Service Quality Influencing Customer Loyalty of Fitness Centers in Phra Nakhon Si Ayutthaya Province

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Abstract

The objectives of this study were to investigate: 1) levels of each service quality and customer loyalty quantity of the fitness centers 2) relationship among quality of fitness center services and customer loyalty of the fitness centers and 3) how overall and each service quality influence customer loyalty of the fitness centers. 122 people participating in 8 fitness centers located in Phra Nakhon Si Ayutthaya Province were selected as the samples using an accidental sampling technique. Questionnaires consisted of a Likert 5-level scale on service quality and customer loyalty with content validity coefficients .67 – 1.00 and reliability coefficients .82 – .95 were used for collecting data. Mean, standard deviation, simple linear correlation, and multiple regression analysis were used for data analysis. The results of the study are the following; The findings revealed that the fitness centers have generally provided 6 services (buildings and the surrounding area, facilities, locker room, exercise equipment, overall staff, and exercise activities with high quality at good–very good levels. Moreover, the customers participating in the fitness centers have reflected their loyalty to the centers at many levels. In terms of the connection among quality of fitness center services together with customer loyalty of the fitness centers, there was a statistically significant relationship at .01 among them. Following the study results, it was found that the hypothesis of overall service quality influencing customer loyalty was significantly supported but only 3 out of 6 services (facilities, overall staff as well as exercise activities) were statistically significant at .05 respectively influencing the customer loyalty.

Keywords: service quality; customer loyalty; fitness center

Introduction

The survey on Thai consumer health behaviors to raise public health awareness on world health day 2017 was conducted between November 2016 to January 2017 with 10,589 people aged 15–60 years old. It was also investigated on the analysis of health trends in Thailand in 2017. It was found that 37 percent of the respondents had good knowledge about health and 98 percent of them knew that regular exercise helps them healthy. Furthermore, they defined good health as being strong, proportionate, not sick, and having a good mood. It was also indicated that Thais understood holistic health care including mind and body. Therefore, it was a good sign to encourage exercises (Kasikorn Bank, 2020).

Since there was a good sign mentioned so far, it would promote the health and well–being of Thai people even further in the future. There was also a trend of the love of health around the world including Thailand which resulted in an increasing interest in exercise and sports (The Standard Team, 2018). The growing interest in exercise indicated that exercise was gaining in popularity among urbanized societies. One of the most popular forms of exercise was exercising in a fitness center which was especially suitable for Thailand because of hot weather, limited space, and traffic jams. Most Thai people in the past rarely liked to go to the fitness centers because they had little time. However, the establishment of the fitness business since 2016–2019 was up to 29.69 percent when compared to the same period of the past year. Moreover, the total fitness revenue increased changes in customers' behaviors resulted in a steady increase in the fitness business. It adopted the customers' trends, technology, and diverse market needs (Department of Business Development, Ministry of Commerce of Thailand, 2019). Also, there have been a lot of problems, obstacles, and very high competition among the business owners. Therefore, they have to look for strategies to raise the quality of their services in every aspect so that they can compete and survive in their business (Jirapa Phungbangkruay, 2007).

Objectives

1. To investigate levels of each service quality and customer loyalty quantity of the fitness centers

2. To investigate relationship among quality of fitness center services and customer loyalty of the fitness centers

3. To investigate how overall and each service quality influence customer loyalty of the fitness centers

Scope of the study

This research investigated 1) levels of each service quality and customer loyalty of the fitness centers, 2) relationship among each service quality and customer loyalty of the fitness centers and 3) the influence of service quality on customer loyalty of the fitness centers 176 people participating in 8 fitness centers during October–December, 2020 in Phra Nakhon Si Ayutthaya Province were the population of this study.

