# A Mixed Method Study of Factors Impacted Upon Customer Dissatisfaction, A Case Study of Fitness Center in Bangkok, Thailand

Chittipa Ngamkroeckjoti[1] Sirivimol Chompoothawat [2]

## Abstract

Nowadays, new trend of exercise in Bangkok creates the expansion of the fitness club around the city. Variety type of demand are required to be served them right. Thus, service quality is an important factor that reflects customer's (dis)satisfaction to their performance. This study focuses on the negative factors that make customer dissatisfaction towards the usage of fitness center. The objective of the research was to identify the service quality dimensions that the members use to evaluate the fitness, to analyze the major factor that leads dissatisfaction to the members, and find the relationship by using correlation between service quality dimensions of tangibility and reliabilities and customer dissatisfaction variable. This study used mixed methodology through an embedded design. The study also uses descriptive research, which derived from a sample size of 387 members of fitness's customers as respondents. Thus, collecting data by using convenience sampling. The finding shows that members dissatisfy on exercise equipment and facilities are moderately strong positive relationship in the fitness center. The company should have made extra research and development (R&D) in order to survey the frequently used class and time from majority of customers. Moreover, experienced personal trainer had added the great value in recommendations section.

**Keywords:** Customer's dissatisfaction, Service quality dimensions, Fitness Center

## Introduction

The fitness industry in Thailand is highly popular and trend to increase continually within urban society of Bangkok. Trend of exercise makes the opportunities for fitness club to expand this business. A fitness club is suitable for Thai's society because of the tropical weather and the space for exercise in Bangkok is limited. The new fitness trend is functional training which can reach people close to urban society that the time is limited (Panpeng, 2015). Today, the fitness industry model uses a small place and investment which 2 years ago health clubs in Bangkok had more than 50 fitness opened. It makes fitness industry boom and gain more benefit from memberships, personnel trainer fee and others. According to the fitness center in Bangkok, Thailand, the first largest operator and the one of the world's leading health and fitness companies who can survive until now in Thailand and opened 29 branches. Their historically fitness club opened in 1993, in the United Kingdom.

Moreover, the fitness industry grows sharply in Thailand, The fitness center expects 6.3 million check-in at its Thai clubs in 2015, up by 10.5% from last year, and 78,000 members, an increase of 4%. The revenue growth of 12% to 3.36 billion Baht would top the forecast of 10% growth for the overall industry (Suchiva, 2016). Due to this growth The Office of the Consumer Protection Board (OCPB) must come to control the fitness operators because the consumer still complaints about the fitness clubs' service which it unfair in service and contracts then the researcher want to find out the factor of SERVQUAL dimensions that make customer's dissatisfaction. This research want to study about relationships between customer's dissatisfactions and service quality dimensions of fitness center. Under the factors that are in service quality dimensions consist of five major categories; tangibles, reliability, responsiveness, assurance, and empathy of SERVQUAL's five dimensions Parasuraman, Berry and Zeithaml (1991) which this researcher use only two dimensions of the pilot test that the respondent has strongly negative attitude on tangibles and reliability. The dependent variable in this study, which is customer's dissatisfaction, it really interested in the company and everyone who want to create the fitness business. This study will show the negative factor or the service quality gap in the negative that comes from the real user of the fitness center.

## Literature Review

- *Service Quality Dimensions*

Fowdar (2007) mentioned that the service quality is the gap between expectation and perception that the companies should provide what it actually offers and bperceptions of

the service performance of the customer. The standard that the customer expected to get before the perceived service that the result of comparison between both which service performance is estimated (Parasuraman *et al.*, 1985; 1988). They also develop the ten service quality dimensions to SERVEQUAL's five dimensions from gap 5 can show the difference between perceptions and expectations of service business (Parasuraman *et al.*, 1991) as tangibles, reliability, responsiveness, assurance, empathy.

- *Reliability*

Liu (2013) stated that reliability is the ability to complete the promised service that give to customer dependably and make it accurate through the customer which is reliable service promises.

- Tangibility

Liu (2013) supported that tangibles are the physical facilities of service, for example, staff clothing, appearance, decoration, atmosphere, innovation, and equipment that are helping the service provider to reach the customer need of service. This study defines tangibility into three dimensions comprising equipments, facilities, and class trainers.

