

THE IMPACT OF SERVICE QUALITY ON MULTIFUNCTIONAL LEISURE CENTRES CLIENT LOYALTY: EVIDENCE FROM LITHUANIA

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Annotation. This study examines how service quality influences client loyalty in Lithuanian multifunctional leisure centres. A quantitative survey of 385 participants was conducted using an integrated assessment based on SERVQUAL, SQAS, and QUESC models, along with the LSSS loyalty scale. Results revealed a consistent negative gap between client expectations and actual service experience, indicating that services often fail to meet consumer demands. Despite this gap, all service quality dimensions showed a significant positive relationship with loyalty. Price, equipment quality, and sports programs emerged as the strongest predictors of loyal behaviour. Findings highlight the importance of improving perceived value, modernising equipment, and diversifying programs to strengthen client retention. The findings offer practical implications for multifunctional leisure centre managers seeking to enhance customer retention and loyalty by improving service quality, particularly in pricing, program offerings, and facility equipment.

Keywords: service quality, loyalty, evaluation models.

JEL classification: L83, M31, D12.

Introduction

In recent years, rapid technological advancements, urbanization, and the growing prevalence of sedentary lifestyles have underscored the importance of physical activity for maintaining health and well-being. As

awareness of the benefits of regular exercise grows, the leisure industry has expanded significantly, becoming a vital part of modern lifestyles and public health strategies. The continuous development of this sector has intensified competition among leisure centers, underscoring the need to deliver high-quality services that ensure customer satisfaction and foster long-term loyalty.

In today's service-driven economy, service quality is considered a primary determinant of organizational success and competitive advantage. High-quality services not only attract new customers but also strengthen relationships with existing ones, fostering customer trust, satisfaction, and loyalty (Peitzika *et al.*, 2020; Urban, 2009). Loyal clients generate stable income, contribute to a positive reputation through recommendations, and reduce marketing costs (Huang, Kim, 2023). For this reason, understanding how service quality influences loyalty is essential for the sustainability of leisure centres.

The scientific literature defines service quality as a dynamic, subjective construct formed by comparing customer expectations with actual experiences (Parasuraman *et al.*, 1985; Tsitskari *et al.*, 2006). Numerous models, such as SERVQUAL, SERVPERF, SQAS, and QUESC, have been developed to measure perceived service quality across various industries. Meanwhile, specialized scales like LSSS and CLSSC provide tools for assessing loyalty in sports settings. However, no single universal model exists that could evaluate every dimension of service quality or loyalty in all contexts.

Previous studies consistently demonstrate a strong and positive relationship between service quality and customer loyalty (Huang, Kim, 2023; Fernández *et al.*, 2018; Katkat, 2021). High service quality fosters satisfaction, trust, and emotional attachment, key components of long-term commitment. In the context of leisure centres, this means that the quality of programs, staff professionalism, facilities, and responsiveness directly influence whether clients remain loyal or switch to competitors.

This research aims to evaluate the impact of service quality on client loyalty in leisure sports centres.

Research Tasks:

- To analyse the scientific literature on service quality and customer loyalty in the context of sports and multifunctional leisure centres.
- To identify the key service quality dimensions that influence client satisfaction and loyalty, based on existing theoretical models.

1. Literature Review

1.1 The Concept of Service Quality

In the contemporary competitive environment, organizations must continuously evolve, observe market dynamics, and respond to consumers' ever-increasing expectations. As consumer welfare and income levels rise, so do their demands for higher-quality services. When organizations provide poor-quality services, they risk losing customers and damaging their financial performance. Therefore, maintaining high service quality is essential for retaining existing clients, attracting new ones, and achieving profitability.

Services, in a broad sense, are defined as intangible economic activities designed to deliver value and benefits to clients at a specific time and place (Olusegun *et al.*, 2025). Unlike tangible products, services are distinct in their production, consumption, and evaluation processes. Scholars highlight four key characteristics that differentiate services from goods: intangibility, heterogeneity, simultaneity, and inseparability (Chelladurai, Chang, 2000; Yildiz, Kara, 2012).

- Intangibility indicates that services cannot be seen, touched, or physically examined before purchase.
- Heterogeneity reflects that service outcomes often vary depending on the provider, the client, and contextual factors.
- Simultaneity refers to the fact that service production and consumption occur at the same time, typically through direct interaction between the service provider and the customer.
- Inseparability means that the service experience is inherently tied to the provider's performance, making human interaction a vital quality determinant (Parasuraman *et al.*, 1985).

According to Hartwig and Billert (2018), the primary objective of service provision is to deliver high-quality performance through skilled expertise and competence. Over the past decades, service quality has become a central element of marketing research, forming the cornerstone of competitive strategies (Yildiz, Kara, 2012). However, the literature reveals no single universally accepted definition of service quality.

Christopher *et al.* (1993) define it as the organization's ability to meet or exceed customer expectations. Similarly, Tsitskari *et al.* (2006) and Le *et al.* (2025) describe service quality from the consumer's perspective as the comparison between what customers expect and what they actually experience. Ramya *et al.* (2019) emphasize the inseparability and variability of services, noting that providers cannot perform a quality inspection before delivering the final service outcome; thus, perceived quality is based on the client's post-service evaluation.

Ross and Juwaheer (2003) identify three aspects of service quality: physical, situational, and behavioral. These dimensions encompass the tangible components of the service environment, the delivery context, and the conduct of service personnel. Yiğit and Soyer (2023) extend this idea by defining service quality as a dynamic process that evolves through interactions among people, the service itself, its methods, and the surrounding environment. Moreover, quality perceptions vary depending on the nature of services offered. Deschamps *et al.* (2025) observe that while some services satisfy intellectual needs, others fulfil material or emotional ones, implying that quality criteria must be context-specific. In the leisure sector, service quality is directly linked to organizational performance, customer satisfaction, and loyalty. Effective quality management not only enhances satisfaction but also strengthens brand reputation and word of mouth (Xu *et al.*, 2021).

