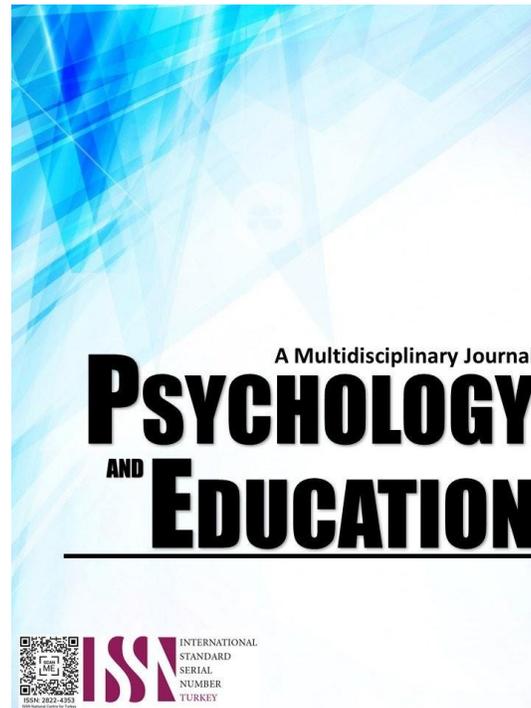


# **RELATIONSHIP BETWEEN SERVICE QUALITY AND CUSTOMER SATISFACTION OF NAN NING FITNESS CENTERS, REPUBLIC OF CHINA**



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## Relationship between Service Quality and Customer Satisfaction of Nan Ning Fitness Centers, Republic of China

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### Abstract

Every organization ought to not only be working toward achieving a high level of customer satisfaction, but they should also be actively working toward achieving that level. Studies correlating influencing factors on the relationship between the quality service and customer satisfaction is scarce at the local level. This quantitative research made use of the descriptive, correlational research design to assess influencing factors on the relationship between the quality service and customer satisfaction in Nanning Fitness Centers in China. Findings of this study served as basis for a proposed intervention plan. 200 respondents were recruited and statistical treatments used were frequency distribution, simple percentage, mean score and standard deviation, and Pearson r. Findings of the study revealed that physical environment, customer value, supporting service, switching cost, and purchasing decision were considered to be very important to the respondents. Overall, the influencing factors were considered to be very important in influencing the relationship between the quality service of Nanning Fitness Centers and customer satisfaction. Respondents were very satisfied with the service of the fitness center. Physical environment, customer value, supporting values, switching cost, purchasing decision, and overall factors influencing the relationship between service quality and customer satisfaction were significantly correlated with extent of the clients' satisfaction with the service. The more important the physical environment, customer value, supporting values, switching cost, purchasing decision, and overall factors influencing the relationship between service quality and customer satisfaction, the higher the extent of satisfaction on the service. To address the findings of the study an in-intervention plan was proposed.

**Keywords:** *fitness clubs, influencing factors, satisfaction with service, service quality*

### Introduction

If one wants to be competitive and wants to remain in the industry, installation of continuous quality improvement is essential. Continuous quality improvement in the form of customer satisfaction, service quality, and customer feedback are just a few of the mechanisms that one can install to continually improve and therefore attract more clients.

In the study of Wong and Teo (2019), the study explored the impact of Service Quality on Customer Satisfaction in the Fitness Industry and proposed gender perspective, emphasizes the importance of understanding the relationship between service quality and customer satisfaction to improve customer experience. Also, according to Chen and Hu (2020), the study explored service quality, customer satisfaction, and Loyalty in Fitness Centers from a Chinese perspective. The relationship between loyalty provides relevant evidence to discuss the relationship between service quality and customer satisfaction in Nanning Fitness Center. Lin and Wang (2019) revealed that the relationship between repurchase intention and a gender perspective are proposed, which has implications for understanding the relationship between service quality and customer satisfaction in Nanning fitness centers. Choi, Lee, and Kim (2020), in their study "The Effect of Service Quality on Customer Satisfaction and Behavioral Intention in Fitness Centers: The Moderating Role of Gender." This study examined the effect of service quality on customers. The impact of satisfaction and behavioral intention is discussed, and the moderating role of gender is explored, which provides a reference for in-depth exploration of the relevant relationships in Nanning fitness centers.