Review of the Related Literature

Fitness Centers

Fitness Center is known as a health club, fitness club, health spa, or gym. In recent years, the number of fitness centers has increased, expanding the interest among the population. Today, fitness centers are a reference of health services, rising the adherence to physical activity (León–Quismondo et al., 2020). A Fitness Center is a health, recreational, and social facility geared towards exercise, sports, and other physical activities (Mion, 2017). Nevertheless, a gym is a room or hall with equipment for doing the only physical exercise (Hornby and Wehmeier, 2003). So, fitness clubs or centers are more well–known than gyms.

Fitness Services

Over the last fifteen years, fitness centers have been dramatically developed from weight training facilities to resort–style offering a variety of fitness services. Not surprisingly, due to an increase in the number of competitions within the industry, a variety of supporting services offered, have significantly been increased as well (IHRSA, 2007). Activities include organized, group instructional programs such as spinning classes, yoga, and martial arts; organized and impromptu team sports; and individual fitness opportunities such as cardiovascular training, weight training, and swimming. Individual activities may be self–guided or conducted under the supervision of a trainer. A Fitness Center may also accommodate outdoor activities with features such as a running track, swimming pool, and sport playing fields. The social component is an important secondary function of the Fitness Center and is represented by elements that support the fitness goals but also

encourage social interaction. These include a snack bar, sport spectator seating, saunas, and hot tubs (Mion, 2017)

Service Quality in Fitness Centers

Service quality referred to comparing a customer evaluation of the perceived performance of specific attributes to their prior expectation (Zeithaml, Bitner, and Gremler, 2017) It was also defined as the customer's overall impression of the relative inferiority/superiority of the organization and its services. (Bitner and Hubbert, 1994) Therefore, definitions of service quality focused on meeting the customers' needs and requirements, and how well the service delivered matched the customers' expectation (Bozorgi, 2006). Since a lot of fitness centers have been increasing over decades, the fitness business becomes very highly competitive. To survive this business, especially remaining profitability, it is vital to highlight service quality as well as productive operation (Papadimitriou and Karteliotis, 2000). According to Chelladurai, Scott, and Haywood-Farmar (1987), the Scale of Attribute Fitness Service (SAFS) was developed to measure fitness service by including 30 items. This may lead to five dimensions; Professional services, Customer service, Peripheral service, Facilitating good, and Goods and Services. Tanormsak Senakham (2008) used the SQAS instrument to measure service quality in fitness centers. It consisted of six-dimensional factors which include Staff, Programs, Locker Rooms, Physical facilities, Workout Facility, and Child Care.

Influence of Service Quality on Loyalty of Fitness Centers

Customer loyalty is the act of choosing one company's products and services consistently over their competitors. When a customer is loyal to one company, they aren't easily swayed by price or availability. They would rather pay more and ensure the same quality service and product they know and love (www.sendpulse.com, 2020). A conceptual model is proposed which examines the influence of service quality on loyalty in fitness centers by having perceived value and satisfaction as mediate variables. Propositions of the model are presented including service quality influencing loyalty, service quality influencing perceived value, perceived value influencing loyalty (Thitaree Durongdumrongchai, Chachanun Nitiwattana, and Malichun Thongchum, 2019).

It was concluded that the concepts and theories on service quality and customer loyalty of fitness centers used in this research are fitness centers, fitness services, service quality of fitness centers, the influence of service quality on customer loyalty of fitness centers. A fitness center is a place that houses exercise equipment for physical exercise. It offers a variety of fitness services including group instructional programs, team sports, individual activities also accommodates outdoor

activities with a snack bar, sport spectator seating, saunas, and hot tubs. Since the fitness business becomes very highly competitive, it is vital to highlight quality service as well as productive operation with customer loyalty to survive this business. Moreover, there is a conceptual model proposed to hypothesize that service quality may have a positive influence on customer loyalty to fitness centers.

Methodology

This study is causal-comparative research with customer loyalty as the dependent variable and quality of six services provided in the 8 fitness centers located in Phra Nakhon Si Ayutthaya Province as the independent variables

Population and Samples: 176 people participating in 8 fitness centers located in Phra Nakhon Si Ayutthaya Province were the population of this study. The sample size needed for this research was approximately 122 which relevant to the acceptable sample size of 10-20 people per independent variable for multiple regression analysis (Hair et al. 2010). Accidental sampling technique was used to select (15 participants per fitness center) whoever available to answer those questionnaires at the fitness centers at the given time.

