perceived service qualityTurnover intention (Male < Female). However, there is no significant difference between male and female customers regarding the impact of customers' citizenship behaviour on their turnover intentions. These findings reflect previous studies undertaken in different consumption contexts, which contend that co-creation of value can influence perceptions of service quality and turnover intentions (Fan et al., 2018; Hwang et al., 2015; Ulseth, 2004). Further, according to the NCA results, perceived service quality is unnecessary, but sufficient, to reduce turnover intention. As with the MGA results, there is a gender difference with regard to the necessity of perceived service quality in reducing turnover intentions.

This study also explored whether complex combinations of co-creation factors influence perceived service quality and turnover retention using an asymmetrical method (i.e. fsQCA). Thus, we evaluated the results of configurational model testing, framed by the key tenets of complexity theory, in order to identify the causal interactions of citizenship behaviours and participation on customer perceptions of service quality and turnover intentions. The fsQCA results for customer participation and citizenship show that causal recipes of perceived service quality and turnover intentions differ between male and female fitness club customers. As per Table 4, two causal recipes describe conditions through which female customers' participation predicts low customer turnover intention. *Model 1* indicated that low levels of turnover intention result from high levels of information seeking and responsible behaviours. *Model 2* shows that low levels of turnover intention also result from low levels of information seeking and high levels of responsible behaviour. As shown in Table 4, two causal recipes describe conditions underpinned by male customers' participation. These results are similar to those identified for female customers.

As per Table 4, six causal recipes describe conditions where female customers' citizenship behaviours predict low turnover intentions. *Model 1* indicated that low turnover intentions result from low levels of feedback and advocacy and high levels of help. *Model 2* indicated that low turnover intentions result from high levels of feedback and tolerance and low levels of help. *Model 3* showed that low turnover intentions resulted from high levels of feedback, low advocacy and high tolerance. *Model 4* exhibited that low turnover intentions resulted from low advocacy, high levels of help and high tolerance. *Model 5* revealed that low levels of feedback, high levels of help and high tolerance could reduce turnover intentions. Finally, *Model 6* showed that low levels of feedback, high levels of advocacy, low levels of help and low levels of tolerance can reduce turnover intentions. Conversely (Table 4), only four causal recipes describe conditions where male customers' citizenship behaviours predict low turnover intentions. Accordingly, *Model 1, 2, 3 and 4* for male customers echoes Models *1, 2, 3 and 4* for female customers. These results show that female fitness club customers, when compared to their male counterparts, demonstrate greater flexibility with regards to retaining membership of health and fitness clubs.

As per Table 5, two causal recipes describe conditions where female customers' participation predicts high perceptions of service quality. *Model 1* indicated that high perceived service quality resulted from high levels of personal interaction, high levels of information seeking and high levels of responsible behaviour. *Model 2* showed that high perceived service quality resulted from high levels of information seeking, high levels of information sharing and high levels of responsible behaviour. Again, demonstrated in Table 5, two causal recipes describe conditions where male customers' participation predicted high perceptions of service quality. *Model 1* indicated that high perceived service quality resulted from low levels of information seeking, high levels of personal interaction and high levels of responsible behaviour. *Model 2* revealed that high perceived service quality stemmed from high levels of information seeking, high levels of information sharing and high levels of responsible behaviour.

Once again, as per Table 5, two causal recipes describe conditions where female customers' citizenship behaviours predicted high levels of perceived service quality. *Model 1* indicated that high perceived service quality resulted from high levels of help and tolerance. *Model 2* indicated that high perceived service quality was caused by high levels of feedback, advocacy and tolerance. Further, two causal recipes describe conditions where male customers' citizenship behaviours predict high levels of perceived service quality. *Model 1* indicated that high perceived service quality resulted from low advocacy and high tolerance. *Model 2* indicated that high perceived service quality resulted from high feedback and tolerance. The findings also suggest that the necessary conditions to achieve low turnover intentions and high perceived service quality did not differ between females and males (Table 6). Ferrell et al. (2018) report no gender discrimination in attitudes towards gender-based pricing, but that males expect gender-based pricing to emerge more often than female consumers. To this end, the complexity of gender's influence over consumer behaviour is acknowledged by Busch et al. (2017). Thus, gender appears to significantly moderate the relationship between value co-creation dimensions and service quality and turnover intentions. Recognizing this, customized marketing strategies should be developed to improve the value co-creation processes within the fitness club setting specific to the recipes outlined for the different gender groups under investigation.

