



Analysis of Sports Facilities and Infrastructure in Improving Consumer Satisfaction at Palindra Gym Fitness, PALI Regency

¹Moch Aman Rizky Abdillah*, ²Yasir Arafat, ³Farizal Imansyah

*Corresponding Author: Moch Aman Rizky Abdillah, e-mail: rizsky@gmail.com

^{1,2,3}Faculty of Teacher Training and Education, Universitas PGRI Palembang, Indonesia

Abstract

Objectives. This study aims to analyze the availability and quality of sports facilities and equipment at Palindra Gym Fitness in PALI Regency and their role in enhancing consumer satisfaction. The research investigates how various aspects of infrastructure—such as completeness, cleanliness, safety, accessibility, and equipment maintenance—affect members’ perceptions and overall experience.

Materials and Methods. A descriptive quantitative approach was used with data collected through a structured questionnaire distributed to 30 gym members. The questionnaire measured user satisfaction with gym facilities and infrastructure across several indicators. Descriptive statistics were applied to identify the average response for each item, which was interpreted using predetermined qualitative categories.

Results. The findings show that most indicators fall under the "very good" category, including the availability of standard fitness equipment, room cleanliness, lighting quality, and facility accessibility. Meanwhile, a few aspects, such as locker room ventilation and the variety of equipment, received slightly lower satisfaction ratings, though still in the "good" category. The overall average score indicates a high level of customer satisfaction with the gym's infrastructure.

Conclusions. Properly managed and well-maintained sports facilities significantly contribute to consumer satisfaction. Continuous improvement in infrastructure, especially in terms of maintenance and service variety, can enhance user experience and retention in fitness centers such as Palindra Gym Fitness in PALI Regency.

Keywords: consumer satisfaction, gym infrastructure, sports facilities, fitness center, Palindra Gym

Introduction

The development of sports and fitness facilities is a vital component in promoting healthy lifestyles and improving community well-being (Daniels et al., 2023). As public interest in physical fitness continues to grow, especially in urban areas, the demand for accessible, clean, and well-equipped gymnasiums also increases (Hietarinta, 2017). In this context, the role of infrastructure—both physical (facilities and equipment) and service-oriented (management, accessibility, comfort)—becomes crucial in determining user satisfaction and retention (Lenka et al., 2010).

Consumer satisfaction in the context of fitness centers is often influenced by multiple factors, including the availability of modern exercise equipment (Kim & Kim, 2024),

cleanliness and hygiene of the facility, ease of access, safety measures, and overall service quality (Sun & Pan, 2023). Well-maintained facilities do not only support effective workout routines but also enhance user comfort, motivation, and long-term engagement (Tross et al., 2024). In contrast, poorly maintained or insufficient gym infrastructure can lead to dissatisfaction, reduced membership renewal, and negative word-of-mouth (AbouRokbah & Salam, 2023).

Palindra Gym Fitness, located in PALI Regency, serves as one of the most frequented private sports facilities in the region. With a growing number of members, the management faces increasing expectations to ensure that the physical environment meets the evolving needs of consumers. This study was conducted to assess the current state of facilities and infrastructure at Palindra Gym and analyze their role in shaping consumer satisfaction. The research explores whether the gym's existing physical provisions align with user expectations and how these factors contribute to the overall quality of service.

This study is significant in providing actionable insights for gym operators, policymakers, and stakeholders in the field of sports facility management. By identifying strengths and weaknesses in the facility, the findings can guide improvement strategies to enhance consumer experience and operational efficiency (Imansyah, 2018). Furthermore, the study contributes to the broader discourse on the importance of infrastructure in fostering sustainable fitness cultures.

Materials and Methods

Study Participants.

The participants consisted of 30 active members of Palindra Gym Fitness, selected through a purposive sampling technique. Criteria for inclusion included being an active user of the gym facilities for a minimum period of three months to ensure relevant and informed feedback. All participants voluntarily agreed to participate and completed the research instrument.

Study organization.

This study employed a descriptive quantitative research design aimed at evaluating consumer satisfaction with the sports facilities and infrastructure at Palindra Gym Fitness in PALI Regency. The approach focused on capturing objective responses from gym users regarding the adequacy, functionality, and comfort of the available facilities.

Statistical analysis.

Data for this study were gathered using a structured questionnaire designed to assess various components of sports facilities and infrastructure at Palindra Gym Fitness. The questionnaire consisted of multiple items grouped under several key indicators: the

availability and completeness of gym equipment, the cleanliness and hygiene of workout areas, lighting and ventilation quality, accessibility and safety features, and the maintenance of sports equipment. Each item was rated on a 5-point Likert scale, where 1 indicated "Very Poor" and 5 represented "Very Good." This format allowed participants to express their level of satisfaction with each aspect of the gym environment in a clear and measurable way.

To ensure content relevance and clarity, the instrument was adapted from existing validated facility evaluation tools commonly used in sports and recreation research. Prior to its implementation, the instrument underwent review by two domain experts in sports facility management to confirm its suitability for the local gym context and its alignment with consumer satisfaction dimensions.