Service quality is a complex, multidimensional construct that serves as a key competitive advantage in the marketplace. Its dynamic and subjective nature complicates objective evaluation but simultaneously underscores its importance. Regular assessment of service quality enables organizations to refine processes, align with customer expectations, and sustain long-term success in a changing environment.

1.2 Service Quality Evaluation Models

Service quality has been a prominent research subject across various fields for several decades. Studies consistently reveal that no single universal model can fully capture or evaluate all aspects of service quality across diverse service industries (Yildiz, 2012). As a result, numerous measurement models have been developed to assess perceived quality in various contexts.

One of the most widely used frameworks is the SERVQUAL model, introduced by Parasuraman, Zeithaml, and Berry (1988). This model identifies five core dimensions that collectively represent consumers' perceptions of service quality: tangibles, reliability, responsiveness, empathy, and assurance. The core logic of SERVQUAL lies in measuring the gap between customer expectations and their actual experiences. The smaller this gap, the

higher the perceived quality. This model has been widely used to evaluate service quality across sectors such as banking, education, and tourism.

However, SERVQUAL has also been criticized. Researchers argue that its five dimensions are not universally applicable and may fail to capture sector-specific attributes (Yildiz, 2012). Additionally, the reliance on measuring expectation perception gaps has raised methodological concerns. To address these limitations, Cronin and Taylor proposed the SERVPERF model, which evaluates service performance solely based on perceived performance, using the same five dimensions as SERVQUAL. By focusing on actual performance rather than expectations, SERVPERF is simpler to apply and has gained wide acceptance. Nonetheless, academic consensus remains divided; both models are still employed depending on research aims and context.

As the service economy expanded, specialized instruments were developed for particular industries, including sports and leisure services, where traditional models often lacked contextual sensitivity. Scholars noted that success in sports organizations depends heavily on their ability to identify client needs and provide services that meet or exceed expectations (Polyakova & Mirza, 2016). Consequently, numerous sector-specific scales have been created. There are specialized service quality models in sports and leisure:

- SAFS (Scale of Attributes of Fitness Services) – developed by Chelladurai *et al.* (1987), measures five dimensions: professionalism, customers, environment, discounts, and services (Yildiz, 2012).
- QUESC (Quality Excellence of Sport Centres) – proposed by Kim & Kim (1995), includes 33 items grouped into eleven dimensions: staff attitude, reliability, program variety, environment, information accessibility, personal aspects, price, privileges, attention, stimulation, and convenience (Polyakova & Mirza, 2016).
- SQFS (Scale of Quality in Fitness Services) – created by Chang & Chelladurai (2003), identifies nine dimensions such as interpersonal interaction, task interaction, programs, service climate, management, physical environment, client–client interaction, and service recovery.
- SQAS (Service Quality Assessment Scale) – developed by Lam *et al.* (2005), encompasses 31 elements across six dimensions: staff, program, locker rooms, physical facilities, training area, and childcare services. This tool demonstrated strong psychometric validity for evaluating fitness club services.
- SSQRS (Sport Service Quality and Recreation Scale) – validated by Ko & Pastore (2007), outlines four general dimensions: program quality, interaction quality, outcome quality, and environment quality.
- SFC-PSQS (Sports Fitness Center–Perceived Service Quality Scale) – introduced by Ucan (2007), consists of 31 items and six dimensions, including interaction quality, result quality, physical environment, equipment, program quality, and environmental conditions (Yildiz & Cokpartal, 2016).
- SQS-FC (Service Quality Scale for Fitness Centers) – developed by Yildiz (2011), identifies four core dimensions: staff, physical environment, supplementary services, and program.
- FITT-Q (Fitness Industry Trust Tools–Quality Scale) – the most recent model proposed by Mulyono *et al.* (2024), emphasizing four key areas: physical environment, program, staff, and secondary services.

These models offer researchers and practitioners valuable tools for identifying strengths and weaknesses, enhancing service delivery, and improving customer satisfaction and loyalty in competitive leisure markets. Furthermore, service quality remains a multidimensional construct that a single instrument cannot fully capture. Moreover, the evolution of service environments has introduced new variables, particularly artificial intelligence

(AI) technologies. AI is increasingly used to personalize customer experiences, automate booking processes, provide real-time data analytics, and enhance service responsiveness (Noor *et al.*, 2022; Huang & Rust, 2020). In the leisure fitness context, AI applications such as automated registration, membership management, digital reminders, and customer preference surveys illustrate how technology can redefine service quality dimensions. Studies confirm that both AI-based and human-delivered services have a significant impact on satisfaction and perceived quality (Sardesai *et al.*, 2024).

Overall, service quality evaluation models have evolved from general frameworks, such as SERVQUAL, to highly specialized tools designed for specific industries. While these models differ in structure and application, they share a common goal of systematically assessing and improving the quality of customer experiences. In today's dynamic, technology-driven environment, integrating traditional service quality concepts with emerging AI-based innovations is essential for sustaining competitiveness and customer loyalty in the leisure sector.

1.3 The Concept of Loyalty

In a constantly changing service environment, customers are increasingly seeking providers that can satisfy their evolving needs and expectations. For sports organizations, maintaining long-term relationships with clients requires much more than mere chance or initial satisfaction; it demands consistent effort and strategic management of loyalty (Suwono, Oktaria, 2016). Customer loyalty remains one of the most significant factors in achieving sustainable profitability and competitive advantage (Yigit, Soyer, 2023; Allahveisi *et al.*, 2023). Investing in loyalty-building initiatives is considered one of the most efficient marketing strategies, as loyal clients generate stable income, reduce acquisition costs, and often promote the brand voluntarily (Schijns *et al.*, 2016).

Customer loyalty is typically defined as a consistent preference for a particular company's products or services, manifested through repeated purchases and a reluctance to switch, even when competitors offer lower prices or easier access (Khattiyasuwan, 2021). Short-term promotions or convenience factors do not easily influence loyal clients; instead, they prioritize maintaining a relationship with a trusted provider, sometimes at a higher cost.

According to Y. Li (2018), loyal customers exhibit several defining characteristics: a long-term association with a company, repeated purchases, a psychological attachment, and stable behavioral patterns. Suwono and Sihombing (2016) emphasize that clients remain loyal only as long as they believe the company provides superior value compared to alternatives.