The focus of this study is to assess the relationship between factors influencing the relationship between service quality and customer satisfaction and the extent of satisfaction with the services in the context of fitness centers in Nan Ning, Republic of China. The study aims to determine the influencing factors of the relationship service quality and customer service and how these factors influence satisfaction with the services. By examining the correlation and potential causal relationships between the factors influencing the relationship between service quality and customer satisfaction and the extent of satisfaction on the services, this will provide valuable insights to fitness center operators in Nan Ning. It will help them identify areas for improvement in service delivery, enhance customer satisfaction, and ultimately improve their business performance. Furthermore, the study may contribute to the understanding of the service industry in general, particularly in the fitness sector, and inform future research and practice in this field. This study holds significant importance across various aspects. By understanding this relationship, the centers can enhance service quality to better meet customer needs, thereby gaining a competitive edge in the market. Satisfied customers are more likely to remain loyal, leading to increased customer retention and positive word-of-mouth marketing, attracting new clientele. Moreover, improved customer satisfaction correlates with better financial performance as customers are willing to pay more for quality services and make repeat purchases. Insights gained from the study also enable the centers to tailor their offerings according to customer preferences, fostering overall satisfaction and loyalty.

Furthermore, conducting such research fosters a culture of continuous improvement, ensuring the centers remain relevant and

successful in the dynamic market landscape. The study may have identified several gaps that prompted the study. These includes limited specific research on the fitness industry in Nan Ning, and there might be a lack of in-depth studies focusing on service quality and customer satisfaction within the fitness industry in this particular region. Unique cultural or market factors such as differences in customer preferences, service expectations, or market dynamics in Nan Ning compared to other regions could create a research gap. Lastly, evolving customer demands where the changing landscape of the fitness industry and customer expectations may not have been adequately addressed in existing research.

To address the research gap effectively, the study could identify and evaluate specific service quality dimensions that are crucial to customer satisfaction in Nan Ning fitness centers. Determine customer satisfaction drivers by determining the factors that significantly impact customer satisfaction within the context of fitness centers in Nan Ning, such as staff competence, facilities, cleanliness, or value for money. Propose practical recommendations through an intervention plan which provide actionable recommendations for fitness center managers to improve service quality and enhance customer satisfaction levels. Lastly, consider cultural nuances by acknowledge any cultural or regional factors that may influence customer perceptions of service quality and satisfaction in Nan Ning, ensuring the study's relevance and applicability.

Yang and Peterson (2019), the study studied customer-perceived service quality from the perspective of Chinese fitness clubs , satisfaction and loyalty, and examined the moderating role of gender in it, which has reference value for explaining the situation of Nanning fitness center. Liu and Jang (2018), the study examined service quality, customer satisfaction, and loyalty. The relationship between degrees and the moderating role of age are examined, which provides a reference for analyzing the situation of Nanning fitness center. There is a rapid growth in the fitness industry, as we experienced on the post-COVID-19 in NanNing, the capital city of GuangXi Province in China, The demand for physical and mental health improvement has led to a 30 percent steady increase in the fitness industry from 2022 to the present (Alexandra, 2024). With a large urban population, NanNing boasts 320 fitness centers catering to over 300,000 adults above 18 years old (GuangXi Provincial Bureau of Statistics, 2024; Tianyancha, 2024). However, some fitness centers struggle to meet the growing demand, resulting in customer dissatisfaction. Addressing and improving customer satisfaction should be a top priority for NanNing Fitness Centers. First, Studying and addressing members' expectations and needs is crucial for the sustainable operation and competitiveness of fitness centers.

Key variables influencing success include: Physical Environment: Encompassing infrastructure like buildings, equipment, and location, the physical environment significantly affects operations and success. Elements such as climate, topography, and accessibility impact business effectiveness (Howat & Assaker, 2020). Secondly, Customer Value; beyond price, customer value considers quality, features, brand reputation, and satisfaction. Creating and delivering value is vital for building customer loyalty and maintaining a competitive edge (Hongxing, 2021). Thirdly, Support Services; assistance provided before, during, and after a purchase, including customer support and after-sales services, enhances satisfaction, loyalty, and brand perception (Dongdong et al., 2020). Fourthly, Switching Costs; the expense, effort, or inconvenience customers face when changing providers. Higher switching costs act as a barrier, promoting customer retention (Zhenjie & Yao, 2020). And lastly, Purchasing Decision; The process by which consumers evaluate options and choose to purchase is influenced by price, quality, brand reputation, preferences, and external factors (Garcia-Fernandez, 2022).

In business strategy and marketing, considering and managing these factors are critical for a fitness center's success, influencing market position and meeting customer needs. The service quality study conducted in NanNing's fitness industry can serve as a model for the broader Chinese fitness market. By investigating members in NanNing, everyone will gain insights into China's fitness market's current state and challenges. Analyzing the link between service quality at NanNing fitness centers and customer satisfaction not only aids in enhancing and developing NanNing's fitness sector but also contributes to the overall advancement of the fitness market in China. This research not only enhances my research skills and interest but also has broader implications for the country's fitness industry.