5.1 | Implications

The findings of this study raise several managerial implications. *First*, the results suggest that gender differences in the value co-creation process could serve as a differentiation strategy for service businesses (e.g. fitness clubs). Accordingly, within such settings, service providers should be open and responsive to the differing consumption preferences of female and male customers, using this as a channel for value creation and an identifiable source of differentiation from competitors. Adopting this strategy may also encourage industry managers to better-facilitate interactions among customers, with value co-creation activities used to reduce barriers between male and female customer groups. *Second*, prior research indicates that female customers are generally more nurturing, supportive and caring (Fan et al., 2018), with our study developing upon this by revealing that, within the fitness club context, they may wish to engage more in value co-creation processes and act in a manner that helps their peers.

Thus, health and fitness clubs should endeavour to better engage female customers during service delivery as the findings reveal that interactive environments play an important role in shaping perceptions of service quality and subsequent turnover intentions. Further, females show greater flexibility with regards to the conditions that may encourage them to terminate their relationship with the fitness club. However, this is manifest in the form of more complicated conditions when describing the recipes stimulating value creation. Mangers must therefore allocate more resources in order to satisfy the conditions leading to high levels of perceived service quality for female customers. Specifically, compared with their male equivalents, the findings suggest that female fitness club members desire more robust help and advocacy schemes within the service environment. Industry managers should thus train employees—alongside consumers who are interested in supporting their peers—to learn how to help customers consistently and effectively, increasing customer retention in the process.

Third, male customers are often conceptualized as being more task-focussed, as opposed to process-oriented. Therefore, the functional aspects (e.g. keeping fit) of the fitness club service may prove particularly important with regards to customer retention. As such, health and fitness clubs should engage male customers in service delivery, but also allocate resources to the sharing of information, with this capable of appealing to male consumers' goal evaluations. Managers can use social media and club websites as means for sharing information, with emphasis placed on the co-created services on offer and how co-creation can contribute to achieving customers' goals (Barari et al., 2020; Drummond et al., 2020). However, specific to this study's context, Facebook and Twitter have banned citizens from their platforms. Thus, industry managers should use alternatives, such as Instagram, to demonstrate the co-creative elements of service enacted on-site. *Finally*, the findings can be generalized beyond the study context into non-Muslim contexts. Islam is the fastest growing religion worldwide. Thus, while the international fitness and health club industry is booming, the results encourage industry managers in Western countries to increasingly consider the needs of Muslim consumers in order to perpetuate and sustain this growth.

5.2 | Limitations and further research

Despite providing nascent insight into the moderating role gender plays in the co-creation of value within the fitness club context, this study is not without limitations. First, data were drawn from one location through self-reported measures. While CMV was not a significant problem, future research should collect data from multiple fitness clubs across different contexts (Liang et al., 2007). Second, the effects of value co-creation on turnover intention and perceived service quality could be further moderated by additional variables (e.g. service complexity, mood and service failure); multi-setting and multi-nation studies focussed thus may go some way to addressing this.

Third, as this study draws upon survey data, a supplementary qualitative study may provide deeper insight into how value co-creation dimensions influence customer experiences (Taheri, Pourfakhimi, et al., 2020). Interviews with both customers and service providers may provide greater insight into the interplay between value co-creation, perceptions of service quality, and turnover intentions. Finally, this study only considered value co-creation in a traditional, *offline* format. However, recreation and leisure firms also use *online* channels to interact with customers, shaping service offerings and expectations in the process. Thus, future studies should also acknowledge and investigate the role of online engagement behaviours in shaping perceived service quality and turnover intentions. Overall, future studies should delve deeper into the conditions shaping interactive fitness environments and, specifically, examine the antecedents and outcomes of female and male customer engagement on their subsequent intentions and actual behaviours.

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REFERENCES

Afthinos, Y., Theodorakis, N. D., & Howat, G. (2017). How do perceptions of other customers affect satisfaction and loyalty in public aquatic centres? *Managing Sport and Leisure*, *22*(6), 428–441.

Afthinos, Y., Theodorakis, N. D., & Nassis, P. (2005). Customers' expectations of service in Greek fitness centers: Gender, age, type of sport center, and motivation differences. *Managing Service Quality: An International Journal*, *15*(3), 245–258.