- *Equipments*

McKechnie *et al.* (2007) stated that equipments in the fitness or exercise equipment such as treadmills, stationary cycling machines, stair climbers, and equipment targeting the abdominals and hips such as abdominals Trimmer, abdominal Slim, and Hip Shaper, crunch benches, matt and other for a workout or use in exercise settings.

- *Facilities*

Brown *et al.* (2014) defined that the fitness facilities mean the physical environment that fitness center provided for member for more convenient within the fitness center included equipment for exercises; last, schedule fitness classes.

- *Class Trainers*

Wilkinson (2014) defined that class trainers or aerobics instructors is certified person who expert on training people and physical body by leading, train and motivate member in exercise activities.

- *Class/ Time Schedule*

Wilkinson (2014) stated that class and the time schedule is the group of fitness classes that the company set for member provide low to medium levels of cardiovascular activity designed to gradually and progressively increase exercise intensity through the bell curve.

- *Customer's dissatisfaction*

Cho and Song (2012) stated that customer's dissatisfaction is a judgment of customer to the product or service feature or itself, provides or providing an inconvenience level of consumption linked to the levels of dissatisfaction. The article also explained dissatisfaction as the filth of disappointment and bitterness on the customers' side, who has been received less than promised.

- *Pilot Study*

Payne (2014) stated that pilot study is a small set of research study conducted before launch a full-scale study. Pilot studies are usually performed before the actual research, but on a smaller scale.

**Research Framework**

The research developed the conceptual framework from two major models. The first was developed by Shahin and Janatyan (2011) whose study was focused on *service quality dimension to analyze the relationship of customer dissatisfaction related to those service quality gaps in Iran Travel Agency.* The second model was created by Yang *et al.* (2003) studied about *customer satisfaction and dissatisfaction of users in a scope of internet commerce, which carefully explore the service attributes that had both negative and positive contributions in the service industry.*
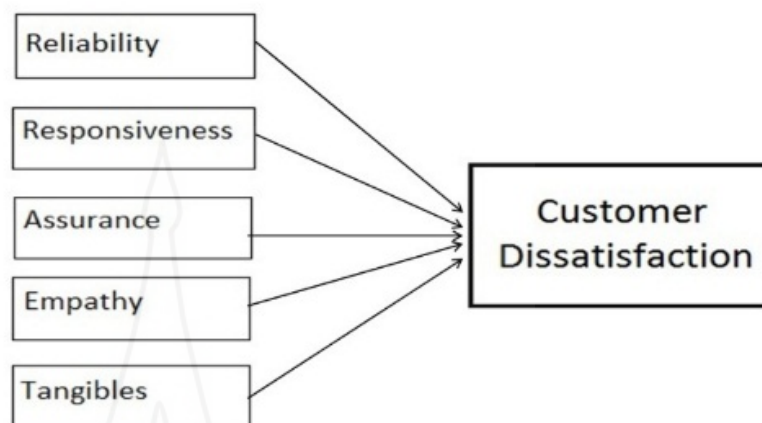
**Figure 1: The research model**