Research Instrument: Questionnaires were used to collect data for the study. Each questionnaire consists of three sections, which are customer personal data, service quality, and customer loyalty of fitness centers. Section 1 is a checklist and fill-in-the-blank form. Section 2 consists of a Likert 5-level scale of service quality on 6 dimensions: buildings and the surrounding area, facilities, locker room, exercise equipment, overall staff, and exercise activities. Section 3 consists of a Likert 5-level scale of overall customer loyalty with 5 aspects: service usage, public relation, purchasing services, service opinion, and paying attention to service. The questionnaire was assessed by 3 experts for content validity with the coefficients of. 67 – 1.00 and Cronbach's Alpha coefficient for overall reliability and each dimension of .82 – .95.

The procedure of collecting data: There are 8 fitness centers located in Phra Nakhon Si Ayutthaya Province. The researcher went to contact 8 fitness center managers in person for permission to conduct the collecting data and also to distribute the questionnaires. The research team set up a plan and schedule to visit customers at each fitness center daily throughout the month. During the period for collecting data each day, the fitness center managers were met, along with the participants at each fitness center at a break or an appropriate time and they were asked for permission to distribute the questionnaires. Furthermore, the research team had to keep in mind

trying to avoid repeating the collection of data from the same participants. 122 questionnaires were distributed and the researcher had collected about 122 perfect questionnaires or 100 percent of all respondents.

Data Analysis: The Statistical Package for The Social Sciences (SPSS) was used to analyze the data. The data analyses for this research were conducted following the research objectives; descriptive statistics were applied for sections 1, 2, and 3 of the questionnaires. Multiple linear regression analysis with stepwise regression process was used to find out the relationship among all variables (quality of 6 services provided for customers in the 8 target fitness centers: buildings and the surrounding area, facilities, locker room, exercise equipment, overall staff, and exercise activities as well as customer loyalty) and the influence of overall and each independent variable of service quality on the dependent variable of customer loyalty.

Results of Analysis

Part 1 Levels of Overall, Each Service Quality and Customer Loyalty

Table 1 Mean, Standard deviation, Quality/Quantity of services and customer loyalty

Services and Loyalty	$\bar{x}$	SD	Quality/Quantity
1 buildings and surrounding area	4.04	.54	very good
2 facilities	4.06	.57	very good
3 locker room	3.86	.77	good
4 exercise equipment	4.01	.74	very good
5 overall staff	4.20	.56	very good
6 exercise activities	3.99	.73	good
7 customer loyalty	3.93	.69	much

According to Table 1, The quality of most services were at very good levels ($\bar{x}$ =4.01–4.20) except, the services of locker room and exercise activities were at good levels ($\bar{x}$ = 3.86. – 3.99), whereas the quantity of customer loyalty was at much level ($\bar{x}$ =3.93)

Part 2 Relationship among quality of fitness center services and customer loyalty

Table 2 Correlation coefficients of Relationship among quality of fitness center services and customer loyalty

variables	X1	X2	X3	X4	X5	X6	X7
X1 buildings and surrounding area	1	.722**	.644**	.615**	.633**	.528**	.650**
X2 facilities		1	.709**	.723**	.675**	.575**	.708**
X3 locker room			1	.734**	.550**	.552**	.513**
X4 exercise equipment				1	.558**	.668**	.578**
X5 overall staff					1	.596**	.681––
X6 exercise activities						1	.595**
X7 customer loyalty							1

** p < .01

The data analysis results in Table2 show that all variables of service quality and customer loyalty had statistically significant positive correlation at .01. (r= .513.734).