Andreasson, J., & Johansson, T. (2018). Glocalised fitness: the franchising of a physical movement, fitness professionalism and gender. *Leisure/Loisir*, *42*(3), 301–321.

Andreassen, T. W., Kristensson, P., Lervik-Olsen, L., Parasuraman, A., McColl-Kennedy, J. R., Edvardsson, B., & Colurcio, M. (2016). Linking service design to value creation and service research. *Journal of Service Management*, *27*(1), 21–29.

Anvari, R., & Amin, S. B. M. (2010). The customer relationship management strategies: Personal needs assessment of training and customer turnover. *European Journal of Social Sciences*, *14*(1), 17–33.

Armstrong, J. S., & Overton, T. S. (1977). Estimating nonresponse bias in mail surveys. *Journal of Marketing Research*, 14(3), 396–402.

Assiouras, I., Skourtis, G., Giannopoulos, A., Buhalis, D., & Koniordos, M. (2019). Value co-creation and customer citizenship behavior. *Annals of Tourism Research*, 78, 102742.

Avourdiadou, S., & Theodorakis, N. D. (2014). The development of loyalty among novice and experienced customers of sport and fitness centres. *Sport Management Review*, 17(4), 419–431.

Barari, M., Ross, M., Thaichon, S., & Surachartkumtonkun, J. (2020). A meta-analysis of customer engagement behaviour. *International Journal of Consumer Studies*, https://doi.org/10.1111/ijcs.12609

Bench, S., Eassom, E., & Poursanidou, K. (2018). The nature and extent of service user involvement in critical care research and quality improvement: A scoping review of the literature. *International Journal of Consumer Studies*, 42(2), 217–231.

Borges, A., Babin, B. J., & Spielmann, N. (2013). Gender orientation and retail atmosphere: effects on value perception. *International Journal of Retail & Distribution Management*, 41(7). https://doi.org/10.1108/IJRDM-02-2012-0014

Bove, L. L., Pervan, S. J., Beatty, S. E., & Shiu, E. (2009). Service worker role in encouraging customer organizational citizenship behaviors. *Journal of Business Research*, 62(7), 698–705.

Busch, T., Chee, F., & Harvey, A. (2017). Corporate responsibility and gender in digital games. *Gender equality and responsible business* (pp. 31–45). Routledge. https://doi.org/10.4324/9781351286367

Chen, T., Dodds, S., Finsterwalder, J., Witell, L., Cheung, L., Falter, M., Garry, T., Snyder, H., & McColl-Kennedy, J. R. (2020). Dynamics of wellbeing co-creation: A psychological ownership perspective. *Journal of Service Management*, https://doi.org/10.1108/JOSM-09-2019-0297

Chiu, W., Kwag, M. S., & Bae, J. S. (2015). Customers as partial employees: The influences of satisfaction and commitment on customer citizenship behavior in fitness centers. *Journal of Physical Education and Sport*, 15(4), 627–663.

Chiu, W., Won, D., & Bae, J. S. (2019). Customer value co-creation behaviour in fitness centres: How does it influence customers' value, satisfaction, and repatronage intention? *Managing Sport and Leisure*, 24(1-3), 32–44. https://doi.org/10.1080/23750472.2019.1579666

Chuah, S. H. W., Rauschnabel, P. A., Marimuthu, M., Thurasamy, R., & Nguyen, B. (2017). Why do satisfied customers defect? A closer look at the simultaneous effects of switching barriers and inducements on customer loyalty. *Journal of Service Theory and Practice*, 27(3), 616–641. https://doi.org/10.1108/JSTP-05-2016-0107

Chuang, Y. F., & Tai, Y. F. (2016). Research on customer switching behavior in the service industry. *Management Research Review*, 39(8), 925–939. https://doi.org/10.1108/MRR-01-2015-0022

Clevinger, K., Petrie, T., Martin, S., & Greenleaf, C. (2020). The relationship of sport involvement and gender to physical fitness, self-efficacy, and self-concept in middle school students. *Physical Educator*, 77(1), 154–172. https://doi.org/10.18666/TPE-2020-V77-I1-9228

Coelho, F. J., Evanschitzky, H., Sousa, C. M. P., Olya, H., & Taheri, B. (2021). Control mechanisms, management orientations, and the creativity of service employees: Symmetric and asymmetric modelling. *Journal of Business Research*. https://doi.org/10.1016/j.jbusres.2020.10.055

Cordina, R., Gannon, M. J., & Croall, R. (2018). Over and over: Local fans and spectator sport tourist engagement. *The Service Industries Journal*, 39(7–8), 590–608.