## Research Questions

The main purpose of the study is to assess influencing factors on the relationship between the quality service and customer satisfaction in Nanning Fitness Centers in China. Findings of this study served as basis for a proposed satisfaction sustenance plan. Specifically, this study answered the following questions:

1. What is the degree of influencing factors on the relationship between the quality service of Nanning Fitness Centers and customer satisfaction in terms of:
  - 1.1. physical environment;
  - 1.2. customer value;
  - 1.3. supporting services;
  - 1.4. switching cost; and
  - 1.5. purchasing decision?
2. What is the extent of clients satisfaction on the service of the Nan Ning Fitness Centers?
3. Is there a significant correlation between the influencing factors and the extent of clients satisfaction on the service of the Nan Ning fitness Centers?
4. What satisfaction sustenance plan can be developed based on the findings of the study?

## Literature Review

**Service Quality.** Service Quality Comprise of (1) The physical environment of fitness refers to the surroundings where exercise and physical activity take place. This includes factors such as the layout of workout spaces, availability and quality of equipment, lighting, temperature, cleanliness, and overall design of the fitness facility. (2) The customer value of fitness involves the perceived benefits and satisfaction that individuals derive from their engagement with fitness-related products or services. It goes beyond just physical outcomes and includes factors like personalized guidance, community support, convenience, and overall experience. Providing value in fitness often means addressing diverse needs and enhancing overall well-being. (3) Supporting services in fitness typically refer to additional offerings beyond the basic exercise programs. This could include services like personalized training plans, nutritional guidance, fitness assessments, recovery support, and access to wellness resources. These supplementary services aim to enhance the overall fitness experience and help individuals achieve their health and wellness goals more comprehensively. (4) The switching cost in fitness refers to the effort, time, or financial investment required when an individual decides to change their fitness routine, gym, or exercise program. Factors contributing to switching costs may include membership fees, adapting to a new workout environment, finding new trainers, or adjusting to different class schedules. Reducing switching costs is often a consideration for fitness businesses aiming to retain their members. (5) Purchasing decisions involve the process an individual goes through when deciding to invest in a fitness-related product or service. This decision-making process can be influenced by a variety of factors, such as personal fitness goals, budget considerations, brand reputation, and the perceived value of the product. Fitness businesses often strive to understand and cater to these factors in order to attract and retain customers.

**Customer Satisfaction.** Customer satisfaction reflects what customers think about the physical environment, custom value, support service and switch cost, purchasing decision provided by NanNing Fitness Center. It is deeply recognized by fitness users. As a basic resource for fitness groups, a high degree of satisfaction is good for their bodies and Health is of paramount importance and contributes significantly to a fitness center's reputation.

**Influencing Factors on Service Quality and Customer Satisfaction.** In the study of Khadka and Srijana (2022), the regression analysis results indicate that affordability, location, and advertising significantly impact customer satisfaction, while equipment quality does not. These findings highlight the need for fitness clubs to prioritize accessibility, affordability, and effective advertising to increase consumer satisfaction. In a highly competitive industry, fitness clubs can optimize customer experiences and enhance overall business performance by understanding these factors.

The results in the study of Nursanti and Tomoliyus (2021) showed that loyalty and satisfaction were significantly influenced by word-of-mouth, and service quality had a positive effect. Price had a significant effect on customer satisfaction and loyalty as well. A company's customer satisfaction and loyalty are very important for increasing profits, so it is crucial for companies to always maintain good relations with their customers.

The correlation analysis of Thilagavathi and Nanjappa (2023) revealed that all the factors positively correlate with customer satisfaction at the fitness centre. The multiple regression analysis indicates that each factor significantly impacts satisfaction with fitness centres. The study concluded that customers would be satisfied if services were set against costs. Customers demand quality service because they have invested money, time, effort, and emotional well-being.

According to Xu et al. (2021), service recovery, service assurance, facility function, program operation, instructor quality, and staff performance were factors that significantly predicted customer satisfaction with fitness clubs in China. The findings highlight the importance of high-quality service delivery, service recovery, and service assurance and pinpoint specific areas for improvement.

**Extent of Customer Satisfaction on the Services.** In the study of Wang (2023), the customer's satisfaction with the experience effect of the Fitness Club was high and basically meets the customer's psychological expectations, which indicates that the implementation of the experience marketing strategy had been realized in all aspects of the customer experience process.