Scholars generally distinguish between two major dimensions of loyalty:

- Behavioural loyalty, which refers to the observable actions of repurchasing and continued use of services; and
- Attitudinal (emotional) loyalty, which encompasses favourable attitudes, commitment, and positive word-of-mouth advocacy (Li, 2018; Saini & Singh, 2020).

These dimensions are interrelated and complementary. Developing only one aspect of loyalty rarely yields sustainable benefits. Saini and Singh (2020) note that companies focusing exclusively on behavioural loyalty may fail to cultivate genuine emotional attachment, which is the foundation of long-term retention and advocacy.

Earlier, Reichheld (2003) noted that loyalty should not be equated with mere repeat purchases, as customers may continue buying out of habit, convenience, or a lack of alternatives, rather than genuine commitment. Later

studies by Gucal and Gurbuz (2024) emphasized that emotional connection is crucial for business longevity; without it, even successful firms can quickly lose customers. When an emotional bond exists, loyal clients are less likely to switch, even in the presence of attractive alternatives. Similarly, Saini and Singh (2020) and Wijaya *et al.* (2025) suggest that investing in marketing strategies aimed at emotionally loyal customers can yield stronger behavioural outcomes, resulting in higher profitability and stability.

Loyalty benefits not only the company but also the customer. As Salman (2018) points out, loyalty can reduce uncertainty and perceived risk. Long-term customers enjoy greater trust, receive exclusive offers, and save time by avoiding the search for alternatives. In the leisure sector, loyal behaviours manifest through actions such as renewing memberships, increasing membership level or usage frequency, and recommending the club to others.

Pedragosa and Correia (2009) identify three key indicators for evaluating loyalty among leisure sport club members:

- the level of repeat purchases or continued membership;
- willingness to recommend the club to potential new members;
- intention to increase participation frequency.

Numerous international studies have confirmed a strong positive relationship between service quality, customer satisfaction, and loyalty. For instance, Fernández *et al.* (2018) found that loyalty in Spanish public and low-cost leisure centres depends largely on perceived quality, value, and satisfaction. Similarly, Armbrecht (2021) demonstrated a positive relationship between service quality and customers' intentions to repurchase. Improved service quality leads to higher satisfaction and stronger loyalty. Moreover, Gucal and Gurbuz (2024) highlight that perceived service quality significantly influences the first stage of loyalty formation, repurchase intention, which subsequently enhances the overall competitive strength of fitness and wellness clubs. Thus, quality acts as the foundation upon which satisfaction and loyalty are built, linking customer experience with long-term organizational success.

In summary, customer loyalty in the leisure multifunctional sector is a multidimensional construct encompassing both behavioural and emotional elements. It is sustained by customers' satisfaction, trust, and affective commitment, rather than by habitual behaviour alone. Organizations striving to nurture loyalty must adapt to technological and social changes, invest in relationship quality, and continuously enhance service performance.

1.4 The Relationship between Service Quality and Consumer Loyalty

The relationship between service quality and consumer loyalty has long been recognized as a central topic in the service industry and particularly in the leisure sector. As competition intensifies and customer expectations evolve, understanding how perceived service quality drives loyalty has become essential for sustaining organizational success and profitability. Numerous studies confirm that quality is a key determinant of satisfaction, trust, and long-term commitment, all of which shape loyal customer behaviour.

Integrating relationship marketing theory and service-dominant logic provides a deeper explanation of why service quality drives loyalty (Grönroos, Gummerus, 2014). Relationship marketing emphasizes satisfaction and trust as central mediators linking quality to long-term client commitment. At the same time, service-dominant logic highlights that value is co-created through ongoing interactions between clients and service providers. Together, these theories clarify how high-quality services, personalised interactions, and well-designed programs foster emotional attachment, repeated membership, and positive word-of-mouth

High service quality not only creates favourable customer experiences but also strengthens emotional attachment and behavioural intentions, two vital elements of loyalty. Loyal clients are those who consistently use the same service, renew their memberships, recommend it to others, and remain committed, even when faced with attractive competitive alternatives. Therefore, service quality functions as both a precursor and a sustaining factor of loyalty (Yigit & Soyer, 2023; Gucal & Gurbuz, 2024).

Empirical research consistently supports this interconnection. Huang and Kim (2023) found that the five traditional dimensions of service quality — tangibles, reliability, responsiveness, assurance, and empathy — directly affect customer satisfaction and trust, which, in turn, foster loyalty in leisure centers. Similarly, Fernández *et al.* (2018) examined public and low-cost sports clubs in Spain. They demonstrated that perceived quality, service value, and satisfaction significantly predict customers' future intentions to continue using the service. Interestingly, they observed that different quality dimensions, such as facility comfort and staff professionalism, have varying importance depending on the type of leisure centre.

Another study by Katkat (2021) emphasized that factors such as service quality, cleanliness, price, and emotional attachment are the primary determinants of loyalty among leisure sport club members. These findings highlight that loyalty is shaped not only by the technical aspects of service delivery but also by customers' emotional and psychological connections with the organization. Peitzika *et al.* (2020) further argued that sport and leisure clubs face the continuous challenge of meeting customers' expectations across multiple areas, from physical environment and equipment to staff competence and interpersonal interaction. Their study of Greek leisure clubs revealed that the quality of the physical environment and the condition of the equipment were among the most influential factors driving customer satisfaction and subsequent loyalty. Similarly, Eskiler and Safak (2022) found that service outcome quality, staff-client interactions, and client-to-client relationships significantly enhance the overall service experience, which in turn translates into stronger loyalty.

The research by Xu, Chen, Kim *et al.* (2021) confirmed that in the leisure industry, service assurance and responsiveness are critical elements of quality that directly affect customer satisfaction. When customers feel that problems are resolved effectively and promptly, their trust in the organization strengthens, leading to continued membership and advocacy behaviour. This aligns with the broader understanding that satisfaction mediates the relationship between perceived quality and loyalty. Satisfied clients tend to remain with the organization longer and are more willing to recommend it to others. Gucal and Gurbuz (2024) demonstrated that when customers perceive high service quality, they exhibit stronger loyalty behaviours such as repeat purchases and positive word-of-mouth communication. Their findings reinforce the idea that loyalty is a process initiated by perceived quality, developed through satisfaction and trust, and maintained by emotional engagement.