Cossío-Silva, F. J., Revilla-Camacho, M. Á., Vega-Vázquez, M., & Palacios-Florencio, B. (2016). Value co-creation and customer loyalty. *Journal of Business Research*, 69(5), 1621–1625. https://doi.org/10.1016/j.jbusres.2015.10.028

Cronin, J. J. Jr, & Taylor, S. A. (1992). Measuring service quality: A reexamination and extension. *Journal of Marketing*, 56(3), 55–68. https://doi.org/10.1177/002224299205600304

Curran, R., Baxter, I. W. F., Collinson, E., Gannon, M. J., Lochrie, S., Taheri, B., Thompson, J., & Yalinay, O. (2018). The traditional marketplace: Serious leisure and recommending authentic travel. *The Service Industries Journal*, 38(15–16), 1116–1132. https://doi.org/10.1080/02642069.2018.1432603

Dedeoğlu, B. B., Taheri, B., Okumus, F., & Gannon, M. (2020). Understanding the importance that consumers attach to social media sharing (ISMS): Scale development and validation. *Tourism Management*, 76, 103954.– https://doi.org/10.1016/j.tourman.2019.103954

Devito, M. (2014). *Female only fitness classes start spring semester*. University Wire.

Dias, C., Ferreira, A., Romão Pereira, A., & Fonseca, A. M. (2019). Examining the relationship between perceived service quality, satisfaction, and renewal intention in Portuguese fitness centers. *Revista De Psicología Del Deporte*, 28(2), 49–58.

Dittmar, H., Beattie, J., & Friese, S. (1995). Gender identity and material symbols: Objects and decision considerations in impulse purchases. *Journal of Economic Psychology*, 16(3), 491–511. https://doi.org/10.1016/0167-4870(95)00023-H

Dong, B., Evans, K. R., & Zou, S. (2008). The effects of customer participation in co-created service recovery. *Journal of the Academy of Marketing Science*, 36(1), 123–137. https://doi.org/10.1007/s11747-007-0059-8

Douglas, E. J., Shepherd, D. A., & Prentice, C. (2020). Using fuzzy-set qualitative comparative analysis for a finer-grained understanding of entrepreneurship. *Journal of Business Venturing*, 35(1), 105970. https://doi.org/10.1016/j.jbusvent.2019.105970

Drummond, C., O'Toole, T., & McGrath, H. (2020). Digital engagement strategies and tactics in social media marketing. *European Journal of Marketing*, 54(6), 1247–1280. https://doi.org/10.1108/EJM-02-2019-0183

Ennew, C. T., & Binks, M. R. (1999). Impact of participative service relationships on quality, satisfaction and retention: An exploratory study. *Journal of Business Research*, 46(2), 121–132. https://doi.org/10.1016/S0148-2963(98)00016-2

Fan, A., Wu, L., & Mattila, A. S. (2018). Gender differences in the intentions to voice complaints across different service failure modes. *Journal of Foodservice Business Research*, 21(1), 22–32. https://doi.org/10.1080/15378020.2016.1229091

Fang, E., Palmatier, R. W., & Evans, K. R. (2008). Influence of customer participation on creating and sharing of new product value. *Journal of the Academy of Marketing Science*, 36(3), 322–336. https://doi.org/10.1007/s11747-007-0082-9

Feng, K., Altinay, L., & Olya, H. (2019). Social well-being and transformative service research: Evidence from China. *Journal of Services Marketing*, 3(6), 735–750. https://doi.org/10.1108/JSM-10-2018-0294

Ferrand, A., Robinson, L., & Valette-Florence, P. (2010). The intention-to-repurchase paradox: A case of the health and fitness industry. *Journal of Sport Management*, 24(1), 83–105. https://doi.org/10.1123/jsm.24.1.83

Ferrell, O. C., Kapelianis, D., Ferrell, L., & Rowland, L. (2018). Expectations and attitudes toward gender-based price discrimination. *Journal of Business Ethics*, 152(4), 1015–1032. https://doi.org/10.1007/s10551-016-3300-x