The results of the multiple regression analysis of Lim et al. (2024) revealed that customer perceived value, satisfaction, and service quality significantly influence customers' psychological commitment and behavioral intentions of membership renewal and customer referrals. Therefore, the higher customer perceived value, satisfaction, and service quality, the higher customer loyalty

## Methodology

### Research Design

This quantitative research made use of the descriptive - correlational design. The descriptive design was used to determine the profile of the respondents, the degree of influencing factors on the relationship between the quality service and customer satisfaction as well as the extent of clients satisfaction on the service. The correlational design was used to assess the relationship between the influencing factors and the extent of clients' satisfaction on the service.

### Participants

The study employed 200 participants that composed the following: 50 students, 50 coaches, 50 teachers, 50 community clients who

were regular customers of the Nan Ning Fitness Centers that were selected purposively.

### **Instrument**

The study made use of a three-part researcher-made instrument based on the review of related literature being done. Part one pertains to the profile of the respondents in terms of age, sex, and number of years doing fitness in the fitness center.

Part two is the influencing factors on the relationship service quality and customer service. It is a 30-item instrument composed of five dimensions namely: Physical Environment (12 items), customer value (5 items), supporting services (4 items), switching cost (4 items), and purchasing decision (5 items). It is answered using a four-point Likert scale where 1 is not important, 2 is somewhat important, 3 is important, and 4 is very important. Parametric scores and interpretation are as follows: 1.00 – 1.75 is not important, 1.76 – 2.50 is somewhat important, 2.51 – 3.25 is important, and 3.26 – 4.00 is very important.

Part three is the satisfaction with service. It is a 15-item instrument and is answered using a five-point Likert scale where 1 (Very Dissatisfied), 2 (Dissatisfied), 3 (Neutral), 4 (Satisfied), 5 (Very Satisfied). Parametric scores and interpretation are as follows: 1.00 – 1.80 is very dissatisfied, 1.81 – 2.60 is dissatisfied, 2.61 – 3.40 is neither satisfied nor dissatisfied, 3.41 – 4.20 is satisfied, and 4.21 – 5.00 is very satisfied.

The research questionnaire developed by the researcher was tested for content validity to assess the fit of the content with the research objectives, as well as the logical and chronological organization. Afterwards, the research questionnaire was tested for reliability among 15 respondents to assess the normality of the data and should achieve a Cronbach alpha score of at least 0.5. Cronbach alpha for the instrument revealed .937 for physical environment, .926 for customer value, .924 for supporting service, .896 for switching cost, .828 for purchasing decision, and .979 for the satisfaction with the services (please see appendix).

### **Procedure**

**Pre-Data Gathering.** In order to undertake the research project, permission from the Dean of the University of the Visayas' Graduate School of Education was required, along with a panel member's endorsement. In order to secure the Notice to Proceed, the researcher followed the compliance check list and submitted to UV-IRB for technical and ethical review. The Ethics Committee issued a Noticed to Proceed Certification once it had been authorized. The researcher then moved on to collecting data using the approved research instrument for the data gathering procedures.

**Actual Data Gathering.** Upon the issuance of the Noticed to Proceed Certificate from the Research Ethics Committee of the University of the Visayas- Institutional Review Board the research started the data collection. The study's main respondents were the students coming from various university in Naning City, China. This was done in a referral recruitment manner which minimized the minor risk identified in the study which was socio-economic risk allowing the students to have enough time to answer the survey in their free and preferred time. The survey was administered not necessary within the educational institution but it was done even outside as long as they met the criteria as presented in the research respondents inclusion criteria.

Data gathering surveys were done in both online or face-to-face manner in order to facilitate convenience to the respondents on how they wished to answer the survey. All questionnaires were double-checked to make sure that no item is left out. Should an instrument be found to be incomplete, it was discarded and a new respondent was recruited. In addition, respondents were presented with the informed consent form as part of the ethical procedure and only considered a full respondent when consent was provided through signing of the informed consent form. It took about 3 months to gather the data.

**Post-Data Gathering.** Upon completing the survey, the researcher tabulated and were stored in a password protected laptop. Only the researcher had access to the said file.

The data after tabulating and arranging the raw data the researcher then apply statistical analysis using the formula as required by the study upon the generating the result using statistical tool system. The researcher presented them in a tabular manner and provides interpretation, implications, and supporting literature and studies. All raw data were deleted and destroyed at the end of the study.

