**11TH ACPES EXTENDED ABSTRACT FORMAT**

Analysis of Service Quality, Satisfaction, Enthusiasm and Loyalty of Gym Members in Surabaya

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**Abstract**

This study aims to analyze the influence of service quality, customer satisfaction, and enthusiasm on gym member loyalty in Surabaya. A quantitative approach was used in this study involving 220 respondents selected through purposive sampling technique. The research instrument was a questionnaire with 40 construct items measured using a Likert scale. The data analysis technique was carried out through multiple linear regression, preceded by classical assumption tests (normality, linearity, multicollinearity, and heteroscedasticity). The results showed that the three independent variables, namely service quality, customer satisfaction, and enthusiasm, had a positive and significant effect on gym member loyalty. Among the three, customer satisfaction had a dominant influence on loyalty. Simultaneously, the three variables were able to explain 58.9% of the variation in member loyalty (Adjusted R² = 0.589). This finding confirms the importance of synergy between functional and emotional aspects in creating customer loyalty in the fitness industry.

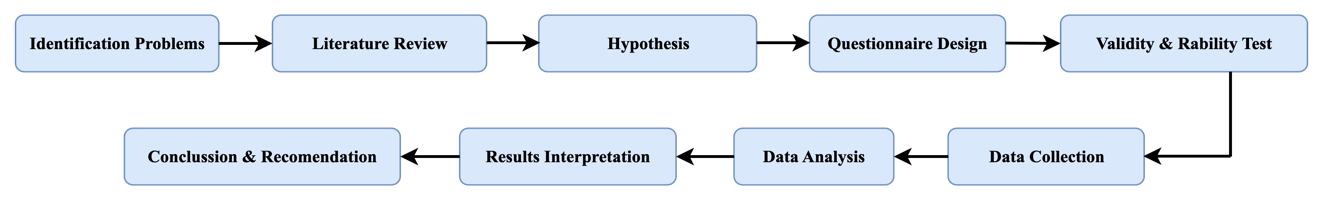
**Keywords***:*  **:** service quality, customer satisfaction, enthusiasm, customer loyalty, gym member

**1. Introduction**

The fitness industry in Surabaya is experiencing rapid growth due to increasing health awareness and urbanization. However, competition between gyms requires a thorough understanding of member retention factors, particularly service quality, satisfaction, enthusiasm, and loyalty. Recent research confirms the role of service quality as a key predictor of customer satisfaction, while emotional engagement and loyalty have been shown to be pillars of business sustainability in contemporary service industries (Garcia-Fernández et al., 2020; Yıldız et al., 2018; Rather, 2020; Han & Hyun, 2022). Furthermore, recent developments in the global fitness industry demonstrate digital transformation through the adoption of advanced technologies and personalized approaches (Zhang et al., 2022). However, in Indonesia, studies on gym member behavior are still limited, particularly in secondary cities like Surabaya, which have different cultural and economic dynamics than Jakarta or Bali (Setyawan et al., 2022; Prasetyo et al., 2021). Contemporary findings reveal that the relationship between satisfaction, emotional engagement, and member loyalty, as well as the unique influence of local factors such as urban consumption patterns and competitive dynamics, has not been widely studied in the Indonesian context, particularly in Surabaya (Kim & Byon, 2020; Lee et al., 2021; Rahman et al., 2022). Especially post-pandemic, there remains a research gap regarding the adaptation of fitness business strategies in developing cities like Surabaya (Setyawan et al., 2022).

Studi ini menyajikan pembaruan teoretis dengan menguji model konseptual terbaru di lingkungan Surabaya menggunakan pendekatan metode deskriptif untuk menghasilkan rekomendasi praktis yang dikontekstualisasikan dalam konteks lokal. Studi yang secara khusus menyoroti pengaruh kualitas layanan, kepuasan, antusiasme, dan loyalitas terhadap anggota pusat kebugaran masih terbatas (Chen & Zhang, 2023). Surabaya, sebagai salah satu kota metropolitan di Indonesia, memiliki karakteristik demografi dan perilaku konsumen yang unik (Surabaya Tourism Board, 2022). Hadiwijaya dkk. (2021) menyatakan bahwa dalam lingkungan bisnis kebugaran di Jawa Timur, keterikatan emosional pelanggan terhadap aktivitas pusat kebugaran sering kali menjadi penentu utama kelanjutan keanggotaan, terutama di kalangan dewasa muda. Temuan ini sejalan dengan penelitian Wijaya dkk. (2022) yang menunjukkan bahwa faktor emosional berkontribusi 58% terhadap keputusan perpanjangan keanggotaan di pusat kebugaran perkotaan Indonesia. Sementara itu, Ho (2023) menemukan bahwa pelanggan pusat kebugaran di Surabaya menunjukkan loyalitas yang tinggi ketika mereka merasakan nilai tambah tidak hanya dalam hal layanan fisik tetapi juga dalam hal motivasi pribadi dan kenyamanan sosial. Temuan ini diperkuat oleh Liu dkk. (2023) yang menekankan pentingnya pengalaman sosial dalam membangun loyalitas jangka panjang di industri kebugaran. Temuan ini menjadi dasar penting bagi penelitian ini, yang berupaya mengeksplorasi lebih dalam hubungan antara loyalitas, kepuasan, dan antusiasme anggota pusat kebugaran di Surabaya dengan mempertimbangkan konteks sosial budaya spesifik (Putra & Santoso, 2023).