Overall research consistently confirms a strong, positive, and multidimensional link between service quality and consumer loyalty. Service quality acts as a foundation for customer satisfaction and trust, which are key mediators of loyalty. In the leisure sport club context, high-quality services—manifested through professional staff, clean and well-equipped facilities, responsive management, and personalized attention create experiences that not only meet but exceed customer expectations. Such experiences generate emotional and behavioural loyalty, contributing to organizational stability, customer retention, and long-term success in a highly competitive market.

This link between quality and loyalty is the core principle of Relationship Marketing. The goal is not a single transaction but the cultivation of a long-term, mutually beneficial relationship. In this model, high service quality (e.g., staff competence, physical environment quality) serves as the foundational element.

This quality first forms the basis for customer satisfaction and trust. As research by Lithuanian authors (Usas *et al.*, 2018) and related studies co-authored by Lithuanian scholars (Khudhair *et al.*, 2019) confirm, customer satisfaction serves as a critical mediator linking service quality (including digital aspects such as website quality) to consumer loyalty. This process is crucial: satisfaction, supported by consistent quality, develops into a more profound emotional attachment and trust in the organization. Research involving Lithuanian scholars (Alguacil *et al.*, 2018) also emphasizes that in the leisure services market, brand credibility (built on quality) is essential for fostering customer loyalty and positive word of mouth. Thus, service quality initiates satisfaction, which in turn creates the sustainable loyalty that relationship marketing seeks to achieve.

2. Research Methodology and Organization

A quantitative, cross-sectional research strategy was used to examine the impact of service quality on customer loyalty in multifunctional leisure centres.

Based on the analysed scientific literature, which consistently confirms a positive relationship between service quality and customer loyalty, and applying the theoretical assumption of the SERVQUAL model regarding the gap between expectations and experience, this study poses the following questions and hypotheses:

H1: Perceived service quality and its dimensions (staff, services, sports programs, equipment, environment, price) have a direct positive impact on the customer loyalty of Lithuanian multifunctional leisure centres.

H2: A statistically significant negative gap exists between the expectations of multifunctional leisure centre clients and their experience in evaluating service quality dimensions.

The sample for this study consisted of 385 participants. The participants were individuals aged 18 and older who attend multifunctional leisure centres, also known as sports and wellness centres, in Lithuania. The study sample was selected using a simple random sampling method, ensuring the sample's representativeness of the population. The inclusion criteria were as follows: membership at the exact centre for more than one year and active use of the gym.

Among the participants, 233 were females (60.5%) and 152 were males (39.5%). In terms of age, the majority (62.6%) were between 27 and 45 years old. According to education level, most participants (54.8%) had higher education. The descriptive statistics are presented in *Table 1*.

Table 1. Sample characteristics

Variable		Number	Percentage
Age (years)	From 18 to 26	79	20.5 %
	From 26 to 45	241	62.6 %
	From 45 to 60	51	13.2 %
	Over 60	14	3.6 %
Education	Graduate school	41	10.6 %
	Professional education	52	13.5 %
	Higher school/university education	261	67.8 %
	Higher school/university student	31	8.1 %
Center Location	Big city	250	64,9%
	Town	135	35,1%
Duration of attendance (years)	From 1 to 2	201	52.2 %
	From 2 to 4	115	29.9 %
	Over 4	69	17.9 %
Average number of visits per week	1-2	158	41.0 %
	3-4	192	49,9%
	5 or more	35	9,1%

Source: created by the authors.

All data were collected via an online survey between February and April 2025. Potential participants were approached via personalized invitations shared in Facebook groups of leisure centres. Before beginning the survey, participants were informed about the study's purpose, the measures used, the procedures, and the potential risks and benefits. They were also reminded of their right to withdraw from participation at any time and told the approximate time required to complete the questionnaire (10-15 minutes). Before starting the survey, participants provided informed consent on the first page of the questionnaire, and only then were directed to the survey items. All questions were set as mandatory, ensuring that no data were missing. This study was conducted in accordance with the Declaration of Helsinki.

To evaluate the impact of service quality on the loyalty of clients of sports and wellness centres, a standardized, anonymous online questionnaire was employed. The questionnaire consisted of four parts: socio-demographic information, service quality, client loyalty, and artificial intelligence (AI) services.

The socio-demographic information was collected through a self-designed questionnaire that included participants' gender, age, education level, and participation in leisure centre activities.

Service quality (both expectations and experience) was assessed using questions based on the SERVQUAL, SQAS, and QUESC methodologies. Four dimensions of active leisure service quality – staff (including administration and coaches), services (the offered program and service itself), facilities, and the centre (encompassing price, environment, and image)- were evaluated according to 59 criteria. Each criterion was rated on a five-point Likert scale ranging from 1 (very poor) to 5 (excellent).

Loyalty Scale assessed client loyalty in Sport Services (LSSS) (Cimen *et al.*, 2016). This scale consists of 8 dimensions and 14 items: Behavioural Intention, Resistance to Change, Overall Satisfaction, Perceived Value, Position Involvement, Informational Complexity, Importance-Hedonism, and Sign. All items were rated on a 5-point Likert-type scale, ranging from 1 (strongly disagree) to 5 (strongly agree).