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50. https://doi.org/10.1177/002224378101800104

Frank, B., Enkawa, T., & Schvaneveldt, S. J. (2014). How do the success factors driving repurchase intent differ between male and female customers? *Journal of the Academy of Marketing Science*, 42(2), 171–185. https://doi.org/10.1007/s11747-013-0344-7

Galvagno, M., & Dalli, D. (2014). Theory of value co-creation: A systematic literature review. *Managing Service Quality*, 24(6), 643–683. https://doi.org/10.1108/MSQ-09-2013-0187

Gannon, M., Rasoolimanesh, S. M., & Taheri, B. (2021). Assessing the mediating role of residents' perceptions toward tourism development. *Journal of Travel Research*, 60(1), 149–171. https://doi.org/10.1177/0047287519890926

Gannon, M., Taheri, B., & Olya, H. (2019). Festival quality, self-connection, and bragging. *Annals of Tourism Research*, 76, 239–252. https://doi.org/10.1016/j.annals.2019.04.014

García-Fernández, J., Gálvez-Ruíz, P., Fernández-Gavira, J., Vélez-Colón, L., Pitts, B., & Bernal-García, A. (2018). The effects of service convenience and perceived quality on perceived value, satisfaction and loyalty in low-cost fitness centers. *Sport Management Review*, 21(3), 250–262. https://doi.org/10.1016/j.smr.2017.07.003

García-Pascual, F., Prado-Gascó, V., Alguacil, M., Valantine, I., & Calabuig-Moreno, F. (2020). Future intentions of fitness center customers: effect of emotions, perceived well-being and management variables. *Frontiers in Psychology*, 11, 2425. https://doi.org/10.3389/fpsyg.2020.547846

Govind, R., Garg, N., & Mittal, V. (2020). Weather, affect, and preference for hedonic products: The moderating role of gender. *Journal of Marketing Research*, 57(4):717-738.

Groth, M. (2005). Customers as good soldiers: Examining citizenship behaviors in internet service deliveries. *Journal of Management*, 31(1), 7–27. https://doi.org/10.1177/0149206304271375

Guardian, T. (2015). Iranian women and sports: Every obstacle an opportunity. https://www.theguardian.com/world/iran-blog/2015/apr/19/iran-women-sports-stadium-competitive-obstacles

Haenlein, M. (2013). Social interactions in customer churn decisions: The impact of relationship directionality. *International Journal of Research in Marketing*, 30(3), 236–248. https://doi.org/10.1016/j.ijresmar.2013.03.003

Hair, J. F. J., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis: A global perspective*. 7th ed. Pearson.

Hair, J. F. J., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)*. 2nd ed. Sage.

Haj-Salem, N., Chebat, J. C., Michon, R., & Oliveira, S. (2016). Why male and female shoppers do not see mall loyalty through the same lens? The mediating role of self-congruity. *Journal of Business Research*, 69(3), 1219–1227. https://doi.org/10.1016/j.jbusres.2015.09.011

Haro-González, M., Pérez-Ordás, R., Grao-Cruces, A., Nuviala, R., & Nuviala, A. (2018). Female users of unisex fitness centres and of fitness centres exclusive for women: Satisfaction. *International Journal of Sports Marketing and Sponsorship*, 19(4), 384–395. https://doi.org/10.1108/IJSMS-08-2016-0044

Henseler, J., Hubona, G., & Ray, P. A. (2016). Using PLS path modeling in new technology research: Updated guidlines. *Industrial Management & Data Systems*, 116(1), 2–20.

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. https://doi.org/10.1007/s11747-014-0403-8

Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. *Advances in International Marketing*, 20, 277–319.

Hewer, P., Gannon, M., & Cordina, R. (2017). Discordant fandom and global football brands:'Let the people sing'. *Journal of Consumer Culture*, 17(3), 600–619. https://doi.org/10.1177/1469540515611199

Hwang, J., Lee, J. S., & Kim, H. (2019). Perceived innovativeness of drone food delivery services and its impacts on attitude and behavioral intentions: The moderating role of gender and age. *International Journal of Hospitality Management*, 81, 94–103.

International Health, Racquet and Sportsclub Association (IHRSA) (2016). Profiles of success.