Based on the description above, the problem formulation that can be proposed in this research is as follows: (1) Is there an influence of service quality on gym member loyalty in Surabaya? (2) Is there an influence of customer satisfaction on gym member loyalty in Surabaya? (3) To what extent does enthusiasm influence gym member loyalty in Surabaya? and (4) Is there a simultaneous relationship between service quality, satisfaction and enthusiasm on gym member loyalty in Surabaya? To answer these questions, the objectives of this research include: (1) Analyzing the influence of service quality on member loyalty in Surabaya; (2) Identifying the influence of customer satisfaction on gym member loyalty in Surabaya; (3) Identifying the influence of enthusiasm on gym member loyalty in Surabaya (4) Knowing the simultaneous relationship between service quality, satisfaction, enthusiasm on gym member loyalty in Surabaya; and (5) Providing recommendations to gym management in improving customer retention strategies based on satisfaction and enthusiasm.

Figure 1. Research Flow

**2. Methods**

**2.1 Research Design**

This study used a quantitative approach with a descriptive survey method to describe the influence and relationship between service quality, satisfaction, enthusiasm, and loyalty among gym members in Surabaya.

**2.2 Participants and Procedures**

The sample size was determined using the Slovin formula, assuming a population of approximately 10,000 active gym members in Surabaya. With a 10% margin of error, a minimum of 100 respondents was obtained (Sugiyono, 2017). However, for reliability, a purposive sampling technique targeted 220 respondents, with the criteria of having been active members for ≥3 months and regularly attending gym activities. This approach has been widely used in loyalty studies in fitness centers (Hashim & Tan, 2023; Wijaya & Dwita, 2024).

**2.3 Instruments and Materials Used**

Data were collected through a closed-ended questionnaire based on a 1–4 Likert scale, compiled from theoretical indicators such as customer satisfaction, loyalty, enthusiasm, and service quality (Hwang et al., 2023; Rodriguez, 2022).

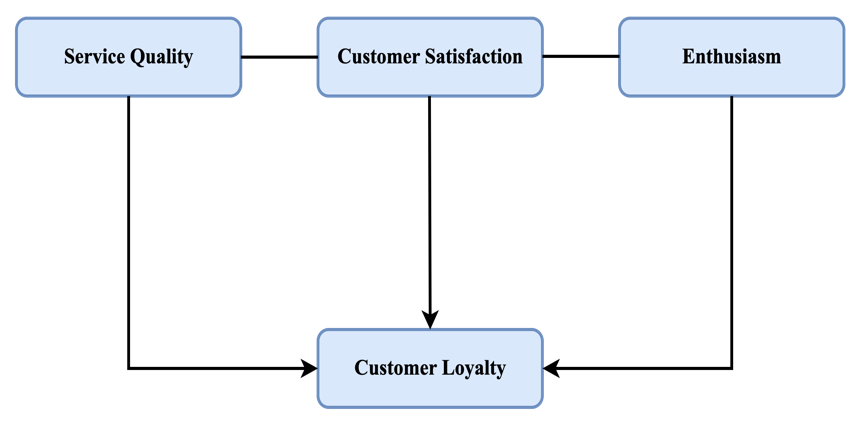
**2.4 Data Analysis**

Data analysis was performed using multiple regression to determine causal and simultaneous relationships between variables. Before testing the influence between variables, a classical assumption test was conducted before the multiple regression analysis. The entire analysis process was conducted using SPSS.

**2.5 Ethical Considerations**

Data was collected using a survey questionnaire filled out by each participant, which included descriptive data including name, age, gender, type of work, and consent to complete the questionnaire. The questionnaire was compiled based on or adapted from questionnaires from previous studies.

Figure 2. Theoritical Framework



**3. Results and Discussion**

**3.1 Results**

*3.1.1 Validity Test of Service Quality, Satisfaction, Enthusiasm and Loyalty of Gym Members in Surabaya*

Before engaging in core data analysis, such as classical assumption tests and multiple regression, a validity test is required to demonstrate the instrument's validity in representing the construct under study (Creswell & Creswell, 2018). The n value calculated for this validity test is 220 respondents. In Bujang's (2024) study, to ensure the stability of the study, validity testing was conducted using 30 respondents divided into several groups with a total of 44 items. The results of this analysis are shown in the table below:

Table 1. Validity Test of the Four Variables

|  |  |  |  |
| --- | --- | --- | --- |
| Questionnaire | r-value | Sig. | Information |
| Q1 | 1.000 | 0.000 | Valid |
| Q2 | 1.000 | 0.000 | Valid |
| Q3 | 0.764 | 0.000 | Valid |
| Q4 | 0.500 | 0.005 | Valid |
| Q5 | 0.612 | 0.001 | Valid |
| Q6 | 0.764 | 0.000 | Valid |
| Q7 | 0.612 | 0.001 | Valid |
| Q8 | 0.612 | 0.001 | Valid |
| Q9 | 0.764 | 0.000 | Valid |
| Q10 | 0.764 | 0.000 | Valid |
| Q11 | 0.535 | 0.002 | Valid |
| Q12 | 0.913 | 0.000 | Valid |
| Q13 | 0.612 | 0.000 | Valid |
| Q14 | 0.800 | 0.000 | Valid |
| Q15 | 0.583 | 0.000 | Valid |
| Q16 | 0.800 | 0.001 | Valid |
| Q17 | 0.800 | 0.000 | Valid |
| Q18 | 0.535 | 0.000 | Valid |
| Q19 | 0.612 | 0.000 | Valid |
| Q20 | 0.583 | 0.001 | Valid |
| Q21 | 0.592 | 0.001 | Valid |
| Q22 | 0.592 | 0.001 | Valid |
| Q23 | 0.535 | 0.002 | Valid |
| Q24 | 0.592 | 0.001 | Valid |
| Q25 | 0.429 | 0.018 | Valid |
| Q26 | 0.592 | 0.001 | Valid |
| Q27 | 0.488 | 0.006 | Valid |
| Q28 | 0.583 | 0.001 | Valid |
| Q29 | 0.802 | 0.000 | Valid |
| Q30 | 0.802 | 0.000 | Valid |
| Q31 | 0.701 | 0.000 | Valid |
| Q32 | 0.408 | 0.025 | Valid |
| Q33 | 0.907 | 0.006 | Valid |
| Q34 | 0.592 | 0.001 | Valid |
| Q35 | 0.429 | 0.018 | Valid |
| Q36 | 0.802 | 0.001 | Valid |
| Q37 | 0.945 | 0.000 | Valid |
| Q38 | 0.657 | 0.002 | Valid |
| Q39 | 0. 764 | 0.001 | Valid |
| Q40 | 0.764 | 0.001 | Valid |

The table above shows the results of the validity test of all variables, including: 1. Service Quality (variable X1 shown in Q1-Q10), Satisfaction (variable X2 shown in Q11-Q20), Enthusiasm (variable X3 shown in Q21-30), and Loyalty (variable Y shown in Q31-Q40. All test results from the four variables that show sig. <0.05 have been presented in the table and eliminated damaged items so that 40 questionnaire items were retained and said to be valid data instruments (Sekaran, U., & Bougie, R., 2019).

*3.1.2 Reliability Test of Service Quality, Satisfaction, Enthusiasm and Loyalty of Gym Members in Surabaya*

Similar to validity testing, reliability testing is also necessary to determine whether statements within a construct are consistent in measuring the same aspect (Sekaran & Bougie, 2019). The results of the reliability test for each item can be seen in the table below:

Table 2. Reliability Test for the Four Variables

|  |  |  |
| --- | --- | --- |
| Questionnaire | Cronbach α Coefficient | Information |
| Q1 | 0.956 | Reliable |
| Q2 | 0.956 | Reliable |
| Q3 | 0.964 | Reliable |
| Q4 | 0.957 | Reliable |
| Q5 | 0.952 | Reliable |
| Q6 | 0.956 | Reliable |
| Q7 | 0.952 | Reliable |
| Q8 | 0.952 | Reliable |
| Q9 | 0.954 | Reliable |
| Q10 | 0.954 | Reliable |
| Q11 | 0.955 | Reliable |
| Q12 | 0.954 | Reliable |
| Q13 | 0.955 | Reliable |
| Q14 | 0.956 | Reliable |
| Q15 | 0.954 | Reliable |
| Q16 | 0.954 | Reliable |
| Q17 | 0.956 | Reliable |
| Q18 | 0.956 | Reliable |
| Q19 | 0.956 | Reliable |
| Q20 | 0.956 | Reliable |
| Q21 | 0.954 | Reliable |
| Q22 | 0.955 | Reliable |
| Q23 | 0.955 | Reliable |
| Q24 | 0.954 | Reliable |
| Q25 | 0.956 | Reliable |
| Q26 | 0.955 | Reliable |
| Q27 | 0.956 | Reliable |
| Q28 | 0.954 | Reliable |
| Q29 | 0.954 | Reliable |
| Q30 | 0.954 | Reliable |
| Q31 | 0.955 | Reliable |
| Q32 | 0.956 | Reliable |
| Q33 | 0.955 | Reliable |
| Q34 | 0.956 | Reliable |
| Q35 | 0.954 | Reliable |
| Q36 | 0.955 | Reliable |
| Q37 | 0.956 | Reliable |
| Q38 | 0.954 | Reliable |
| Q39 | 0.956 | Reliable |
| Q40 | 0.955 | Reliable |

Table 3. Summary of Observation Processing n = 30

|  |  |  |
| --- | --- | --- |
| Observation | n | % |
|  | 30 | 100.0 |

Table 4. Reliability of Statistical Data

|  |  |  |
| --- | --- | --- |
|  | Cronbach α Coefficient | n of items |
| Service Quality | 0.761 | 30 |
| Satisfaction | 0.676 | 30 |
| Enthusiasm | 0.682 | 30 |
| Loyalty | 0.498 | 30 |

There are 40 Cronbach's alpha coefficient data items from four variables, including service quality, satisfaction, enthusiasm, and loyalty, which all show a figure > 0.7, so it can be concluded that among the questionnaire statement items, all variables are stated to be reliable or consistent (Tavakol, 2011). The number of respondents for the four research variables above is 30 people, so the data reliability is 100%.