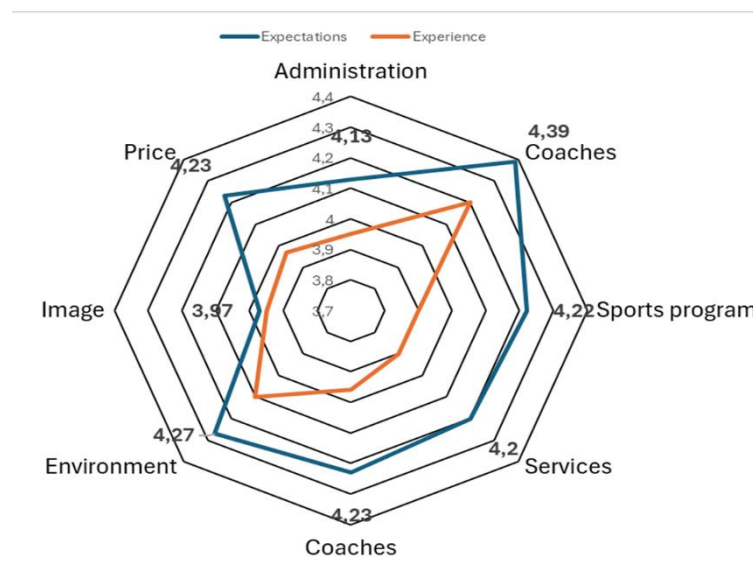
The use of artificial intelligence (AI) service agents in leisure services was assessed using 11 items and six dimensions: efficiency, security, availability, enjoyment, contact, and anthropomorphism, from a scale measuring the quality of AI service agent services (Noor *et al.*, 2022). Items were rated on a 5-point Likert-type scale, ranging from 1 (strongly disagree) to 5 (strongly agree).

IBM SPSS version 21.0 (Statistical Package for the Social Sciences) for Windows was used for data analysis. The methods applied included: descriptive statistics, Cronbach's alpha (to assess internal consistency), paired t-tests (to assess differences between expectations and experience), ANOVA (to assess differences between groups), Pearson correlation analysis, and regression analysis (to assess relationships).

3. Results

Analysis of Client Expectations and Perceived Service Quality. The first finding of the study revealed a statistically significant negative difference between clients' expectations and their actual perceived service quality. In all evaluated categories, client expectations exceeded the actual service quality received.

After analyzing client expectations, it was determined that the highest demands were placed, as seen in *Figure 1*.



Source: created by the authors.

Figure 1. Assessment of Expectations and Experienced Service Quality, Distinguishing the Components of the Service Complex

After calculating the Service Quality Index (SQI) (experience minus expectations), it was found that the evaluation of all service complex components is negative. This confirms that the services did not meet client expectations.

The most significant negative gap (SQI) was identified in the price (-0.2511), sports program (-0.2147), and services (-0.1932) dimensions. The smallest gap was found in the image dimension (-0.0242), indicating that the multifunctional leisure centre image most closely aligned with client expectations.

Paired t-tests confirmed that the differences between expectations and experience in most components (e.g., coaches, program, price) are statistically significant ($p < 0.05$).

Analysis of the Impact of Service Quality on Loyalty. The second significant result of the study is that a positive relationship was found between all investigated dimensions of service quality and client loyalty. This means that the higher clients rate service quality, the more loyal they tend to be.

Correlation analysis (see Table 2) revealed that all quality dimensions are statistically significantly ($p < 0.001$) positively correlated with loyalty. The strongest relationships with loyalty are observed in price ($r = 0.302$), equipment ($r = 0.263$), and the sports program ($r = 0.259$). The evaluation of administration showed the weakest correlation ($r = 0.190$).

Table 2. Correlation Matrix of Consumer Loyalty and Satisfaction with Individual Service Quality Dimensions

		Administration	Coaches	Sports program	Services	Coaches	Environment	Image	Price
Loyalty	Pearson Correlation	0.190 **	0.207 **	0.259 **	0.219 **	0.263 **	0.244 **	0.256 **	0.302 **
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	N	385	385	385	385	385	385	385	385

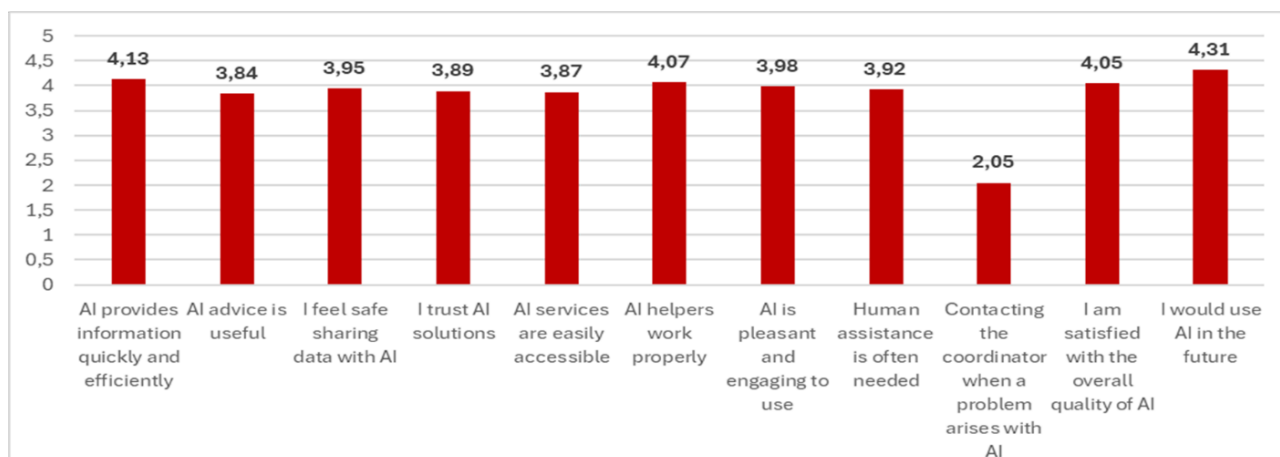
Source: created by the authors.

Linear regression analysis performed for each dimension separately revealed that all of them are statistically significant predictors of loyalty ($p < 0.001$). The largest predicted impact (based on R^2) on loyalty comes from price ($R^2=0.091$), equipment ($R^2=0.069$), and the sports program ($R^2=0.067$).

Multiple regression analysis, treating all dimensions as a single model, found that the overall model is statistically significant ($F=5.813$; $p < 0.001$) and explains 11% of the loyalty variance ($R^2=0.110$). However, in this model, only one factor—price—remained a statistically significant ($p = 0.013$) positive predictor of loyalty. These findings confirm that loyalty is most strongly predicted by three factors: price, equipment quality, and the sports program.