Jung, J. H., Yoo, J. J., & Arnold, T. J. (2017). Service climate as a moderator of the effects of customer-to-customer interactions on customer support and service quality. *Journal of Service Research*, 20(4), 426–440. https://doi.org/10.1177/1094670517714331

Kahan, D. (2003). Islam and physical activity: Implications for American sport and physical educators. *Journal of Physical Education, Recreation & Dance*, 74(3), 48–54. https://doi.org/10.1080/07303084.2003.10608470

Kasiri, L. A., Cheng, K. T. G., Sambasivan, M., & Sidin, S. M. (2017). Integration of standardization and customization: Impact on service quality, customer satisfaction, and loyalty. *Journal of Retailing and Consumer Services*, 35, 91–97. https://doi.org/10.1016/j.jretconser.2016.11.007

Katzan, H. J. (2008). Foundations of service science concepts and facilities. *Journal of Service Science*, 1(1), 1–22.

Kim, Y. K., Trail, G. T., & Magnusen, M. J. (2013). Transition from motivation to behaviour: Examining the moderating role of identification (ID) on the relationship between motives and attendance. *International Journal of Sports Marketing and Sponsorship*, 14(3), 35–56. https://doi.org/10.1108/IJSMS-14-03-2013-B004

Lee, J. H., Kim, H. D., Ko, Y. J., & Sagas, M. (2011). The influence of service quality on satisfaction and intention: A gender segmentation strategy. *Sport Management Review*, 14(1), 54–63. https://doi.org/10.1016/j.smr.2010.02.002

Liang, H., Saraf, N., Hu, Q., & Xue, Y. (2007). Assimilation of enterprise systems: The effect of institutional pressures and the mediating role of top management. *MIS Quarterly*, 31(1), 59–87. https://doi.org/10.2307/25148781

Lim, J., Romsa, B., & Armentrout, S. (2016). The impact of perceived value, satisfaction, service quality on customer loyalty in women's fitness clubs. *The Sport Journal*, 19, 10–27.

MacIntosh, E., & Law, B. (2015). Should I stay or should I go? Exploring the decision to join, maintain, or cancel a fitness membership. *Managing Sport and Leisure*, 20(3), 191–210. https://doi.org/10.1080/23750472.2015.1025093

Marra, M. (2015). Cooperating for a more egalitarian society: Complexity theory to evaluate gender equity. *Evaluation*, 21(1), 32–46. https://doi.org/10.1177/1356389014564856

Mattila, A. S., Grandey, A. A., & Fisk, G. M. (2003). The interplay of gender and affective tone in service encounter satisfaction. *Journal of Service Research*, 6(2), 136–143. https://doi.org/10.1177/1094670503257043

Maxwell, H., & Taylor, T. (2010). A culture of trust: Engaging Muslim women in community sport organizations. *European Sport Management Quarterly*, 10(4), 465–483. https://doi.org/10.1080/16184742.2010.502745

Maxwell-Stuart, R., Taheri, B., Paterson, A. S., O'Gorman, K., & Jackson, W. (2016). Working together to increase student satisfaction: Exploring the effects of mode of study and fee status. *Studies in Higher Education*, https://doi.org/10.1080/03075079.2016.1257601

Meesala, A., & Paul, J. (2018). Service quality, consumer satisfaction and loyalty in hospitals: Thinking for the future. *Journal of Retailing and Consumer Services*, 40, 261–269. https://doi.org/10.1016/j.jretconser.2016.10.011

Mehran, J., & Olya, H. G. (2020). Canal boat tourism: Application of complexity theory. *Journal of Retailing and Consumer Services*, 53, 101954.–https://doi.org/10.1016/j.jretconser.2019.101954

Melewar, T. C., & Alwi S. S. (Eds.) (2017). *Islamic marketing and branding: Theory and practice*. Routledge.

Melnyk, V., Van Osselaer, S. M., & Bijmolt, T. H. (2009). Are women more loyal customers than men? Gender differences in loyalty to firms and individual service providers. *Journal of Marketing*, 73(4), 82–96. https://doi.org/10.1509/jmkg.73.4.082

Menguc, B., Auh, S., & Wang, F. (2020). Customer participation variation and its impact on customer service performance: Underlying process and boundary conditions. *Journal of Service Research*, 23(3):299-320.