Part 3 The Influence of Service Quality on Customer Loyalty

3.1 Relationship of Service Quality Variables and Customer Loyalty Variable

Table 3 Values used to determine the relationship of service quality variables and customer loyalty variable

Model	R	R^2	Adjusted R^2	Standard Error of the Estimate
3	.773	.598	.588	.38241

The data analysis results in Table3 show that variables of service quality altogether related to and of which 58.80 percent accounted for customer loyalty. (Adjusted R^2 = .588)

3.2 The Influence of Overall Service Quality Variables on Customer Loyalty Variable

Table 4 Statistics used to test the influence of overall service quality variables on customer loyalty variable

Model 3	Sum of Square	df	Mean Square	F	Sig
Regression	25.658	3	8.553		
Residual	17.256	118	.146	58.483**	.000
Total	42.914	121			

** p < .01

The data analysis results in Table 4 show that there are at least 1 variable of service quality influences customer loyalty. (F = 58.483)

3.3 Investigation of Regression Coefficient of each Service Quality Variable Influencing Customer Loyalty Variable

Table 5 Regression coefficients of each service quality variable influencing customer loyalty variable

variables	Unstandardized coefficients		Standardized coefficients	t	Sig
	B	std error	β		
constant	.276	.282		.918	.329
X2 facilities	.418	.087	.398	4.818*	.000
X5 overall staff	.320	.090	.301	2.558*	.001
X6 exercise activities	.153	.062	.188	2.418*	.015

* p< .05

The data analysis results in Table 5 show that there are 3 variables of service quality influencing customer loyalty variable: X2 facilities (B = .418), X5 overall staff (B = .320) and X6 exercise activities (B = .153,)

Discussion

According to the results of the analysis, the fitness centers in Phra Nakhon Si Ayutthaya Province have generally provided buildings and the surrounding area, facilities, locker room, exercise equipment, overall staff and exercise activities accommodating indoor and outdoor exercises, sports, and other physical activities with high service quality at good– very good levels for their customers so far. Moreover, it was found that they have gained acceptable customer loyalty at many levels as well. Not surprisingly, due to the increase in the number of competitions within the business, they have to focus on their service quality together with customer loyalty. To survive this business, especially remaining profitability, it is vital to highlight service quality, productive operation (Papadimitriou and Karteliotis, 2000) as well as customer loyalty (Thitaree Durongdumrongchai et al, 2019)

The analysis results of simple linear correlation indicated that all 7 variables analyzed in this study (buildings and the surrounding area, facilities, locker room, exercise equipment, overall staff, exercise activities, and customer loyalty) had a statistically significant positive correlation at

.01. (r = .513 – .734). It indicated that those variables had a strong relationship with one another (Heckman, 2016). Furthermore, multiple linear regression was used to examine how service quality variables (facilities, overall staff, and exercise activities) were significantly related to the customer loyalty variable. According to the results of the analysis, it indicated that the adjusted R2 is .588. It means 58.80 percent of the variation in the customer loyalty variable is explained by the selected service quality variables. So, in simple terms, the higher the adjusted R2, the more variation of customer loyalty is explained by the selected service quality variables, and hence better is the model (Kenton, 2020)

A stepwise multiple linear regression process was used to identify the strength of the influence that the service quality variables have on the customer loyalty variable. According to the results of the analysis, it indicated that the three selected variables out of six service quality variables namely; facilities (B = .418), overall staff (B = .320), and exercise activities (B = .153), captured the customer attention to be satisfied to the fitness centers and they possibly contributed favorable customer loyalty outcomes to the centers. These findings are closely relevant to the conceptual model of service quality influencing customer loyalty proposed by Thitaree Durongdumrongchai et al. (2019) and Exploring the Relationship of Service Quality, Customer Satisfaction, and Customer Loyalty: In the Case Study of Fitness Centers in Cambodia by Loem Huot and Pithoon Thanabordeekij (2019) Therefore, it could be confirmed that some service quality variables have a strong influence on customer loyalty variable.