Based on the research results, both hypotheses were confirmed. First, a statistically significant positive relationship was found between all investigated service quality dimensions and customer loyalty (H1), with price, equipment, and sports programs showing the most substantial impact on loyalty. Second, the study also confirmed a statistically significant negative gap between customer expectations and experience across all service categories (H2), indicating that the services did not fully meet clients' high expectations.

Evaluation of Artificial Intelligence (AI) Services. The study revealed that artificial intelligence (AI) solutions are not yet widespread in Lithuanian multifunctional leisure centres. Only 9.4% of respondents reported actively using AI services, while 40.3% did not even know whether their centre offered such services.



Source: created by the authors.

Figure 2. Evaluation of Artificial Intelligence in Multifunctional Leisure Centres

However, those clients who do use AI services rate them favourably (see Figure 2). The statements rated highest were: "I would use AI in the future" (average rating of 4.31), "AI provides info quickly and efficiently" (average rating of 4.13), and "I am satisfied with the overall AI quality" (average rating of 4.05). This indicates a positive attitude and a desire to use these technologies in the future. The lowest-rated aspect was the ability to contact an employee if a problem arises (avg. 2.05), indicating a lack of human contact when solving AI-related issues.

4. Discussion

The results of this study confirm that service quality is a complex phenomenon dependent on the gap between expectations and experience. The statistically significant negative gap between expectations and experience aligns with findings from similar studies (e.g., Ying, 2015; Yıldız *et al.*, 2018; Gucal, Gurbuz, 2024). This indicates that multifunctional leisure centres often fail to meet high client expectations.

The highest expectations placed on coaches (professionalism, responsibility) echo the research of Xu *et al.* (2021) and Galvez-Ruiz *et al.* (2023), which emphasize the importance of staff competence and social skills. The importance of the physical environment, also confirmed by this study, is widely discussed in the literature (Suwono, Sihombing, 2016; Huang, Kim, 2023).

In this study, price emerged as the strongest predictor of loyalty. This aligns with the insights of Suwono and Sihombing (2016) and Cimen *et al.* (2016), who note that clients are susceptible to the price-quality ratio. The most significant negative SQI gap, found precisely in the price dimension, indicates that clients feel the value received does not match the price paid.

The study confirmed a positive, statistically significant relationship between all service quality dimensions and client loyalty, consistent with previous findings (Alauddin, 2023; Eskiler, Safak, 2022; García-Fernández *et al.*, 2018). Although only price remained statistically significant in the multiple regression, linear regression revealed that equipment and sports programs are also crucial factors in loyalty.

Finally, the AI analysis results indicate an initial stage of this technology's implementation in Lithuanian multifunctional leisure centres. Although usage is low, respondents' favorable evaluations (especially regarding

speed and convenience) align with the insights of K. Xu *et al.* (2021) and Noor *et al.* (2022) on the growing need for technology and virtual interactions in the service sector.

In this study, price emerged as the strongest predictor of loyalty. This must be interpreted in conjunction with our second key finding: the largest negative Service Quality Index (SQI) gap also occurred in the price dimension.

This convergence of findings suggests that the critical factor is not price alone, but rather perceived value. The negative gap indicates clients feel the value received does not match the price paid. This finding aligns with Fernández *et al.* (2018), who identified perceived value as a key predictor of future intentions. Furthermore, research co-authored by Lithuanian scholars (Khudhair *et al.*, 2019) explicitly discusses the importance of managing services for "value-sensitive customers". It is likely that in the Lithuanian market, price functions as a fundamental "hygiene" factor; if clients perceive a value deficit, their loyalty cannot be secured merely by other quality dimensions, such as staff friendliness.

While our study confirmed the positive link between all quality dimensions and loyalty, our regression analysis highlighted price, equipment, and sports programs as the strongest predictors of loyalty. This offers a nuanced perspective compared to international studies, which often focus on the physical environment or staff responsiveness.

This difference may reflect the specifics of the Lithuanian market context. The dominance of price as a predictor, combined with the large negative SQI gap, points to a highly rational and value-sensitive consumer, an observation supported by other studies involving Lithuanian researchers (e.g., Khudhair *et al.*, 2019).

Furthermore, the importance of equipment and programs suggests a mature consumer base demanding tangible, high-quality core offerings. This aligns with research by Alguacil *et al.* (2018) involving scholars from Lithuanian Sports University, which found that in the Baltic leisure market, building brand credibility (often linked to tangible quality) is fundamental for translating client attitudes into loyalty and positive word-of-mouth. Our study clarifies what drives this: clients are not loyal simply because staff are polite (which they expect as a baseline), but because they feel they are receiving concrete value for their money, as evidenced by the use of modern equipment and diverse programs at a price they deem fair.

Conclusions

Based on the research results, the following conclusions are formulated:

1. The analysis of scientific literature showed that service quality is a dynamic and subjective phenomenon formed by comparing consumer expectations with their experiences. Loyalty in the context of multifunctional leisure centres is manifested through repeated memberships, recommendations to others, and remaining faithful despite competitive alternatives.
2. There is no single universal model for assessing service quality. Specialized instruments (e.g., SAFS, QUESC, SQAS, FITT-Q) have been developed for the sports services field, emphasizing program, physical environment, and staff. This study employed a combined questionnaire that integrated SERVQUAL, SQAS, and QUESC models.
3. Scientific research confirms that high service quality directly and positively affects client satisfaction, trust, and loyalty. Aspects such as the physical environment and staff professionalism are essential predictors of allegiance.

4. The results of this study revealed that the expectations of Lithuanian multifunctional leisure centres' clients exceed their actual experiences in most service quality aspects. Nevertheless, a statistically significant positive relationship was confirmed between all dimensions of perceived service quality and client loyalty. The most substantial impact on loyalty (according to linear regression) was exerted by price, equipment, and the sports program. Multiple regression analysis revealed that price was the most statistically significant predictor of loyalty in the overall model.