**Source:** Shahin and Janatyan (2011), p. 107.

   Shahin and Janatyan (2011) studied about service quality dimension to analyze the relationship of customer dissatisfaction related to those service quality gaps in Iran Travel Agency. The aim of this article to find out the correlation of SERVQUAL model (perception and expectation). The result shows that the maximum gap between expectations and perceptions of customer is 2.93 which related to tangibles, sub-dimension as "appealing accommodation facilities" and the minimum gaps are "on time service and reputation of service". There is no correlation among the gaps and the importance factor of this study is tangibles for reducing the customer dissatisfaction.
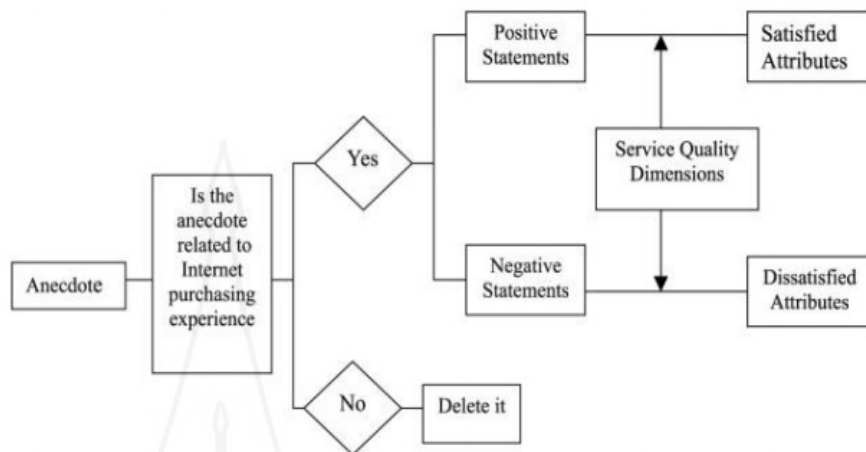
**Figure2: The research model of Service quality dimensions**

**Source:** Yang *et al.* (2003), p. 690

      Yang *et al.* (2003) studied about customer satisfaction and dissatisfaction of users in a scope of internet commerce, which carefully explore the service attributes that had both negative and positive contributions in the service industry. This study was qualitative research with average numbered anecdote length about 65 words and used Ethonograph 5.0 software for decoded that data. The study got 85.4 percent for satisfying stories and 87.5 percent for dissatisfying anecdotes. The result of this research was the most factor that consumer satisfied in responsiveness at 30.7 per cent of all services on internet retailing. The most factor of customer dissatisfied was the responsiveness of their service at 29.4 per cent.
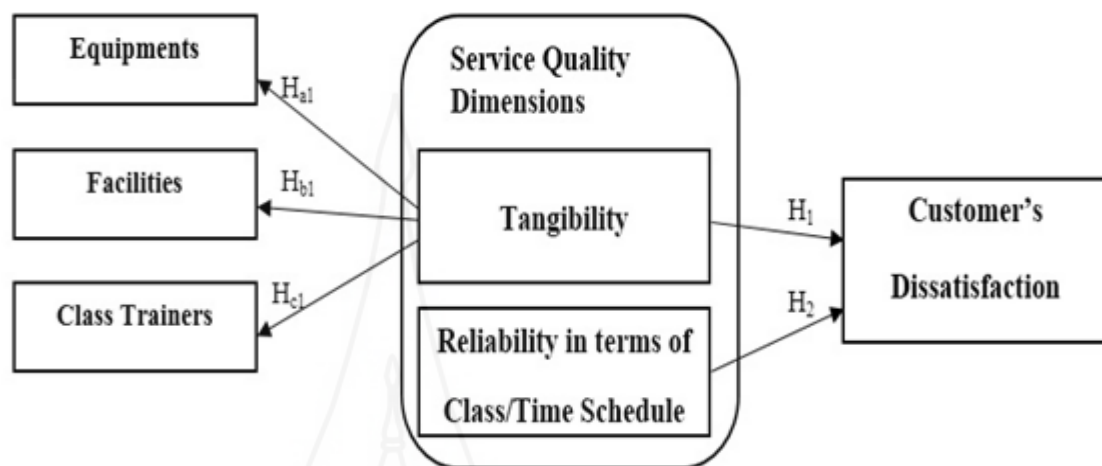
**Figure 3: The Conceptual Framework**

**The hypotheses for this study are:**

$H_1$: The relationships between tangibility is statistical significant with customer's dissatisfaction.

$H_{a1}$: The relationships between tangibility in terms of equipments is statistical significant with customer's dissatisfaction.

$H_{b1}$: The relationships between tangibility in terms of facilities is statistical significant with customer's dissatisfaction.

$H_{c1}$: The relationships between tangibility in terms of class trainers is statistical significant with customer's dissatisfaction.

$H_2$: The relationships between reliability in terms of class/time schedule is statistical significant with customer's dissatisfaction.