### **Data Analysis**

To facilitate the analysis of the data for this research the following are to be used:

Frequency Distribution and Simple Percentage was used in determining the profile of the respondent. Mean score and standard deviation was used to determine the degree of influencing factors on the relationship between the quality service and customer satisfaction as well as the extent of clients satisfaction on the service. Pearson r was used assess the relationship between the influencing factors and the extent of clients satisfaction on the service.

### **Ethical Considerations**

Ethical principles were observed in the conduct of the study. The study went through ethical approval. A notice to proceed was secured to data gathering. Please appendices for the discussion of the ethical considerations.



## Results and Discussion

### Degree of Influencing Factors on the Relationship between the Quality Service of Nanning Fitness Centers and Customer Satisfaction

Table 1 is the presentation of the data on the degree of the influencing factors on the relationship between the quality service of Nanning Fitness Centers and customer satisfaction.

Table 1. Degree of Influencing Factors on the Relationship between the Quality Service of Nanning Fitness Centers and Customer Satisfaction

<i>Dimensions</i>	<i>Mean score</i>	<i>SD</i>	<i>Interpretation</i>
Physical Environment			
Fitness center cleanliness and sanitation	3.74	.475	Very important
Fitness center equipment status	3.75	.468	Very important
Fitness center space layout	3.68	.490	Very important
Fitness center temperature and ventilation	3.75	.468	Very important
Fitness Center Music and Atmosphere	3.70	.542	Very important
Fitness center bathing facilities	3.66	.533	Very important
Fitness center staff friendliness	3.73	.488	Very important
Fitness Center parking and accessibility	3.68	.609	Very important
Financial rewards	3.56	.623	Very important
Personal satisfaction	3.70	.499	Very important
Autonomy and independence	3.64	.548	Very important
Impact on society	3.65	.582	Very important
Factor mean	3.69	.388	Very important
Customer Value			
Coaching and staff quality.	3.74	.481	Very important
Equipment and facilities.	3.74	.481	Very important
Courses and Activities.	3.70	.529	Very important
Personalized service	3.74	.473	Very important
Convenience and accessibility	3.75	.468	Very important
Factor mean	3.74	.414	Very important
Supporting Service			
Member consultation and guidance	3.70	.532	Very important
Health assessment	3.75	.468	Very important
Training and education	3.74	.459	Very important
Member benefits	3.62	.588	Very important
Factor mean	3.70	.425	Very important
Switching Cost			
Economic cost	3.66	.533	Very important
Time and effort	3.71	.487	Very important
Brand loyalty	3.68	.556	Very important
Geographical location	3.64	.520	Very important
Factor mean	3.68	.431	Very important
Purchasing Decision			
Courses and activities	3.70	.503	Very important
Word of mouth and reviews	3.72	.490	Very important
Brand loyalty	3.68	.549	Very important
Price and payment options	3.65	.547	Very important
Social experience	3.72	.522	Very important
Factor mean	3.69	.430	Very important
Grand mean	3.70	.386	Very important

Note: n=200. Legend: 1.00 – 1.75 is not important, 1.76 – 2.50 is somewhat important, 2.51 – 3.25 is important, and 3.26 – 4.00 is very important

**Physical Environment.** This was considered to be very important. Respondents believed that cleanliness and sanitation is very important along with the equipment status, space layout, temperature and ventilation, music and atmosphere, and bathing facilities. They also consider staff friendliness, parking and accessibility, financial rewards, personal satisfaction, autonomy and independence, and impact on society as very important factors that influence the relationship between quality service and customer satisfaction.

Importance of physical environment to customer satisfaction: From the questionnaire results, it can be seen that physical environment is one of the important factors affecting customer satisfaction. A high-quality physical environment can not only enhance the customer's exercise experience, but also increase the customer's trust and loyalty to the fitness center. Necessity of continuous improvement: Although Nanning Fitness Center has received high praise from customers in many aspects, it still needs continuous improvement. For example, the types and quantity of equipment can be further increased, the diversity and professionalism of courses can be improved, and the cost-effectiveness of membership packages can be optimized. At the same time, it is also necessary to pay attention to keeping

the facilities clean and tidy to ensure that customers can exercise in a comfortable and pleasant environment.

In summary, the physical environment of the fitness center, including cleanliness and hygiene, equipment diversity and maintenance, reasonable facility layout and fitness course arrangement, and overall environment and atmosphere, has a significant impact on customer satisfaction. Nanning Fitness Center has performed well in these aspects and significantly improved customer satisfaction. Therefore, it is recommended that fitness centers continue to maintain high standards of environmental hygiene, maintain and update equipment in a timely manner, and optimize facility layout and course arrangements to continuously improve customer satisfaction.