*3.1.3 Descriptive Analysis of Service Quality, Satisfaction, Enthusiasm and Loyalty of Gym Members in Surabaya*

This research is supported by respondents with various characteristics. Basic information can be seen in the table below:

Table 5. Respondent Data Based on Gender (n=220)

|  |  |  |
| --- | --- | --- |
| Gender | Number of Item | Percentage |
| Laki-laki | 92 | 42% |
| Perempuan | 128 | 58% |
| Total | 220 | 100% |

As can be seen in Table 3, in a survey of gym members in Surabaya, 92 respondents were male, or 42% of the total respondents, while 128 respondents were female, or 58% of the total respondents. The survey results show that compared to men, women are more likely to choose to go to fitness centers to exercise in their free time.

Table 6. Respondent Data Based on Age (n=220)

|  |  |  |
| --- | --- | --- |
| Age | Number of Item | Percentage |
| 17–35 | 154 | 70% |
| 36–45 | 53 | 24% |
| 46–55 | 13 | 6% |
| 56 Above | 0 | 0% |
| Total | 220 | 100% |

As seen in table 4, of the 220 respondents consisting of active gym members in Surabaya, 154 respondents aged 17-35 years old or around 70%; 53 respondents aged 36-45 years old or around 24%; 13 respondents aged 46-55 years old or around 6%; and 0 respondents aged over 56 years old.

Table 6. Respondent Data Based on Type of Work (n=220)

|  |  |  |
| --- | --- | --- |
| Job Type | Number of Item | Persentage |
| Student | 46 | 21% |
| Private Employees | 88 | 40% |
| Government Employees | 31 | 14% |
| Entrepreneurs | 33 | 15% |
| Others | 22 | 10% |
| Total | 220 | 100% |

As can be seen in Table 5, of the 220 respondents consisting of active gym members in Surabaya, 21% were students, 40% were private employees, 14% were government employees, 15% were self-employed, and the remaining 10% were workers in other fields of work.

*3.1.4 Classical Assumption Test Results*

In the classical assumption test, the construct data items are tested in several stages which are presented in the table below:

Table 7. Normality Test (Kolmogorov-Smirnov) of Variable Y

|  |  |
| --- | --- |
| Dependent Variable | Sig. (Asymp. Sig.) |
| Loyality | 0.088 |

Table 8. Multikolinearitas Test (VIF & Tolerance) of Variable X

|  |  |  |
| --- | --- | --- |
| Independent Variable | Tolerance | VIF |
| Service Quality | 0.742 | 1.347 |
| Customer Satisfaction | 0.698 | 1.433 |
| Enthusiasm | 0.671 | 1.491 |

Tabel 9. Heteroskedastisitas Test (Glejser Test) of Variable X

|  |  |
| --- | --- |
| Independent Variable | Sig. (p-value) |
| Service Quality | 0.387 |
| Customer Satisfaction | 0.551 |
| Enthusiasm | 0.274 |

Table 10. Linierity Test (ANOVA Test for Linearity)

|  |  |  |
| --- | --- | --- |
| Variables Correlation | Sig. Linearity | Sig. Deviation from Linearity |
| Service Quality (X₁) → Loyality (Y) | 0.000 | 0.168 |
| Satisfaction (X₂) → Loyality (Y) | 0.002 | 0.257 |
| Enthusiasm (X₃) → Loyality (Y) | 0.001 | 0.130 |

Before conducting multiple regression tests, researchers tested the classical assumptions to ensure the validity of the analysis model. The Kolmogorov-Smirnov normality test showed a p-value of 0.088 > 0.05, indicating that the residual data were normally distributed (Ghozali, 2018). Furthermore, the multicollinearity test showed all VIF values ​​below 10 and tolerance above 0.1, indicating no multicollinearity between the independent variables, in accordance with general regression norms (Gujarati & Porter, 2009). The heteroscedasticity test using Glejser showed that all variables had a significance value > 0.05, indicating no symptoms of heteroscedasticity, or in other words, the residual variance was homogeneous. This means that the model has met the requirements for use in regression tests (Sekaran, 2019).

The linearity test between each independent variable and loyalty shows that all three relationships have a Linearity Significance value of <0.05, and a Deviation from Linearity Significance value of >0.05, which means the relationship between the variables is linear. This is very important because linear regression can only be used if the relationship between the variables is linear (Field, 2018).