**Methodology**

This study use Mixed Methodology and Emdebbed Research Design to support this study, it is a combination of qualitative and quantitative research method by choosing Exploratory Sequential Design to identify the scope of the research topic and a transformation of the resulting problems in to define ones (Zikmund, 2003). The exploratory sequential approach can divide into two stages; start with collecting the qualitative information and exploring the views of respondents by doing a pilot study to collect data, then analyze and transform to build on the next following stage with the quantitative data collection or instrument that suitable for each study such as questionnaire (Creswell, 2014).
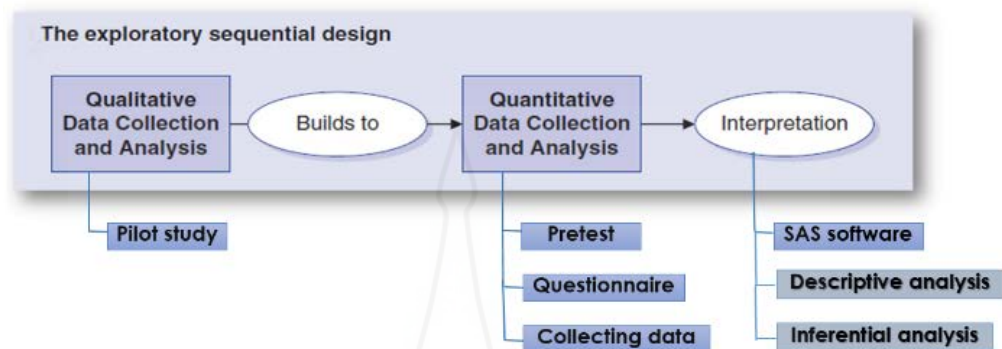
**Figure 4: The exploratory sequential design method of Mixed Methods Research Designs**

**Source:** Creswell, J. W. (2003), p. 213. Research Design (4 ed.).

Then, the data was translated and interpreted from survey by SAS software license number 12400609, which the descriptive and inferential statistic techniques in order to analyze the data by using frequency, percentage, mean, standard deviation and Pearson Correlation coefficient define the result.

- *Target population*

The target population is people in Thailand who are members of fitness center more than one year within Bangkok branches. The target of sample size is 400 participants which completed only 387 and other left were invalid.

- *Sampling procedures*

These studies applied to use with non – probability technique which described as a person who's the parts of the population, but the researcher don't know who is the actual population but selected on personal judgment (Zikmund, 2003).

*Stage 1*: the researcher conducted this study which used a pilot test to see the factor that makes customer dissatisfaction through the service and created pretest questions to test the reliability of the questionnaire. The researcher, distributed 30 sets of questionnaire to member of fitness center who used the fitness with many branches which are The Mall Bangkapi, The Prommanade, Mega Bangna and other branches in Bangkok, Thailand.

*Stage 2*: The researcher utilized the sampling procedure was the way to manage the research instrument. The researcher used the convenience sampling technique is a type of non-probability sampling by collecting data and launched an online questionnaire through the web

board of that fitness center and then got 387 completed questionnaires were collected from the member of the fitness center in Bangkok branches.

- *Measurement and instruments*

This study use Six-points likert scale (Gwinner, 2016), 3 parts with 37 questions can posited of 1 screening question, 7 demographic questions, 29 independent and dependent questions.

- *Reliability Test*

This study corrected and improved the questionnaire for more accurate result which met the standards of each variable greater than 0.6 (Vanichabancha. 2014).

The study tested 30 respondents who being a member in the fitness center or experience exercised in the fitness more than one year in order to test the reliability of the questionnaire with SAS programming. The questionnaire was adapted and adjusted to make sure that respondent are truly understand the questionnaire. All variables had alpha result more than 0.71 which can be preceded by an author.

**Results and Discussion**

The data transformed to translate and interpreted by SAS software license number 12400609 for testing the descriptive and inferential statistic techniques in order to analyze the data by using frequency, percentage, mean, standard deviation and Pearson Correlation coefficient define the result.

**Results**

- *Descriptive Analysis*

The analysis of branches which respondents, frequency used the fitness shows the highest percentages were found in The Mall Bangkapi branch with the result of 35.14 percent or 136 respondents. Then 26.36 percent or 102 members frequency uses at the Mega Bangna branch, following by Other branches which consist of Central Plaza Chaengwattana, Central Plaza Pinklao, Seacon Square, The Mall Bangkhae, and The Mall Thapra at 19.38% percent or 75 respondents and the lowest have 19.12 percent or 74 respondents at The Promenade branch.