Mohamed, N., Taheri, B., Farmaki, A., Olya, H., & Gannon, M. J. (2020). Stimulating satisfaction and loyalty: Transformative behaviour and Muslim consumers. *International Journal of Contemporary Hospitality Management*, *32*(9), 2903–2923. https://doi.org/10.1108/IJCHM-04-2020-0330

Mullen, S. P., & 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*, *8*(1), 24–35. https://doi.org/10.1080/1612197X.2010.9671931

Nikbin, D., Marimuthu, M., & Hyun, S. S. (2016). Influence of perceived service fairness on relationship quality and switching intention: An empirical study of restaurant experiences. *Current Issues in Tourism*, *19*(10), 1005–1026. https://doi.org/10.1080/13683500.2013.801407

Olya, H. (2021). Towards advancing theory and methods on tourism development from residents' perspectives: developing a framework on the pathway to impact. *Journal of Sustainable Tourism*, *3*, 1–21. https://doi.org/10.1080/09669582.2020.1843046

Olya, H. G., Lee, C. K., Lee, Y. K., & Reisinger, Y. (2019). What are the triggers of Asian visitor satisfaction and loyalty in the Korean heritage site? *Journal of Retailing and Consumer Services*, *47*, 195–205. https://doi.org/10.1016/j.jretconser.2018.11.002

Pandey, S., & Kumar, D. (2020). Customer-to-customer value co-creation in different service settings. *Qualitative Market Research: An International Journal*, *23*(1), 123–143. https://doi.org/10.1108/QMR-09-2018-0106

Pfister, G. (2003). Women and sport in Iran. In I. Hartmann-Tews, & G. Pfister (Eds.), *Sport and women: social issues in international perspectives (p* (pp. 207–223). Routledge.

Podsakoff, P. M., MacKenzie, S. M., Lee, J., & Podsakoff, N. P. (2003). Common method variance in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*(5), 879–903.

Polese, F., Mele, C., & Gummesson, E. (2017). Value co-creation as a complex adaptive process. *Journal of Service Theory and Practice*, *27*(5), 926–929. https://doi.org/10.1108/JSTP-07-2017-0111

Polyakova, O., & Mirza, M. T. (2016). Service quality models in the context of the fitness industry. *Sport, Business and Management: An International Journal*, *6*(3), 360–382. https://doi.org/10.1108/SBM-04-2014-0015

Prahalad, C. K., & Ramaswamy, V. (2004). Co-creation experiences: The next practice in value creation. *Journal of Interactive Marketing*, *18*(3), 5–14. https://doi.org/10.1002/dir.20015

Prayag, G., Gannon, M. J., Muskat, B., & Taheri, B. (2020). A serious leisure perspective of culinary tourism co-creation: The influence of prior knowledge, physical environment and service quality. *International Journal of Contemporary Hospitality Management*, https://doi.org/10.1108/IJCHM-10-2019-0897

Ragin, C. C. (2009). *Redesigning social inquiry: Fuzzy sets and beyond*. University of Chicago Press.

Revilla-Camacho, M. A., Vega-Vázquez, M., & Cossío-Silva, F. J. (2015). Customer participation and citizenship behavior effects on turnover intention. *Journal of Business Research*, *68*, 1607–1611. https://doi.org/10.1016/j.jbusres.2015.02.004

Revilla-Camacho, M. Á., Vega-Vázquez, M., & Cossío-Silva, F. J. (2017). Exploring the customer's intention to switch firms: The role of customer-related antecedents. *Psychology & Marketing*, *34*(11), 1039–1049. https://doi.org/10.1002/mar.21043

Ringle, C. M., Wende, S., & Becker, J.-M. (2014). SmartPLS 3.2. http://www.smartpls.com

Segarra-Moliner, J. R., & Moliner-Tena, M. A. (2016). Customer equity and CLV in Spanish telecommunication services. *Journal of Business Research*, *69*, 4694–4705. https://doi.org/10.1016/j.jbusres.2016.04.017

Sfeir, L. (1985). The status of Muslim women in sport: Conflict between cultural tradition and modernization. *International Review for the Sociology of Sport*, *20*(4), 283–306. https://doi.org/10.1177/101269028502000404

Sharma, P., Chen, I. S., & Luk, S. T. (2012). Gender and age as moderators in the service evaluation process. *Journal of Services Marketing*, *26*(2), 102–114. https://doi.org/10.1108/08876041211215266