Once the data were collected, the responses were processed using descriptive statistical analysis. For each item, the mean score was calculated to determine the overall level of satisfaction reported by respondents. These means were then interpreted using a predetermined set of qualitative categories. The interpretation of the scores followed this classification:

Table 1. Interpretation of Mean Scores for Consumer Satisfaction

Mean Score Range	Interpretation
4.20 – 5.00	Very Good
3.40 – 4.19	Good
2.60 – 3.39	Fair
1.80 – 2.59	Poor
1.00 – 1.79	Very Poor

This scoring system made it possible to identify which aspects of the facility were rated highly by users and which areas required improvement. The results of this analysis formed the basis for the findings and recommendations presented in the subsequent sections of the study.

Results

This study aimed to evaluate the level of consumer satisfaction with the sports facilities and infrastructure at Palindra Gym Fitness in PALI Regency. Data were collected through a questionnaire distributed to 30 gym members, followed by descriptive statistical analysis. The overall satisfaction score ranged from a minimum of 82 to a maximum of 110, with a mean score of 97.37 and a standard deviation of 6.795, as shown in Table 1. This result indicates a high level of user satisfaction with the facilities provided.

Table 1. Descriptive Statistics of Member Satisfaction

N	Minimum	Maximum	Mean	Std. Deviation
30	82	110	97.37	6.795

Based on the classification criteria using mean and standard deviation, member satisfaction was further analyzed across five dimensions of service quality: Tangibles, Reliability, Responsiveness, Assurance, and Empathy. For example, under the Tangibles dimension (i.e., physical appearance of facilities and equipment), the mean score was 19.10 with a standard deviation of 3.55. Table 2 summarizes the satisfaction categories for this dimension:

Table 2. Satisfaction Levels for Tangibles Dimension

Score Range	Frequency	Percentage	Category
≥ 24	5	16.6%	Very Dissatisfied
$21 \leq X < 24$	2	6.6%	Dissatisfied
$19 \leq X < 21$	7	23.3%	Satisfied
< 19	16	53.3%	Very Satisfied
Total	30	100%	

The results of the study indicate that consumer satisfaction with the facilities and infrastructure at Palindra Gym Fitness in PALI Regency is generally high. From a total of 30 respondents, the overall mean satisfaction score was 97.37 with a standard deviation of 6.795, reflecting a strong positive perception among users. Analysis of the physical aspects of the facility, categorized under the Tangibles dimension, showed that 53.3% of members expressed very high satisfaction, while 23.3% were satisfied, and only a small proportion (6.6%) reported being dissatisfied. These findings suggest that aspects such as equipment availability, cleanliness, lighting, and spatial arrangement are well-maintained and meet user expectations.

Further examination of the other four dimensions of service quality also revealed positive outcomes. In the Reliability dimension, the mean score was 19.37 with a standard deviation of 3.24, indicating that the gym consistently delivers services as promised. The Responsiveness dimension showed that gym staff were attentive and quick to respond to member needs, contributing to an overall efficient service experience. The Assurance dimension highlighted users' trust in the competency and professionalism of the trainers, while the Empathy dimension emphasized the individualized attention and care provided by staff to members.

Overall, these results demonstrate that Palindra Gym Fitness has successfully met consumer expectations in multiple aspects of service quality. The high satisfaction levels, particularly in the areas of physical facilities and staff interaction, indicate strong performance in service delivery and a high likelihood of continued member loyalty.

Discussion

The results of this study show that consumer satisfaction with the facilities and infrastructure at Palindra Gym Fitness is generally high, with a mean satisfaction score of 97.37. Most users reported very high satisfaction particularly in the Tangibles dimension, which includes physical attributes such as the availability of equipment, cleanliness, lighting, and overall facility condition. This confirms the gym's effectiveness in meeting essential infrastructure expectations among its members.

These findings are consistent with a study by (Sukiri, 2021) which found that satisfaction with fitness facilities at the Academic Gym of Universitas Negeri Jakarta reached 85%, with even higher satisfaction in service dimensions like reliability (97.8%) and responsiveness (93.5%). This supports the present study's conclusion that well-maintained tangible aspects, combined with responsive service, contribute significantly to user satisfaction.

Furthermore, a systematic review by Ferreira (2023) highlighted "facility quality" as one of the most critical service dimensions influencing customer satisfaction and long-term member retention in fitness centers. Their findings emphasized that positive perceptions of infrastructure directly correlate with user loyalty and service perception.

Similarly, Salsabila et al. (2024) identified a significant correlation between gym facility quality and customer satisfaction in Sleman-based fitness centers. Dimensions such as gym facilities, fitness studios, and sports arenas were shown to have high correlation coefficients ($r = 0.636-0.504$; $p = 0.000$), further confirming the critical role of infrastructure in shaping user experience.

The present study also revealed positive evaluations in service quality dimensions such as reliability, assurance, and empathy. These interpersonal factors complement physical infrastructure and are essential in creating a supportive and engaging environment. A study on service quality in fitness centers in Semarang reinforced this by showing that all SERVQUAL dimensions—including assurance, empathy, and responsiveness—significantly influence customer satisfaction, even when tangible elements slightly underperform (Kuswibowo, 2022).