Gender start with the highest percentages in female at 73.90 percent or 286 respondents and male have 26.10 percent or 101 respondents

From 387 respondents, The most highest age range are 26-35 years old at 54.52 percent or 211 respondents, following by 36-45 years old has 26.10 percent or 101 respondents.

Then, that range of less than 25 years old has 13.70 percent or 53 respondents. The lowest came from aged between 46 or above years old were 5.68 percent or 22 respondents.

The result of education level with the highest one were on bachelor's degree level by 70.80 percent or 274 respondents, 25.58 percent or 99 respondents were master degree or above, and the 3.62 percent or 14 respondents were the lowest in under bachelor's degree.

The highest occupation were corporate employee as 45.22 percent or 175 respondents, then 20.41 percent or 79 respondents on self-employed, followed by business owners at 14.73 percent or 57 respondents, the student has 12.14 percent or 47 respondents. Then, those who did as the government officer was 3.88 percent or 15 respondents, next merchant were 2.07 percent or 8 respondents and retired were none. The other occupation was the lowest percentage at 1.55 percent or 6 respondents from the total of 387 respectively.

The highest percentage was shown in 15,000-30,000 income range per month of 35.66 percent or 138 respondents, following with 30,001-45,000 Baht per month at 28.94 percent or 112 respondents continue with 28.42 percent or 110 respondents at 45,000 or above income per month. The lowest income range was less than 15,000 Baht and at 6.98 percent or 27 respondents.

The analysis of reason to join the fitness center shows that the respondent almost chooses healthy as the main reason at 43.67 percent or 169 respondents. The next reason that member always chooses is losing weight at 24.03 percent or 93 respondents following with building muscle at 17.57 percent or 68 respondents and the last reason that a few members choose where firm body at 14.73 percent or 57 respondents with other reason not mentioned.

**Table 2: The summary of demographic characteristics**

| Variables | Frequency(ƒ) | Percentage (%) |
|---|---|---|
| **Branch** | | |
| TheMall Bangkapi | 136 | 35.14 |
| Mega Bangna | 102 | 26.36 |
| The Promenade | 74 | 19.12 |
| Others | 75 | 19.38 |
| **Sex** | | |
| Male | 101 | 26.10 |
| Female | 286 | 73.90 |

| | | |
|---|---|---|
| **Age** | | |
| Less than 25 years old | 53 | 13.70 |
| 26-35 years old | 211 | 54.52 |
| 36-45 years old | 101 | 26.10 |
| 46 or above years old | 22 | 5.68 |
| **Education** | | |
| Under Bachelor's degree | 14 | 3.62 |
| Bachelor's degree | 274 | 70.80 |
| Master degree or above | 99 | 25.58 |
| **Occupation** | | |
| Government officer | 15 | 3.88 |
| Business owners | 57 | 14.73 |
| Corporate employee | 175 | 45.22 |
| Merchant | 8 | 2.07 |
| Self-employed | 79 | 20.41 |
| Student | 47 | 12.14 |
| Retired | - | - |
| Other | 6 | 1.55 |
| **Income** | | |
| Less than 15,000 | 27 | 6.98 |
| 15,000 - 30,000 | 138 | 35.66 |
| 30,001 - 45,000 | 112 | 28.94 |
| 45,001 or above | 110 | 28.42 |
| **Reason** | | |
| Lose weight | 93 | 24.03 |
| Firm body | 57 | 14.73 |
| Healthy | 169 | 43.67 |
| Build muscle | 68 | 17.57 |
| Others | - | - |
| **Total** | **387** | **100** |

- *Inferential Analysis*

The inferential analysis is a statistical testing for hypothesis statement setting of the study. The result of each hypothesis testing will be signing at the 0.05 level. This part used

Pearson Correlation coefficient to test the relationship (*r*) between five hypotheses of fitness centers. Therefore, each hypothesis result can analyze in the following table.