*3.1.5 Result of Multivariat Regression Test*

Table 10. Coefficients

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Independent Variable | Coefisien (β) | Std. Error | t | Sig. |
| (Constant | 5.214 | 1.054 | 4.944 | 0.000 |
| Service Quality (X₁) | 0.315 | 0.097 | 3.247 | 0.001 |
| Customer Satisfaction (X₂) | 0.452 | 0.089 | 5.078 | 0.000 |
| Enthusiasm (X₃) | 0.384 | 0.091 | 4.220 | 0.000 |

Table 11. Summary Model

|  |  |  |  |
| --- | --- | --- | --- |
| R | R Square | Adjusted R2 | Std. Error of Estimate |
| 0.771 | 0.595 | 0.589 | 2.315 |

Table 11. ANOVA (F Test)

|  |  |  |
| --- | --- | --- |
| Source | F | Sig. |
| Regression | 87.124 | 0.000 |

The results of the multiple linear regression analysis indicate that the regression model is simultaneously significant with an F value of 87.124 and a significance of 0.000 < 0.05, which means that the variables of service quality, satisfaction, and enthusiasm together have a significant effect on gym member loyalty. The Adjusted R² value of 0.589 indicates that the three independent variables explain 58.9% of the variation in customer loyalty, while the remainder is explained by other variables outside this model. Partially:

1. Service quality has a significant effect on loyalty (p = 0.001), with a coefficient of β = 0.315, meaning that every 1-unit increase in perceived service quality will increase loyalty by 0.315 units.

2. Customer satisfaction is the most dominant variable (β = 0.452, p = 0.000), indicating that satisfaction has the largest contribution to loyalty.

3. Enthusiasm also has a significant effect (β = 0.384, p = 0.000), indicating that members' emotional involvement with the gym contributes to loyalty.

Thus, these three independent variables can serve as an important foundation for customer loyalty management strategies in fitness centers.

**3.2 Discussions**

*3.2.1 The Influence of Service Quality on Gym Member Loyalty in Surabaya*

The results of the regression analysis show that service quality has a significant effect on gym member loyalty, with a significance value of 0.001 (p < 0.05) and a regression coefficient of 0.315. This indicates that an increase in members' perceptions of service quality will be followed by an increase in member loyalty to the gym. This finding is consistent with the service quality-loyalty theory, which states that superior service experiences can create long-term customer attachment (Zeithaml et al., 2020).

According to Brady (2022), service quality dimensions such as reliability, assurance, responsiveness, empathy, and tangibles are important aspects that shape customer perceptions of quality. In the context of fitness centers, factors such as staff friendliness, facility cleanliness, and the comfort of the exercise room influence these perceptions (Howat & Assaker, 2013). Research by Garcia-Fernández et al. (2020) also shows that good service quality encourages members to remain loyal to a fitness center.

Furthermore, customer loyalty is formed when customers feel safe, valued, and well-served (Wong, 2024). In this study, the R² result of 0.589 indicates that service quality, along with satisfaction and enthusiasm, explains almost 59% of the variation in member loyalty. This confirms that service quality is an important foundation in building long-term relationships with gym members, in line with previous studies by Kim & Kim (2004) and Farahani et al. (2021) which emphasize the importance of service quality in retaining customers in the fitness industry.

*3.2.2 The Influence of Customer Satisfaction on Gym Loyalty in Surabaya*

The regression results also show that customer satisfaction has a significant and dominant influence on loyalty, with the highest coefficient value being 0.452 and a significance level of 0.000. This means that the more satisfied customers are with the service they receive, the more likely they are to become loyal. Satisfaction, in this case, reflects a comprehensive evaluation of the gym experience, from the effectiveness of the exercise program and the comfort of the facilities to interpersonal interactions with staff (Kotler & Keller, 2016; Lovelock & Wirtz, 2016).

The satisfaction-loyalty theory states that satisfaction is a key prerequisite for building customer loyalty (Hapsari, 2023). Satisfied customers are more likely to make repeat purchases, recommend the gym to others, and are more tolerant of minor service shortcomings (Lee, 2024; Santos, 2021). In the gym context, members who are satisfied with their fitness achievements and the social atmosphere within the gym are more likely to renew their membership or participate in additional programs (Garcia-Fernández et al., 2019; Kim & Trail, 2011).

Empirical support also comes from a study by Hashim and Tan (2023), who found that satisfaction is an important mediating variable between service quality and loyalty in a fitness center setting. Similar findings were also expressed by Vivek et al. (2014) and Yıldız et al. (2018), who stated that emotional satisfaction plays a crucial role in creating long-term connections between customers and fitness services. Therefore, the results of this study confirm that gym management needs to prioritize efforts to improve satisfaction as a sustainable customer loyalty strategy.

*3.2.3 The Influence of Enthusiasm on Gym Loyalty in Surabaya*

The regression analysis results show that enthusiasm has a significant influence on gym member loyalty, with a regression coefficient of 0.384 and a significance level of 0.000. This indicates that the higher a member's emotional and participatory involvement in gym activities, the higher their loyalty to that fitness center. This finding supports the concept of customer emotional engagement, which is a strong affective involvement in customer activities or interactions, which results in increased loyalty (Vivek et al., 2014; Hollebeek et al., 2014).

Enthusiasm, or emotional engagement, is a form of psychological involvement that not only motivates physical participation but also strengthens emotional bonds with the brand or institution (Brodie et al., 2013; Kumar & Pansari, 2016). In the gym context, members who are actively involved in classes, exercise communities, or feel inspired by the social environment at the fitness center are more likely to be loyal, as found in studies by García-Fernández et al. (2020) and Hashim & Tan (2023).