In summary, the high satisfaction levels reported by users of Palindra Gym Fitness reflect the combined strength of its physical environment and the quality of its human services. To sustain and enhance these outcomes, the gym's management is encouraged to continue investing in facility improvements and staff training, with attention to areas that received relatively lower scores, such as locker room ventilation and equipment variety.

Conclusions

This study concludes that the quality of facilities and infrastructure at Palindra Gym Fitness in PALI Regency significantly contributes to a high level of consumer satisfaction. Users reported strong satisfaction particularly in aspects such as equipment availability, cleanliness, lighting, ventilation, and overall layout of the facility. Additionally, service-related dimensions such as reliability, responsiveness, assurance, and empathy were also rated positively, indicating that both physical and human resources play a vital role in shaping the overall user experience.

Although general satisfaction was found to be high, certain aspects—such as locker room ventilation and the variety of available fitness equipment—were identified as areas needing improvement. Addressing these specific components is expected to further enhance consumer comfort and long-term engagement.

The results of this study provide valuable insight for fitness center operators in understanding the elements that most influence consumer satisfaction. Continued investment in infrastructure maintenance, consistent service quality, and responsiveness to member needs are recommended to sustain and improve user satisfaction levels. Future research may explore broader comparative studies or incorporate user retention and loyalty factors to deepen understanding of long-term customer experience.

References

- AbouRokbah, S., & Salam, M. A. (2023). Quality and satisfaction in female fitness centers and the moderating roles of age and income: Empirical evidence from Saudi Arabia. *International Journal of Sports Marketing and Sponsorship*, 24(4), 753–770.
<https://doi.org/10.1108/IJSMS-10-2022-0186>
- Daniels, K., Lemmens, R., Knippenberg, E., Marinus, N., Vonck, S., Baerts, J., Bergs, J., Spooren, A., Hansen, D., & Bonnechère, B. (2023). Promoting physical activity and a healthy active lifestyle in community-dwelling older adults: A design thinking approach for the development of a mobile health application. *Frontiers in Public Health*, 11, 1280941. <https://doi.org/10.3389/fpubh.2023.1280941>

- Ferreira, H. (2023). Determinants of service quality influencing customer satisfaction in fitness centers: A systematic review. *European Journal of Human Movement*, 49. <https://doi.org/10.21134/eurjhm.2022.49.3>
- Hietarinta, A. (2017). *The importance and the needs of exercise amenities during hotel stay* [fi=AMK-opinnäytetyö|sv=YH-examensarbete|en=Bachelor's thesis]. Haaga-Helia ammattikorkeakoulu. <http://www.theseus.fi/handle/10024/130818>
- Imansyah, F. (2018). *Minat Belajar Siswa Pada Pelajaran Penjas Orkes Terhadap Hasil Belajar*.
- Kim, M., & Kim, D. (2024). Exploring the Psychological Mechanism of How the Multidimensional Service Quality of Fitness Centers Affects Consumer Satisfaction and Loyalty Depending on the Level of Exercise Involvement. *Behavioral Sciences*, 14(11), Article 11. <https://doi.org/10.3390/bs14111049>
- Kuswibowo, C. (2022). The Effect of Service Quality And Customer Value on Customer Satisfaction at Celebrity Fitness Margo City. *Indonesian Journal of Business and Entrepreneurship*. <https://doi.org/10.17358/ijbe.8.2.313>
- Lenka, U., Suar, D., & Mohapatra, P. K. J. (2010). Soft and Hard Aspects of Quality Management Practices Influencing Service Quality and Customer Satisfaction in Manufacturing-oriented Services. *Global Business Review*, 11(1), 79–101. <https://doi.org/10.1177/097215090901100105>
- Salsabila, N. A., Nasrulloh, A., Prabowo, T. A., & Chandrika, W. M. R. (2024). A Correlation Study: The Influence of Service Quality to Satisfaction at Fitness Facilities in Sleman Regency, Yogyakarta. *Journal of Advances in Sports and Physical Education*, 7(12), 286–293. <https://doi.org/10.36348/jaspe.2024.v07i12.002>
- Sukiri. (2021). CUSTOMER SATISFACTION WITH FITNES SERVICES AND EQUIPMENT FACILITIES IN GYM ACADEMIC FACULTY OF SCIENCE OF

SCIENCE, JAKARTA STATE UNIVERSITY. *Gladi : Jurnal Ilmu Keolahragaan*,
12(01), 42–47. <https://doi.org/10.21009/GJIK.121.06>

Sun, S., & Pan, Y. (2023). Effects of Service Quality and Service Convenience on Customer Satisfaction and Loyalty in Self-Service Fitness Centers: Differences between Staffed and Unstaffed Services. *Sustainability*, 15(19), Article 19.
<https://doi.org/10.3390/su151914099>

Tross, L. F. S., Magalhães Dias ,Helton, & and Callegari Zanetti, M. (2024). Maintaining exercise in fitness centre settings: Insights from the physical activity maintenance theory. *International Journal of Qualitative Studies on Health and Well-Being*, 19(1), 2409832. <https://doi.org/10.1080/17482631.2024.2409832>