Recommendations

Based on the study's conclusions, the following recommendations are provided to multifunctional leisure centres in Lithuania:

1. **Invest in Staff.** As clients have exceptionally high expectations for coaches' professionalism, courtesy, and responsibility, it is recommended that periodic qualification upgrade training be organized to strengthen staff communication and client motivation skills.
2. **Improve the Material Base and Programs.** Having identified a significant impact of equipment quality and sports programs on loyalty, it is recommended to continuously invest in equipment modernization, maintain facility cleanliness, and increase the variety of sports programs and flexibility of schedules.
3. **Optimize Pricing.** Price was identified as the factor with the most substantial impact on loyalty. Multifunctional leisure centres should carefully review their pricing strategies to ensure they align with the perceived value of the services they offer.
4. **Apply a Segmented Approach.** The study revealed that loyalty varies significantly by consumer gender, education, and membership duration. Future strategies and research should aim to analyze the needs of these segments separately to tailor services and increase loyalty.
5. **Gradually Implement AI Solutions.** Although AI technologies are not yet widespread, users are open to them and value their speed and convenience. It is recommended to gradually integrate AI solutions in customer service, registration, information provision, and personalized offerings, while also informing clients about the benefits of these technologies.

Literature

- Alguacil, M., Núñez-Pomar, J.M., Valantine, I., Crespo-Hervas, J., Pérez-Campos, C., Staskeviciute-Butiene, I. (2018), "The Importance of the Services Brand in Predicting Loyalty and Word of Mouth", *Engineering Economics*, Vol. 29, No 5, pp.579–587.
- Allahveisi, N., Izadi, S., Monsouri, M. (2023), "Customer loyalty as a determinant of sustainable competitive advantage in service industries", *Journal of Services Marketing*, Vol. 37, No 2, pp.254–269.
- Armbrecht, J. (2021), "Service quality and repurchase intentions: Evidence from leisure fitness centers", *International Journal of Sport Management and Marketing*, Vol. 21, No 1, pp.45–63.
- Chelladurai, P., Chang, K. (2000), "Targets and standards of quality in sport services", *Sport Management Review*, Vol. 3, No 1, pp.1–22.
- Christopher, M., Payne, A., Ballantyne, D. (1993), *Relationship marketing: Creating stakeholder value*, Butterworth-Heinemann, Oxford.
- Deschamps, P., Jacobs, B., Hansen, A.S., Wiguna, T., Moussa, S., Chachar, A.S., Piot, M.A. (2025), "Experiences in child and adolescent psychiatry training: An international qualitative study", *Child and Adolescent Psychiatry and Mental Health*, Vol. 19, No 1, pp.42.
- Fernández, J.G., Sánchez, M.G., García, J. (2018), "Perceived quality, value, and satisfaction in public and low-cost fitness clubs in Spain", *European Sport Management Quarterly*, Vol. 18, No 2, pp.164–181.

- Freitas, A., Lacerda, F. (2018), "Applying SERVQUAL to measure service quality in fitness clubs", *International Journal of Sport Management*, Vol. 19, No 3, pp.27–38.
- Gucal, A., Gurbuz, B. (2024), "Emotional bonding and customer loyalty in fitness services", *Sport Business Management: An International Journal*, Vol. 14, No 1, pp.87–103.
- Grönroos, C., Gummerus, J. (2014), "The service revolution and its marketing implications: Service logic vs service-dominant logic", *Managing Service Quality*, Vol. 24, No 3, pp.206–229.
- Hartwig, K., Billert, M.S. (2018), "Competence and service quality in the fitness industry", *Journal of Physical Education and Sport Management*, Vol. 9, No 1, pp.23–35.
- Huang, M.-H., Kim, J. (2023), "The role of service quality and satisfaction in customer loyalty within fitness centers", *Journal of Consumer Behaviour*, Vol. 22, No 4, pp.312–328.
- Huang, M.-H., Rust, R.T. (2020), "Artificial intelligence in service", *Journal of Service Research*, Vol. 23, No 2, pp.155–172.
- Katkat, D. (2021), "Customer loyalty scale for sports centers (CLSSC): Development and validation", *International Journal of Sport Management*, Vol. 22, No 2, pp.101–117.
- Khattiyasuwan, W. (2021), "Determinants of customer loyalty in service industries", *Journal of Business and Economics*, Vol. 12, No 1, pp.58–69.
- Khudhair, H.Y., Jusoh, A., Mardani, A., Nor, K.M., Streimikiene, D. (2019), "Review of scoping studies on service quality, customer satisfaction and customer loyalty in the airline industry", *Contemporary Economics*, Vol. 13, No 4, pp.375–387.
- Ko, Y.J., Pastore, D.L. (2007), "An instrument to assess service quality in recreational sport: SSQRS", *Sport Marketing Quarterly*, Vol. 16, No 2, pp.79–89.
- Lam, E.T.C., Zhang, J.J., Jensen, B.E. (2005), "Service quality assessment scale (SQAS) in health-fitness clubs", *Measurement in Physical Education and Exercise Science*, Vol. 9, No 2, pp.79–111.
- Le, T.P., Ngo, S.L., Chau, V.H., Pham, D.K. (2025), "Understanding customer loyalty in sports facilities: Insights into service quality, perceived value, satisfaction and facility image", *Journal of Physical Education and Sport*, Vol. 25, No 1, pp.71–78.
- Li, Y. (2018), "Dimensions of customer loyalty: Attitudinal and behavioral approaches", *Journal of Marketing Development and Competitiveness*, Vol. 12, No 3, pp.68–75.
- Mulyono, H., Santosa, M., Widjaja, P. (2024), "FITT-Q: Measuring service quality in the fitness industry", *Journal of Fitness and Health Management*, Vol. 11, No 1, pp.1–14.
- Noor, S., Hill, S.R., Troshani, I. (2022), "Artificial intelligence in service quality management", *Journal of Service Management*, Vol. 33, No 5, pp.711–732.
- Olusegun, O., Nyongessien, I., Garba, S., Adewole, A., Adetuyi, A. (2025), "Digitalisation and supply chain integration in Northwest Nigerian hospitality: Impact on service quality, operational efficiency and employee satisfaction", *Modern Supply Chain Research and Applications*, pp.1–18.
- Parasuraman, A., Zeithaml, V.A., Berry, L.L. (1985), "A conceptual model of service quality and its implications for future research", *Journal of Marketing*, Vol. 49, No 4, pp.41–50.
- Parasuraman, A., Zeithaml, V.A., 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.
- Peitzika, E., Chatzi, G., Kissa, K. (2020), "The effect of service quality on customer satisfaction and loyalty in Greek fitness clubs", *European Journal of Physical Education and Sport Science*, Vol. 6, No 3, pp.45–59.
- Polyakova, O., Mirza, M. (2016), "Measuring service quality in sport and leisure: A review of models", *Sport, Business and Management: An International Journal*, Vol. 6, No 3, pp.320–340.
- Ramya, N., Kowsalya, A., Dharanipriya, K. (2019), "Service quality and its measurement: A review", *International Journal of Management*, Vol. 10, No 5, pp.57–66.
- Reichheld, F.F. (2003), "The one number you need to grow", *Harvard Business Review*, Vol. 81, No 12, pp.46–54.
- Ross, I., Juwaheer, A. (2003), "Service quality dimensions in the hospitality industry", *International Journal of Contemporary Hospitality Management*, Vol. 15, No 3, pp.145–155.
- Saini, S., Singh, J. (2020), "Linking attitudinal and behavioral loyalty: An integrated approach", *Journal of Services Research*, Vol. 20, No 1, pp.23–39.