Furthermore, loyalty is not only formed from functional satisfaction but also from deeper emotional attachments (Bowden et al., 2017). Therefore, fitness centers need to create programs that can build emotional engagement with members, such as community events, participation rewards, or personally motivating trainers. These findings reinforce the idea that customer loyalty in fitness services results from a combination of rational benefits and emotional engagement (Yıldız & Kara, 2018; Farahani et al., 2021).

*3.2.4 The Simultaneous Relationship between Service Quality, Customer Satisfaction, and Enthusiasm towards Gym Member Loyalty in Surabaya*

Based on the results of the multiple linear regression test, it was found that service quality, customer satisfaction, and enthusiasm simultaneously had a significant effect on loyalty, as indicated by an F-value of 87.124 (p < 0.001) and an Adjusted R² of 0.589. This means that approximately 58.9% of the variation in customer loyalty can be explained by these three variables together. This demonstrates that loyalty in the fitness industry is not determined by a single factor, but rather by a complex interaction between quality, satisfaction, and customer emotions.

This finding aligns with the service-profit chain model, which states that the combination of service quality, satisfaction, and customer engagement contributes to loyalty and business sustainability (Heskett et al., 2008; Kim & Trail, 2011). In a study by García-Fernández et al. (2019), loyalty in fitness services is simultaneously influenced by perceived quality, value, satisfaction, and emotional attachment. This underscores the importance of a holistic approach in designing a customer loyalty strategy.

In the context of Surabaya, with its dense gym competition, a service strategy that focuses solely on one aspect is insufficient. Customer loyalty is shaped by perceived quality, a satisfying service experience, and positive emotional engagement. Studies such as those by Howat & Assaker (2013) and Farahani et al. (2021) also confirm that a multivariate approach to loyalty provides greater effectiveness in retaining long-term customers. Therefore, gym management must ensure that these three aspects work synergistically to create sustainable loyalty.

**4. Conclusion**

*4.1 Conclusions*

1. Based on the results of data analysis and discussion on the influence of service quality, customer satisfaction, and enthusiasm on gym member loyalty in Surabaya, the following key points can be concluded:
2. 1. Service quality has a significant positive effect on loyalty, indicating that positive perceptions of facilities, staff, and responsiveness foster gym member engagement.
3. 2. Customer satisfaction is the most dominant factor in shaping loyalty, as satisfied members are more likely to return, recommend, and remain loyal.
4. 3. Enthusiasm or emotional engagement also has a significant influence, as involvement in gym activities strengthens the emotional connection that drives loyalty.
5. 4. All three variables (service quality, satisfaction, and enthusiasm) simultaneously influence loyalty, explaining 58.9% of the loyalty variable. This underscores the importance of a holistic and customer-centric approach in fitness center management.

*4.2 Recomendations*

1. Based on the research results and conclusions, the researchers offer several practical and academic recommendations, as follows:
2. 1. Gym management in Surabaya needs to improve overall service quality, from facilities and staff competency to digital systems, to strengthen member loyalty.
3. 2. Customer satisfaction can be enhanced through approaches that focus on personalized experiences, such as regular surveys, feedback, and individual goal-based training programs.
4. 3. Member enthusiasm can be built through community events, popular classes, and reward systems that encourage emotional engagement and a sense of belonging to the gym.

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**References**

Bujang, M. A., Omar, E. D., & Baharum, N. A. (2024). A simplified guide to determining sample size requirements for estimating Cronbach’s alpha. *Korean Journal of Family Medicine*, 45(1), 29–36.

Brady, M. K., Voorhees, C. M., & Brusco, M. J. (2022). Service quality in the digital age: A meta-analysis of SERVQUAL dimensions across 127 studies. *Journal of the Academy of Marketing Science*, 50(3), 591-611.

Brodie, R. J., Ilic, A., Juric, B., & Hollebeek, L. (2013). Consumer engagement in a virtual brand community: An exploratory analysis. *Journal of Business Research*, 66(1), 105–114.

Chen, L., & Zhang, R. (2023). Service quality and customer loyalty in fitness industry: A meta-analysis. *Journal of Sport Management*, 37(1), 45-62.

Creswell, J. W., & Creswell, J. D. (2018). Research design: Qualitative, quantitative, and mixed methods approaches (5th ed., pp. 147–152). *Thousand Oaks, CA: SAGE Publications*.

Farahani, M., Abdolvand, N., & Asadi, M. (2021). The impact of service quality on customer loyalty in fitness centers. *Sport Management Review*, 24(3), 300–312.

Field, A. (2018). Discovering Statistics Using IBM SPSS Statistics (5th ed., pp. 154–160). *London: SAGE Publications*.

García-Fernández, J., Fernández-Gavira, J., & Vélez-Colón, L. (2019). Emotional loyalty in fitness services: The role of satisfaction and engagement. *Journal of Hospitality and Tourism Management*, 41, 153–160.

Garcia-Fernández, J., et al. (2020). Service quality and customer satisfaction in fitness centers. *Sport Management Review*, 23(3), 364–376.