Conclusion

The objectives of this study were to investigate: 1) levels of each service quality and customer loyalty quantity of the fitness centers 2) relationship among quality of fitness centers services and customer loyalty of the fitness centers and 3) how overall and each service quality influence customer loyalty of the fitness centers. People participating in 8 fitness centers located in Phra Nakhon Si Ayutthaya Province were the target group of the study.

The findings revealed that the fitness centers have generally provided 6 services (buildings and the surrounding area, facilities, locker room, exercise equipment, overall staff, and exercise activities) with high quality at good–very good levels. Moreover, the customers participating in the services of the fitness centers have reflected their loyalty to the centers at many levels. In terms of the connection among quality of fitness center services together with customer loyalty of the fitness

centers, there was a significant relationship among them. By the study results, it was found that the hypothesis of overall service quality influencing customer loyalty was significantly supported but only the separated hypotheses of 3 out of 6 (facilities, overall staff, and exercise activities) were supported to influence customer loyalty.

Recommendation

Implication

The following suggestions needed to be maintained/ improved in the interest of management to enhance the quality of fitness services as well as customer loyalty to raise better fitness business.

1. The Ministry of Tourism and Sports should improve related policies and strategies enhancing service quality as well as customer loyalty of fitness centers so that there might be better guidelines for not only fitness but also tourism business improvement.

2. Facilities are required to look out carefully. The managers might need to assure those other assets such as modern equipment, the appearance of decoration on the wall or mirror of the centers, and these things will be attractive as service materials to the customers.

3. Staff personnel are the only people who deal with the member of the centers on many occasions (Zeithaml, 1988). Staffs have to have good possession of required knowledge and skills about fitness, and be courtesy in their job and always dress professionally. They must have great communication and good responding when there is any complaint and provide a consistent service to the members.

4. The fitness centers ' managers should organize interesting, various and appropriate exercise activities in accordance with time, environment and customers.

Future research

1. This research focuses on the fitness centers in Phra Nakhon Si Ayutthaya Province and does not include those in other provinces. The next research should focus more on the other provinces.

2. There might be other variables influencing customer satisfaction and loyalty. Therefore, future researchers may investigate more on variables relating to customer satisfaction and loyalty in fitness business.

3. Since service quality and customer loyalty are latent variables, for more accuracy and deeply understanding people interested in this issue, require a fairly high level of statistical sophistication as LISREL for their research analysis.

New Knowledge

The research findings indicated that the fitness centers in Phra Nakhon Si Ayutthaya Province have generally provided 6 services (buildings and the surrounding area, facilities, locker room, exercise equipment, overall staff and exercise activities) with rather high quality as well as gained rather a high customer loyalty as their feedback. In terms of the connection among quality of fitness center services together with customer loyalty of the fitness centers, there was a significant relationship among them. Following the study results, a multiple regression equation can be formed as the following:

X2 facilities (B = .418), X5 overall staff (B = .320) and X6 exercise activities (B = .153)

$y = B_2x_2 + B_5x_5 + B_6x_6 + c$. (B= Unstandardized coefficients, y= dependent variable. X= independent variable) Customer loyalty= (.418) facilities + (.320) overall staff + (.153) exercise activities The B value shown in the equation is used in measuring how effectively each independent variable (facilities, overall staff and exercise activities influences the dependent variable (customer loyalty). Therefore, it can be concluded that facilities, overall staff, and exercise activities are service quality variables significantly influencing customer loyalty respectively.

References

Bitner, M. J., & Hubbert, A. R. (1994). *Encounter satisfaction versus overall satisfaction versus quality.* In R.T. Rust and R.L. Oliver (Eds.), Service quality: New directions in theory and practice, Thousand Oaks: Sage Publications.

Bozorgi, M. M. (2006). *Measuring Service Quality in The Airline Using SERVQUAL Model.* Master thesis, Continuation Courses Marketing and e–commerce. Lulea University of Technology, Sweden.

Chelladurai, P., Scott, F. L., & Haywood–Farmar, J. (1987). Dimensions of fitness service: Development of a model. *Journal of Sport Management, 1*(2), 159–172.