Table 3: Hypothesis testing

| Hypothesis | p- value | Correlation (r) | Level of Correlation | Results |
|---|---|---|---|---|
| $H_1$: The relationship between tangibility statistical significant with customer's dissatisfaction. | .0001 | .630 | Strong Positive Relationship | Rejected |
| $H_{a1}$: The relationship between tangibility in terms of equipments statistical significant with customer's dissatisfaction. | .0001 | .290 | Weak Positive Relationship | Rejected |
| $H_{b1}$: The relationship between tangibility in terms of facilities statistical significant with customer's dissatisfaction. | .0001 | .555 | Moderate Strong Positive Relationship | Rejected |
| $H_{c1}$: The relationship between tangibility in terms of class trainers statistical significant with customer's dissatisfaction. | .0001 | .743 | Strong Positive Relationship | Rejected |
| $H_2$: The relationship between reliability in terms of class/time schedule statistical significant with customer's dissatisfaction. | .0001 | .629 | Strong Positive Relationship | Rejected |

Table 3 presents all the result of the Pearson Correlation analysis showed that the significance level is equal.0001 which is less than.05 (. 0001< 0.05) significant levels. It means that the null hypothesis ($H_o$) is rejected.

For the first hypothesis, which is test the relationships between tangibility statistical significant with customer's dissatisfaction. The result shows correlation is equal 0.630, which means that there is a strong positive relationship between tangibility and customer's dissatisfaction. The second hypothesis tested the relationships between tangibility in terms of equipments statistical significant with customer's dissatisfaction. The result of correlation is equal 0.290, which means that there is the weak positive relationship between tangibility in terms of equipments and customer's dissatisfaction. The third hypothesis tested the relationships between tangibility in terms of facilities statistical significant with customer's dissatisfaction. The result shows correlation which equal to 0.555, which means that there is a moderately strong positive relationship between tangibility in terms of facilities and customer's dissatisfaction. The forth hypothesis which tested the relationships between tangibility in terms of class trainers statistical significant with customer's dissatisfaction. The result shows correlation which equal 0.743, which means that there is a strong positive relationship between tangibility in terms of class trainers and customer's dissatisfaction. The last hypothesis found the relationships between reliability in terms of class/time schedule statistical significant with customer's dissatisfaction. The result of correlation is equal 0.629, which means that there is a strong positive relationship between reliabilities in terms of class/time schedule and customer's dissatisfaction.

**Conclusions and Discussion**

The five the major factors result of five hypotheses. According to this research, service quality dimensions that the researcher of this study found that it has high effect to customer's dissatisfaction towards fitness center in tangibility in terms of exercise equipments and facilities. At lease, reliability in SERVEQUAL model also effect or influence on customer's dissatisfaction.

Among the five key factors, tangibility, tangibility in terms of class trainers and reliability in terms of class/time schedule have a strong relationship with customer's dissatisfaction towards service quality of fitness center in Bangkok. While tangibility in terms of facilities has a moderate strong positive relationship and tangibility in terms of equipments has a weak positive relationship. Tangibility and reliability in the fitness consist of many physical things such as exercise equipments, facilities, even staff or class trainer and class/time schedule also can affect customer positive and negative attitude of the company. Meanwhile, the fitness center should

improve their service by following this research.  The facilities in service quality dimension create the customer's dissatisfaction to the company (Shahin and Janatyan, 2011).

**Recommendations**

The research indicated that almost member disagree with the overall customer's dissatisfaction of service qualities in this fitness center, which means that they can accept the service quality that they perceived, it's still in a range of satisfaction level when compared with overall factors. However, the researcher suggests by following each variable.

The fitness  should improve on hygiene of exercise equipments by hire more staff to take care of each area in the fitness  and cleaning during the off peak period . The fitness should improve and fix the exercise equipment's function, such as ear plug for listening while running and electronics calculating system on the machine by coordinate with exercise equipment's company or be a partner to update all function and new technology every six months, set up the team or trainer in the fitness to check the equipment performance every day because it about member safety.