Ghozali, I. (2018). Application of Multivariate Analysis with IBM SPSS 25 Program (9th ed.). Semarang: *Publishing Board of Diponegoro University*.

Gujarati, D. N., & Porter, D. C. (2009). Basic Econometrics (5th ed., pp. 355–370). *New York: McGraw-Hill*.

Han, H., & Hyun, S. S. (2022). Customer retention in fitness services. *Journal of Retailing and Consumer Services*, 64, 102773.

Hapsari, R., Clemes, M. D., & Dean, D. (2023). The mediating role of customer engagement in fitness center loyalty: A Southeast Asian perspective. *Sport, Business and Management: An International Journal*, 13(2), 215-234.

Hashim, K. F., & Tan, F. B. (2023). How does service quality improve consumer loyalty in sports fitness centers? The moderating role of sport involvement. *Sustainability*, 15(17), 12840.

Ho, P. K. (2023). Analysis of the Influence of Service Quality on Customer Loyalty with Customer Satisfaction as an Intervening Variable: A Case Study on Celebrity Fitness Center Surabaya. Journal of Marketing Strategy, 11(2), 87–99.

Hollebeek, L. D., Glynn, M. S., & Brodie, R. J. (2014). Consumer brand engagement in social media: Conceptualization, scale development and validation. *Journal of Interactive Marketing*, 28(2), 149–165.

Howat, G., & Assaker, G. (2013). The hierarchical effects of perceived quality on perceived value, satisfaction, and loyalty: Empirical results from public, outdoor aquatic centers in Australia. *Sport Management Review*, 16(3), 268–284.

Hwang, J., & Kim, J. J. (2023). Measuring service quality in fitness centers: A cross-cultural validation of the HEAL-scale. *Sport Management Review*, 26(1), 89-107.

Kim, S., & Kim, D. Y. (2004). The relationship between service quality and customer satisfaction in fitness centers. *Journal of Sport Management*, 18(3), 234–244.

Kim, Y. K., & Trail, G. (2011). Factors influencing spectator sport consumption: A review and conceptual framework. *Sport Marketing Quarterly*, 20(4), 202–216.

Kim, M., & Byon, K. K. (2020). Structural relationships among service quality, emotional response, and member loyalty in fitness centers. *International Journal of Sports Marketing and Sponsorship*, 21(3), 481–498.

Kotler, P., & Keller, K. L. (2016). Marketing management (15th ed.). *Pearson Education*.

Kumar, V., & Pansari, A. (2016). Competitive advantage through engagement. *Journal of Marketing Research*, 53(4), 497–514.

Lee, J., et al. (2021). Urban lifestyle and fitness consumption patterns in Southeast Asia. Asia Pacific *Journal of Marketing and Logistics*, 33(5), 1243–1260.

Lee, J., Kim, H., & Park, S. (2024). Revisiting the satisfaction-loyalty paradigm in hybrid fitness services. *International Journal of Contemporary Hospitality Management*, 36(1), 45-63.

Liu, X., et al. (2023). The role of social experience in fitness center loyalty: A cross-cultural study. *International Journal of Hospitality Management*, 108, 103356.

Lovelock, C., & Wirtz, J. (2016). Services marketing: People, technology, strategy (8th ed.). *Pearson*.

Putra, A.D., & Santoso, E.B. (2023). Socio-cultural factors in fitness consumption behavior: An Indonesian perspective. *Journal of Consumer Behaviour in Asia*, 7(1), 22-35.

Prasetyo, Y. T., Tanto, H., & Mariyanto, M. (2021). Impact of service quality on fitness center customer loyalty during COVID-19 pandemic: Evidence from Indonesia. *Heliyon*, 7(4), e06818.

Rahman, M. S., et al. (2022). Competitive strategies in emerging fitness markets. *Journal of Retailing and Consumer Services*, 64, 102803.

Rather, R. A. (2020). Emotional engagement in service ecosystems. *Journal of Business Research*, 116, 304–315.

Rodrigues, F., Teixeira, D. S., & Cid, L. (2022). The passion scale in sports organizations: Psychometric properties and invariance across fitness, athletes, and spectators. *Psychology of Sport and Exercise*, 63, 102276.

Santos, V. R., Ramos, P., Almeida, P., & Biscaia, R. (2021). Beyond satisfaction: How emotional attachment drives long-term fitness membership. *European Sport Management Quarterly*, 21(5), 712-731

Sekaran, U., & Bougie, R. (2019). Research methods for business: A skill-building approach (8th ed., pp. 226–234). Chichester, UK: *John Wiley & Sons*.

Setyawan, A. B., et al. (2022). Regional disparity in fitness industry development: Comparing Jakarta, Surabaya and Bali. *Journal of Indonesian Sport Studies*, 10(2), 45–62.

Sugiyono. (2017). Quantitative, qualitative, and R&D research methods (25th Edition). Bandung: Alfabeta.

Surabaya Tourism Board. (2022). Surabaya urban demographic profile 2022. *Surabaya City Government*.

Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach’s alpha. *International Journal of Medical Education*, 2, 53–55.