Department of Business Development, Ministry of Commerce of Thailand. (2019). *Fitness Business.* Retrieved June 14, 2020, from https://www.dbd.go.th/download /document_file/Statisic/2562/T26/T26_201905.pdf

Durongdumrongchai, T., Nitiwattana, C., & Thongchum, M. (2019). Service Quality Influencing on Loyalty in Context of Fitness Center: A Conceptual Model and Propositions. *Journal of Humanities and Social Sciences Thonburi University, 13*(3), 108–119.

Hair, J. R., Black, W. C., Babin, B. J, & Anderson, R. E. (2010). *Multivariate Data Analysis: A Global Perspective* (7th ed.). New Jersey: Person Education, Upper Saddle River.

Heckman, E. (2016). *Correlation: What It Shows You (and What It Doesn't).* Retrieved August 8, 2020, from https://blog.minitab.com/blog/starting-out-with-statistical-software/ correlation-what-it-shows-you-and-what-it-doesnt

Hornby, A. S., & Wehmeier, S. (2003). *Oxford Advanced Learner's Dictionary of Current English* (6th ed.). New York: Oxford University Press.

Huot, L., & Thanabordeekij, P. (2019). Exploring the Relationship of Service Quality, Customer Satisfaction and Customer Loyalty: In the case Study of Fitness Center in Cambodia. *Journal of Management Sciences, 6*(2), 267–282.

International Health, Racquet and Sportsclub Association (IHRSA). (2007). *The IHRSA Global Report on the State of the Health club Industry.* Boston, MA: IHRSA.

Kasikorn Bank. (2020). *Exercise hits to wake up healthy business trends.* Retrieved October 27, 2020, from https://kasikornbank.com/th/business/sme/KSMEKnowledge/article/ KSMEAnalysis/Pages/Fitness_BT.aspx

Kenton, W. (2020). *Brand.* Retrieved March 27, 2020, from https://www.investopedia.com/ terms/b/brand.asp

León-Quismondo, J., et al. (2020). Service Perceptions in Fitness Centers: IPA Approach by Gender and Age. *Int. J. Environ. Res. Public Health, 17*(8), 2844. https://doi.org/10.3390/ ijerph17082844

Mion, E. G. (2017). *Fitness Centers.* Retrieved March 22, 2020, from https://www.wbdg.org /building-types/community-services/fitness-centers

Papadimitriou, D. A., & Karteliotis, K. (2000). The service quality expectations in private sport and fitness centers: A re-examination of the factor structure. *Sport Marketing Quarterly, 9*(3), 158–164.

Phungbangkruay, J. (2007). *Research report: Service Mix Affecting The Usage Decision of Fitness Center in Bangkok.* Faculty of Business Administration, Sripatum University, Bangkhaen Campus.

Senakham, T. (2008). *Customer's expectations of service quality in Thai University fitness centers in Bangkok metropolitan area, Kingdom of Thailand.* Doctor of Sports Management, The United States Sports Academy. Retrieved November 1, 2020, from https://search.proquest.com/openview/f93313bf9cb071c474932126b605e146/1?pq-origsite=gscholar&cbl=18750&diss=y

The Standard Team. (2018). *Thai's tend to be more health conscious.* Retrieved November 1, 2020, from https://thestandard.co/aia-sharing-a-life-charity/

www.sendpulse.com. (2020). *What is Customer Loyalty: Definition and Guide.* Retrieved December 20, 2020, from https://sendpulse.com/support/glossary/customer-loyalty

Yamane, T. (1973). *Statistics: an introductory analysis.* New York: Harper International.

Zeithaml, V. A. (1988). Consumer Perception on Price, Quality, and Value: A Means-End Model and Synthesis of Evidence. *Journal of marketing, 52*(2), 2–22.

Zeithaml, V. A., Bitner, M. J., & Gremler, D. (2017). *Service Marketing: Integrating Customer Focus Across the Firm* (7th ed.). New York. McGraw-Hill International.