The fitness should adjust the layout of lounge area and activities room more bigger by check the amount of customer which increase every year then arrange the size and expand the activities room, even set up the queue system for a person who want to join the class which not too tightly to the room. The provider should give a day free parking in department store only for their member by coordinate with exercise equipment's company or be a partner to update all function and new technology every six months, set up the team or trainer in the fitness  to check the equipment performance every day because it about member safety.

The fitness should strictly train and set the course for training the class trainer to be an expert then transfer the knowledge to member with the minimum mistake by set up the course for training the class trainer in official or send them to train aboard then come back to share and teach member as world standard and provide screen monitor to guild the class trainer or leader in each activities on the stage to avoid mistake.  In addition to follow-up interview sessions. Mr. Wiwakewon[3] had suggested pre-exercise condition of customers prior to attending personal trainer (PT) or classes.  They are degree of stressfulness (*from factors, such as traffic jam, quarrel with friends, colleagues or family members, sleeplessness, degrees of muscle spasm, urgent*

---

[3] In 2016, Mr. Surasit Wiwakewon has four consecutive years of experiences in personal trainer (PT) and classes like body combat, Bicycle, and Body Pump.  He is currently working as personal trainer and handle variety of classes at the fitness center in Sukhumvit 39 area.

*business right after training session, come late prior to training, weak in thinking scale, chronic pain, and menstruation*), degree of brain function, attitude of thinking (*from factors, such as boring, feeling of doing other things more than exercise, having the dislike person in the same area, autism, losing in mindful thinking, and broken heart*), and degree of happiness. Moreover, Mr. Wiwakewon and Mr. Rungruang[4] had also communally designed criteria to assess his customers' capability for medium-to-long terms (more than or equal to two packages of 50 hours) personal training session. They classified them into muscle, flexibility, act, and core abdominal with ten scales measurement.

The fitness should change or add various types of class and activities to support their member in a suitable time by analyze by the statistic or make a survey to know which class and time that member frequency used then analyze and adjust a suitable activities to meet their needs.

The providers should improve their overall service on staff and physical evidence by building a team for R&D to find out and create the standard course for service for in-house used. Issue the regulation to control all staff and trainer to pass the cause before work.


**Further Studies**

Future researches can focus on other factors of service quality which may affect customer's dissatisfaction to the fitness center. This research can support the next study will be explored as why some people never use or dissatisfy through the fitness's services.

---

[4] In 2016, Mr. Somyot Rungruang has fourteen consecutive years of experiences in personal trainer (PT) and variety of classes. He is currently working as a manager at the $O_2$ fitness at All Seasons Place branch.

**References**

Creswell, J.W. (2003), Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. Sage Publications. ISBN 0767924426, 9780761924425**.**

Parasuraman, A., Berry, L. L., & Zeithaml, V. A. (1991). Perceived Service Quality as a Customer-Based Performance Measure: An Empirical Examination of Organizational Barriers Using an Extended Service Quality Model. *Human Resource Management,* 3(30).

Shahin, A., & Janatyan, N. (2011). Estimation of Customer Dissatisfaction Based on Service Quality Gaps by Correlation and Regression Analysis in a Travel Agency. *International Journal of Business and Management,* 3(6), 99-108.

Suthirungkul, N. (2003). The Study of Customer Expectations and Perceptopns of Service Quality of the Clark Hatch Fitness Center at Silom Road Branch, Bangkok. *Exercise for Human Life.*

Vanichbancha, K. (2014). Sample size of non-probability sampling. *How to use SPSS for windows to analyze the data,* (14).

Zikmund, G. W. (2003). Business research methods (7). Ohio:Thomson South-West.

**Internet: Website**

Chom. (2014). " Fitness First" Invests 225 million Baht to Launch Digital Platform to Meet Online Trends, Aiming to Attract 6.3 Million Check-ins a Year. Retrieved March 22, 2016 from websites http://www.thaipr.net/general/679181

Fernquest, J. (2011). Fitness Sales practices now regulated. Retrieved February 11, 2016, from Bangkok Post websites:http://www.bangkokpost.com/learning/learning-from-news/250474/fitness-sales-practices-now-regulated

Fitness First Decided but not interested in competitors. Retrieved March 22, 2016, from websites: http://www.Manager.co.th/iBizChannel/ViewNews.aspx?NewsID=9550000064524