Snipes, R. L., Thomson, N. F., & Oswald, S. L. (2006). Gender bias in customer evaluations of service quality: An empirical investigation. *Journal of Services Marketing*, *20*(4), 274–284. https://doi.org/10.1108/08876040610674616

Spathis, C., Petridou, E., & Glaveli, N. (2004). Managing service quality in banks: Customers' gender effects. *Managing Service Quality: An International Journal*, *14*(1), 90–102. https://doi.org/10.1108/09604520410513695

Summers, J., Hassan, R., Ong, D., & Hossain, M. (2018). Australian Muslim women and fitness choices–myths debunked. *Journal of Services Marketing*, *32*(5), 605–615. https://doi.org/10.1108/JSM-07-2017-0261

Taheri, B., Olya, H., Ali, F., & Gannon, J. (2020). Understanding the influence of airport servicescape on traveler dissatisfaction and misbehavior. *Journal of Travel Research*, *59*(6), 1008–1028. https://doi.org/10.1177/0047287519877257

Taheri, B., Pourfakhimi, S., Prayag, G., Gannon, M., & Finsterwalder, J. (2020). Towards co-created food wellbeing: Culinary consumption, braggart word-of-mouth, and the role of participative codesign, service provider support, and C2C interactions. *European Journal of Marketing*. https://doi.org/10.1108/EJM-02-2020-0145

Thompson, J., Baxter, I. W., Curran, R., Gannon, M. J., Lochrie, S., Taheri, B., & Yalinay, O. (2018). Negotiation, bargaining, and discounts: Generating WoM and local tourism development at the Tabriz bazaar. *Iran. Current Issues in Tourism*, *21*(11), 1207–1214. https://doi.org/10.1080/13683500.2017.1396294

Torkzadeh, S., Zolfagharian, M., & Iyer, P. (2020). Customer value co-creation behaviors and service outcomes: Insights from a transformative service. *Journal of Strategic Marketing*, 1–23. https://doi.org/10.1080/0965254X.2020.1777458

Trail, G. T., Anderson, D. F., & Fink, J. S. (2005). Consumer satisfaction and identity theory: A model of sport spectator conative loyalty. *Sport Marketing Quarterly*, *14*(2), 98–111.

Tsitskari, E., Tzetzis, G., & Konsoulas, D. (2017). Perceived service quality and loyalty of fitness centers' customers: Segmenting members through their exercise motives. *Services Marketing Quarterly*, *38*(4), 253–268. https://doi.org/10.1080/15332969.2017.1366211

Ulseth, A. L. B. (2004). Social integration in modern sport: Commercial fitness centres and voluntary sports clubs. *European Sport Management Quarterly*, *4*(2), 95–115. https://doi.org/10.1080/16184740408737471

Vargo, S. L., & Lusch, R. F. (2004). Evolving to a new dominant logic for marketing. *Journal of Marketing.*, *68*, 1–17. https://doi.org/10.1509/jmkg.68.1.1.24036

Vargo, S. L., & Lusch, R. F. (2008). Service-dominant logic: Continuing the evolution. *Journal of the Academy of Marketing Science*, *36*(1), 1–10. https://doi.org/10.1007/s11747-007-0069-6

Vilches-Montero, S., Pandit, A., Bravo-Olavarria, R., & Chao, C. W. F. (2018). What loyal women (and men) want: The role of gender and loyalty program characteristics in driving store loyalty. *Journal of Retailing and Consumer Services*, *44*, 64–70. https://doi.org/10.1016/j.jretconser.2018.06.003

Woodside, A. G. (2017). *The complexity turn: Cultural, management, and marketing applications*. Cham.

Xu, H., Liu, Y., & Lyu, X. (2018). Customer value co-creation and new service evaluation: The moderating role of outcome quality. *International Journal of Contemporary Hospitality Management*, *30*(4), 2020–2036. https://doi.org/10.1108/IJCHM-08-2016-0467

Yen, C. H., Teng, H. Y., & Tzeng, J. C. (2020). Innovativeness and customer value co-creation behaviors: Mediating role of customer engagement. *International Journal of Hospitality Management*, *88*, 102514. https://doi.org/10.1016/j.ijhm.2020.102514

Yi, Y., & Gong, T. (2013). Customer value co-creation behavior: Scale development and validation. *Journal of Business Research*, *66*, 1279–1284. https://doi.org/10.1016/j.jbusres.2012.02.026

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