**Customer Value.** This was rated as very important as well. Also, the respondents believed that the influencing factors of coaching and staff quality, equipment and facilities, courses and activities, personalized service, and convenience and accessibility were very important to the relationship between the quality service and customer satisfaction.

It can be seen that Nanning Fitness Center has performed well in many aspects, including cleanliness, employee attitude, equipment quality, course arrangement, membership package, facility management, information communication and overall atmosphere. These factors work together to significantly improve customer satisfaction. It is recommended that fitness centers continue to maintain these high standards of service and facilities and continue to pay attention to customer needs and feedback to further improve customer satisfaction and loyalty.

**Supporting Service.** This was rated as very important. The respondents believed that factors such as member consultation and guidance, health assessment, training and education, and member benefits were very important factors that influence the relationship between the quality service and customer satisfaction.

The importance of support services to customer satisfaction: Through the analysis of the factors affecting support services, we can see that support services play a vital role in the relationship between Nanning Fitness Center's high-quality services and customer satisfaction. Friendly staff, affordable membership packages, effective communication channels, and convenient facilities can enhance customer satisfaction and loyalty.

Fitness centers can effectively improve customer satisfaction and loyalty by improving cleaning and sanitation standards, improving employee service quality, maintaining and updating equipment, arranging courses reasonably, optimizing pricing strategies, strengthening communication and member services, and creating a good fitness environment. These supporting service influencing factors are of great significance to the future development and competitiveness of fitness centers.

**Switching Cost.** This was considered to be very important to the respondents. They believed that economic cost, time and effort, brand loyalty, and geographical location are very important factors that influence the relationship between quality service and customer satisfaction. The level of switching costs directly affects customer loyalty. Nanning Fitness Center has successfully attracted a large number of loyal customers and improved customer satisfaction and loyalty by providing high-quality services and reducing customers' switching costs. Nanning Fitness Center has reduced customers' switching costs by providing high-quality services (such as clean facilities, friendly staff, equipment maintenance, etc.), thereby enhancing customer satisfaction and loyalty.

**Purchasing Decision.** This was also considered to be very important. Courses and activities, word of mouth and reviews, brand loyalty, price and payment options, and social experience were considered by the respondents to be very important factors that influence the relationship between quality of service and customer satisfaction. High-quality services are an important factor affecting customers' purchasing decisions. Nanning Fitness Center has improved customer satisfaction and loyalty by providing high-quality services, thereby increasing the likelihood of customers' purchasing decisions. Balance between price and value: In purchasing decisions, customers will weigh price and value.

Nanning Fitness Center has achieved a balance between price and value by providing reasonable prices and high-quality services, thereby attracting more customers. Importance of word of mouth: Word of mouth is an important factor in purchasing decisions. Nanning Fitness Center has won a good reputation by providing high-quality services and facilities, which in turn attracted more potential customers. Additional services can increase customers' sense of value and thus influence their purchasing decisions. Nanning Fitness Center should continue to provide a variety of additional services to meet the needs of different customers.

Overall, the influencing factors were considered to be very important in influencing the relationship between the quality service of Nanning Fitness Centers and customer satisfaction. The correlation analysis of Thilagavathi and Nanjappa (2023) revealed that all the factors positively correlate with customer satisfaction at the fitness centre. The multiple regression analysis indicates that each factor significantly impacts satisfaction with fitness centres. The study concluded that customers would be satisfied if services were set against costs. Customers demand quality service because they have invested money, time, effort, and emotional well-being.

According to Xu et al. (2021), service recovery, service assurance, facility function, program operation, instructor quality, and staff performance were factors that significantly predicted customer satisfaction with fitness clubs in China. The findings highlight the importance of high-quality service delivery, service recovery, and service assurance and pinpoint specific areas for improvement.

#### **Extent of the Clients being Satisfied with the Service of the Nan Ning Fitness Centers**

Table 2 is the presentation of the data on the extent the clients are satisfied with the service of the Nan Ning Fitness Centers.