- Salman, A. (2018), "The benefits of customer loyalty for both firms and consumers", *Business Perspectives*, Vol. 14, No 2, pp.55–63.
- Sardesai, A., D'Souza, C., Govekar, P. (2024), "The influence of AI and human service quality on customer satisfaction", *Journal of Contemporary Marketing Research*, Vol. 11, No 2, pp.67–82.
- Schijns, J.M., Caniels, M.C., Le Conté, J. (2016), "Loyalty development and customer retention in service contexts", *Journal of Relationship Marketing*, Vol. 15, No 1, pp.1–21.
- Suwono, L.V., Oktaria, R. (2016), "Customer retention through loyalty strategies in sports services", *Journal of Marketing Management*, Vol. 8, No 1, pp.34–44.
- Tsitskari, E., Tsiotras, D., Tsiotras, G. (2006), "Measuring service quality in sport services", *Managing Service Quality*, Vol. 16, No 4, pp.363–386.
- Urban, W. (2009), "Service quality and loyalty in competitive markets", *Total Quality Management*, Vol. 20, No 7, pp.817–829.
- Wijaya, I.P.G.B.A., Sudiarta, I.N., Antara, I.K. (2025), "Motivation, service quality, and tourist satisfaction: Predicting revisit intention at beach clubs in Melasti Beach, Bali", *Asian Journal of Management, Entrepreneurship and Social Science*, Vol. 5, No 03, pp.1185–1209.
- Ūsas, A., Jasinskas, E., Štreimikienė, D. (2024), "Impact of website quality and user satisfaction on consumer loyalty in Lithuanian C2C e-commerce platforms", *Management & Marketing*, Vol. 19, No 4, pp.710–724.
- Xu, K., Chen, L., Kim, Y. (2021), "The influence of service quality on satisfaction and loyalty in leisure fitness clubs", *International Journal of Sports Marketing and Sponsorship*, Vol. 22, No 3, pp.452–469.
- Yiğit, O., Soyer, A. (2023), "Dynamic perspectives on service quality in sports organizations", *International Journal of Contemporary Sport Management*, Vol. 12, No 1, pp.1–12.
- Yigit, O., Soyer, A. (2023), "The role of service quality in consumer loyalty in fitness clubs", *Journal of Physical Education and Sport Management*, Vol. 14, No 1, pp.19–31.
- Yildiz, S.M. (2011), "Service quality scale for fitness centers (SQS-FC): Development and validation", *Journal of Sports Science and Medicine*, Vol. 10, No 3, pp.603–608.
- Yildiz, S.M. (2012), "Service quality models in sports and recreation services: A review and critique", *African Journal for Physical, Health Education, Recreation and Dance*, Vol. 18, No 2, pp.222–241.
- Yildiz, S.M., Cokpartal, C. (2016), "Assessing service quality in sports fitness centers using PSQS", *Journal of Physical Education and Sport Sciences*, Vol. 10, No 2, pp.55–66.

PASLAUGŲ KOKYBĖS POVEIKIS DAUGIAFUNKCIŲ LAISVALAIKIO CENTRŲ KLIENTŲ LOJALUMUI: LIETUVOS ATVEJIS

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Santrauka. Šiame tyrime nagrinėjama, kaip paslaugų kokybė veikia klientų lojalumą Lietuvos daugiafunkčiuose laisvalaikio centruose. Atlikta kiekybinė 385 dalyvių apklausa, naudojant integruotą vertinimą, pagrįstą SERVQUAL, SQAS ir QUESC modeliais bei LSSS lojalumo skale.

Rezultatai atskleidė nuoseklią neigiamą spragą tarp klientų lūkesčių ir faktinės paslaugų patirties visose tirtose kategorijose. Didžiausia neigiama spraga nustatyta kainos, sporto programų ir paslaugų dimensijose, o mažiausia – centro įvaizdžio vertinime. Tai rodo, kad teikiamos paslaugos dažnai neatitinka vartotojų poreikių, ypač kainos ir gaunamos vertės santykio aspektu. Nepaisant šios spragos, visos paslaugų kokybės dimensijos parodė reikšmingą teigiamą ryšį su lojalumu. Papildomai nustatyta, kad nors dirbtinio intelekto sprendimai dar nėra plačiai naudojami, klientai juos vertina palankiai ir rodo polinkį naudoti ateityje. Tyrimo išvadose pabrėžiama svarbą didinti suvokiamąją vertę, modernizuoti įrangą ir įvairinti programas, siekiant stiprinti klientų išlaikymą.

Reikšminiai žodžiai: paslaugų kokybė, lojalumas, vertinimo modeliai.