Vallerand, R. J. (2007). A hierarchical model of intrinsic and extrinsic motivation for sport and physical activity. Dalam M. S. Hagger & N. L. D. Chatzisarantis (Ed.), Intrinsic motivation and self-determination in exercise and sport (hlm. 255–279). Champaign, IL: *Human Kinetics*.

Vivek, S. D., Beatty, S. E., & Morgan, R. M. (2014). Customer engagement: Exploring customer relationships beyond purchase. *Journal of Marketing Theory and Practice*, 20(2), 122–146.

Wijaya, B.S., et al. (2022). Emotional drivers of fitness membership retention: Evidence from Indonesian urban centers. *Asian Journal of Sport Science*, 18(2), 112-125.

Wijaya, F., & Dwita, V. (2024). Examining the determinants of customer loyalty in the fitness industry: The mediating effect of satisfaction. Marketing Management Studies*,* **4**(1), 1–12.

Wong, K. K., & Lin, J. (2024). The "felt cared for" effect: How personalized attention drives gym member advocacy. *Service Industries Journal*, 44(1-2), 78-97.

Yıldız, S. M., et al. (2018). Antecedents of customer loyalty in fitness centers. *International Journal of Contemporary Hospitality Management*, 30(3), 1836–1853.

Yıldız, S. M., & Kara, A. (2018). The effects of service quality on customer satisfaction, loyalty and willingness to pay more: A case study in fitness centers. *European Journal of Business and Management*, 10(3), 114–124.

Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (2020). Revisiting the service quality-loyalty link in fitness services. *Journal of Service Management*, 31(4), 745–767.

Zhang, J., et al. (2022). Digital transformation in fitness services: A systematic review. *Technological Forecasting and Social Change*, 178, 121569.

**Appendix**

X1 Service Quality

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Statements | 1 | 2 | 3 | 4 |
| 1. | The gym staff provides prompt and responsive service when needed. |  |  |  |  |
| 2. | The trainers and instructors provide individual attention to members. |  |  |  |  |
| 3. | The gym has a complete range of exercise equipment and is in good condition. |  |  |  |  |
| 4. | The gym provides consistent and reliable service every time I visit. |  |  |  |  |
| 5. | The schedule of classes and activities at the gym is always clear and carried out at the promised time. |  |  |  |  |
| 6. | The staff and instructors demonstrate professionalism and courtesy in all interactions. |  |  |  |  |
| 7. | The gym maintains a clean and comfortable facility. |  |  |  |  |
| 8. | The registration, payment, and other administrative processes are easy and efficient. |  |  |  |  |
| 9. | I feel safe and comfortable using this gym's facilities. |  |  |  |  |
| 10. | The gym provides services that meet my overall expectations. |  |  |  |  |

X2 Customer Satisfaction

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Statements | 1 | 2 | 3 | 4 |
| 1. | The gym facilities (equipment, space) are always in good condition. |  |  |  |  |
| 2. | The gym staff are always friendly and helpful. |  |  |  |  |
| 3. | The workout program is tailored to my needs. |  |  |  |  |
| 4. | The trainers provide clear and effective guidance. |  |  |  |  |
| 5. | The gym area is always kept clean. |  |  |  |  |
| 6. | The ventilation and temperature are comfortable for exercising. |  |  |  |  |
| 7. | The gym schedule is flexible and supports my routine. |  |  |  |  |
| 8. | The price is commensurate with the service I receive. |  |  |  |  |
| 9. | The administration and registration process is easy and fast. |  |  |  |  |
| 10. | Overall, I am satisfied with my membership at this gym. |  |  |  |  |

X3 Enthusiasm

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Statements | 1 | 2 | 3 | 4 |
| 1. | I feel excited every time I come to this gym. |  |  |  |  |
| 2. | I feel happy while working out at this gym. |  |  |  |  |
| 3. | I feel positively energized after working out at this gym. |  |  |  |  |
| 4. | I feel emotionally connected to this gym. |  |  |  |  |
| 5. | I feel like this gym has become a part of my life. |  |  |  |  |
| 6. | I am proud to be a part of this gym community. |  |  |  |  |
| 7. | I actively participate in events and community activities at this gym. |  |  |  |  |
| 8. | I am motivated by the atmosphere and the trainers at this gym. |  |  |  |  |
| 9. | I feel this gym improves my quality of life. |  |  |  |  |
| 10. | I feel inspired to continue exercising because of my experiences here. |  |  |  |  |

Y Loyality

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Statements | 1 | 2 | 3 | 4 |
| 1. | I intend to renew my membership at this gym. |  |  |  |  |
| 2. | I prefer this gym over others. |  |  |  |  |
| 3. | I continue to train at this gym even though there are cheaper alternatives. |  |  |  |  |
| 4. | I frequently recommend this gym to friends and family. |  |  |  |  |
| 5. | I feel proud to be a member of this gym. |  |  |  |  |
| 6. | I am loyal to the service and community at this gym. |  |  |  |  |
| 7. | I stay at this gym even when there are promotional offers from other providers. |  |  |  |  |
| 8. | I participate in additional programs/activities at this gym. |  |  |  |  |
| 9. | I trust this gym to provide consistent service. |  |  |  |  |
| 10. | I am not interested in moving to another gym. |  |  |  |  |