Table 2. *Extent of the Clients being Satisfied with the Service of the Nan Ning Fitness Centers*

<i>Statements</i>	<i>Mean score</i>	<i>SD</i>	<i>Interpretation</i>
1. How satisfied are you with the overall cleanliness and hygiene of our fitness center facilities?	4.60	.681	Very satisfied
2. On a scale of 1 to 5, how would you rate the friendliness and helpfulness of our staff members?	4.57	.684	Very friendly or helpful
3. How satisfied are you with the variety of equipment available for your workouts?	4.54	.694	Very satisfied
4. Did our fitness center meet your expectations in terms of equipment maintenance and functionality?	4.39	.775	Far exceeded expectations
5. How likely are you to recommend our gym to a friend or family member?	4.48	.694	Very likely
6. How satisfied are you with the availability and cleanliness of locker rooms and shower facilities?	4.46	.722	Very satisfied
7. How would you rate the effectiveness of the fitness classes or personal training sessions you've attended at our fitness center?	4.50	.695	Very satisfied
8. How satisfied are you with the scheduling and availability of fitness classes?	4.50	.702	Very satisfied
9. How satisfied are you with the affordability and value for money of our membership packages?	4.50	.702	Very satisfied
10. How often do you experience overcrowding or long wait times for equipment during your visits to the fitness center?	4.16	.916	Never
11. How satisfied are you with the communication channels provided by the fitness center for updates and announcements?	4.45	.755	Very satisfied
12. How likely are you to renew your membership with our fitness center?	4.38	.714	Very likely
13. How satisfied are you with the accessibility and parking options at our fitness center?	4.46	.742	Very satisfied
14. How satisfied are you with the cleanliness and maintenance of the swimming pool (if applicable)?	4.46	.715	Very satisfied
15. How satisfied are you with the overall atmosphere and ambiance of our fitness center during your visits?	4.52	.665	Very satisfied
<b>Grand mean</b>	<b>4.46</b>	<b>.612</b>	<b>Very satisfied</b>

Note: n=200. Legend: 1.00 – 1.80 is very dissatisfied, 1.81 – 2.60 is dissatisfied, 2.61 – 3.40 is neither satisfied nor dissatisfied, 3.41 – 4.20 is satisfied, and 4.21 – 5.00 is very satisfied

Respondents were very satisfied with the service of the Nan Ning Fitness Center. Specifically, they were satisfied with the overall cleanliness and hygiene of the fitness center facilities and the friendliness and helpfulness of the staff members. Also, they were very satisfied with the variety of equipment available for workouts, about the center meeting expectations in terms of equipment maintenance and functionality, and that because they were very satisfied they would recommend the gym to a friend or family member. Further, they were very satisfied with the availability and cleanliness of locker rooms and shower facilities, the effectiveness of the fitness classes or personal training sessions, and with the scheduling and availability of fitness classes.

Furthermore, they were very satisfied with the affordability and value for money of our membership packages, with the experience of overcrowding or long wait times for equipment, and with the communication channels provided by the fitness center for updates and announcements. Also, they were very satisfied with the fitness centers that they are likely to renew their membership and with the accessibility and parking options. Lastly, they were very satisfied with the cleanliness and maintenance of the swimming pool and with the overall atmosphere and ambiance of the fitness center during visits.

Supporting the findings, in the study of Wang (2023), the customer's satisfaction with the experience effect of the Fitness Club was high and basically meets the customer's psychological expectations, which indicates that the implementation of the experience marketing strategy had been realized in all aspects of the customer experience process.

The results of the multiple regression analysis of Lim et al. (2024) revealed that customer perceived value, satisfaction, and service quality significantly influence customers' psychological commitment and behavioral intentions of membership renewal and customer referrals. Therefore, the higher customer perceived value, satisfaction, and service quality, the higher customer loyalty.

### **Correlation between Influencing Factors and the Extent of the Clients are Satisfied with the Service of the Nan Ning Fitness Centers**

Table 3 is the presentation of the data on whether there is a significant correlation between the influencing factors and the extent of the clients are satisfied.

Table 3 is the presentation of the data on whether there is a significant correlation between the influencing factors and the extent of the clients are satisfied with the service of the Nan Ning Fitness Centers.

The table shows that p values of physical environment, customer value, supporting values, switching cost, purchasing decision, and overall factors influencing the relationship between service quality and customer satisfaction were lesser than the significant value of .05. These values were interpreted as significant which led to the decision of rejecting the null hypothesis. Thus, physical environment,

customer value, supporting values, switching cost, purchasing decision, and overall factors influencing the relationship between service quality and customer satisfaction were significantly correlated with extent of the clients' satisfaction with the service. The correlations were strong positive. This means that the more important the physical environment, customer value, supporting values, switching cost, purchasing decision, and overall factors influencing the relationship between service quality and customer satisfaction, the higher the extent of satisfaction on the service.

Table 3. Correlation between Influencing Factors and the Extent of the Clients are Satisfied with the Service of the Nan Ning Fitness Centers

Independent variables	r value	p value	Decision	Interpretation
Physical environment	.728	.000	Reject Ho	Significant
Customer value	.672	.000	Reject Ho	Significant
Supporting values	.679	.000	Reject Ho	Significant
Switching cost	.674	.000	Reject Ho	Significant
Purchasing decision	.744	.000	Reject Ho	Significant
Overall factors influencing the relationship between service quality and customer satisfaction	.755	.000	Reject Ho	Significant

Legend: Significant if p value is < .05. Dependent variable: Extent of the Clients are Satisfied with the Service. Pearson r interpretation: A value greater than .5 is strong (positive), between .3 and .5 is moderate (positive), between 0 and .3 is weak (positive), 0 is none, between 0 and -.3 is weak (negative), between -.3 and -.5 is moderate (negative), and less than -.5 is strong (negative)

The different factors are not called influencing factors if they do not really influence service quality and customer satisfaction. Service quality and customer service are similar concepts with satisfaction with the service. Thus, it is not surprising to see a correlation between the influencing factors and the extent of satisfaction with service. The provision of the very good physical environment allows clients to have a positive experience when doing fitness exercises. The same with the provision of customer value, supporting values, switching cost, and purchasing decision, clients will be able to see the worth of their investment and everything they need to accomplish fitness goals can be achieved. Thus, no doubt that the overall factors influencing the relationship between service quality and customer satisfaction really correlates with satisfaction with service.

Supporting the findings of the study, in the study of Khadka and Srijana (2022), the regression analysis results indicate that affordability, location, and advertising significantly impact customer satisfaction, while equipment quality does not. These findings highlight the need for fitness clubs to prioritize accessibility, affordability, and effective advertising to increase consumer satisfaction. In a highly competitive industry, fitness clubs can optimize customer experiences and enhance overall business performance by understanding these factors.

The results in the study of Nursanti and Tomoliyus (2021) showed that loyalty and satisfaction were significantly influenced by word-of-mouth, and service quality had a positive effect. Price had a significant effect on customer satisfaction and loyalty as well. A company's customer satisfaction and loyalty are very important for increasing profits, so it is crucial for companies to always maintain good relations with their customers.

## Conclusions

In conclusion, the influencing factors on the relationship between service quality and customer service influences the extent of the clients satisfied with the service of the fitness centers. This means that as the influencing factors become very important, the extent of satisfaction increases. True to the Expectancy-Disconfirmation Theory the very important findings in the influencing factors greatly contributes to customer satisfaction as a result of the comparison between customers' prior expectations and their perceptions of actual service performance of the fitness centers.

Further, the very important findings also affirms the Disconfirmation of Expectations Model, in which the influencing factors was dependent on the discrepancy between customer expectations, perceived performance, and the importance assigned to each attribute. Lastly, the very satisfied finding affirms the Theory of Service Quality where service quality is the comparison between customers' expectations for services and actual perceptions. In order to address the findings of the study, an intervention plan was proposed.

The following recommendations were given based on the findings of the study:

**Practice.** The produced output intervention plan which consists of different activities to sustain the very important influencing factors and very high levels of satisfaction on the services is proposed for use in the fitness clubs where the study was conducted. Other fitness clubs may also adopt the intervention plan as applicable to them. A special meeting will be called for to discuss the findings of the study among fitness club administrators and heads.

**Policy.** Policies on continuing quality improvement will be heightened in terms of its implementation especially on fitness clubs making it a mandatory requirement for fitness clubs to institute continuing quality improvement activities. Internal policies may also be adopted to adopt customer satisfaction as a means of continuing quality improvement among fitness clubs.

**Education.** The study will be a great help in the discussion of research methodology. The methodology used in the study can serve as a guide for other researchers. The study can also serve as a reference in discussing statistical treatments and ethics in research. Finally,

the study findings, can be a good reference in studies relating to influencing factors on the relationship between service quality and customer service and extent of satisfaction with service on fitness clubs.

Research. As a requirement for research dissemination, the study will be disseminated through participation in either oral or poster presentation in any local or international research congress. It will also be submitted for possible publication in a refereed local or international journal. The following research titles are also recommended for future studies:

- A phenomenological inquiry on the lived experience on the influencing factors of customer satisfaction among clients of fitness clubs;
- A comparative analysis on the relationship between the influencing factors and customer satisfaction according to profile of clients; and
- A convergent parallel method in exploring the importance of the influencing factors and extent of customer satisfaction among client of fitness clubs.

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