



# Exploring the Service Quality Factors of Spa Business in Pattaya, Thailand

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## Abstract

Spa and wellness sector earns a significant income comparing to other tourism-related businesses. A spa business is considered a popular activity in Pattaya city, one of the most popular destinations in Thailand and ASEAN, for both domestic and international travelers. This study aimed to discover the important service quality factors shaping the spa-goers' satisfactions, while senior spa-goers and non-senior spa-goers were explored and compared. The adopted SERVQUAL concept includes with five dimensions, namely, tangibility, reliability, responsiveness, assurance, and empathy. The current study employs a mixed methodology. The qualitative study was conducted by using the netnography approach with opinion mining technique to analyze the online review, develop the word cloud, and identify the key themes of spa service quality in stage 1. The findings from stage 1 are utilized as the recommendation for the questionnaire development in stage 2. In stage 2, the quantitative analysis was employed to examine the experienced Pattaya spa-goers' satisfaction toward thier spa experiences by using Confirmatory Factor Analysis (CFA) and ANOVA analysis to compare the findings between senior spa-goers and non-senior spa-goers. The findings reveal that there are some significant differences between two groups, which contributes to both theoretical and practical implications. The limitations are the particular setting of focus destination and samples, while future research should overcome those issues.

**Keywords:** Service quality, Spa, Senior spa-goers, Non-senior spa-goers

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## Introduction

ASEAN region has become the world's popular destination for travelers around the world particularly in the last decade, which inspires the creative innovations and tourism activities among service providers in the region. However, the world tourism industry has collapsed due to the world pandemic crisis of Coronavirus Disease (COVID-19) since in late 2019. It affects tremendous economic downturns; vital loss of employments in the tourism and hospitality sectors; and the inevitable severe situation in spending on public health which is hardly to cope with by the high number of infectious cases. The herd-immunity is expecting to be established after at least 70 percent of all citizens are vaccinated (World Health Organization, 2020) and travel restrictions should be able to relax and tourists are expected to return gradually. In Thailand, the tourism and hospitality industry are looking forward to welcoming visitors from both domestic and international markets under the declaration of the government's regulations of the Amazing Thailand Safety & Health Administration (SHA) by the Ministry of Tourism and Sports (MoTs) and the Ministry of Public Health (MoPH) in 2021 (MGR Online, 2021). Such regulations should be strictly followed by tourism business-related operators in order to open up for travelers as a new standard for all tourism-related activities and services in Thailand.

In the last decade, more and more world citizens have become health-conscious, who mainly concerned about health and mind well-being, besides the new normal behaviors resulted from the pandemic crisis. Spa is considered as one of the popular tourism activities, which is considered as wellness tourism. Initially, spa refers to physical and mental therapy using water, with, in some cases, herbs, ingredients, or massage techniques. Global Wellness Institute (2018) stated that spa is a subset of 'wellness', which is the activities relating to the choices and lifestyles that aims to improve the individual's holistic health, mind, body, and soul well-being. Spa business can be categorized as follows: day-spa, destination spa, resort/hotel spa, medical spa, mineral spring spa, club spa, cruise spa, and cosmetic spa (International Spa Association, 2020). Statistics of the global wellness industry shown that the overall wellness tourism earned US\$639 billion in 2017, while the spa market is accounted for US\$119 billion, which has increased 6% annually at the in 2015-2017 (Global Wellness Institute, 2018).

In Thailand, the growth rate of spa industry is 8% and accounted for \$1.32 billion, which is ranked the 16<sup>th</sup> of the world and among the 5<sup>th</sup> of Asia-Pacific continent, following China, Japan, India, and South Korea (Global Wellness Institute, 2018). According to the Health Establishment Act 2016 by MoPH, 3,003 registered businesses and approximately 70,000 employments in the spa market (Pakdee, Aswin, & Siridech, 2020, pp. 1149). About 90% of revenues were generated by international tourists, which East Asia tourists from China, Hong Kong, Taiwan, Japan and South Korea, and tourists from western countries are the main target group for Thailand's wellness tourism sector (Pakdee, Aswin, & Siridech, 2020, pp. 1149). In

addition, the segment of spa business in Thailand is mainly including spa and massages (23%), medical services (75%), whereas its market can be classified into four target groups as (i.) international tourist arrivals particularly Chinese, Taiwanese, and Korean visitors (ii.) aging people (iii.) job-stressed new generations and (iv.) potential or high-purchasing power customer (Marketeer, 2020).

The spa-goers' behaviors are vary depending on their lifestyles and demographics. As one of the spa target groups, the aging people are 55 and above, the baby boomers who were born in 1946 to 1964 are the largest group. While the job-stressed new generations group can include Generation X members who were born in 1965 to 1979 and Generation Y who were born in 1980 to 1994 (Berkup, 2014, pp. 219). According to the spa usage of different generations, baby boomers, Generation X and Generation Y are recent significant purchasing power groups (Mondok, 2019, p. 23-24). Moreover, Gen X and Gen Y become the core wellness tourism demographics who seek for outdoor adventure, environmentally friendly properties, voluntourism programs, and fitness/yoga classes and facilities (Global Wellness Institute, 2018). This group is also the strongest spending power for spa treatments, retails and gift cards, while baby boomers still prefer the most is traditional spa resorts in choosing spa services (Donaldson, & Carter, 2021). Therefore, three generations of spa-goers which include baby boomers and Gen X and Gen Y will be focused on this research.

As spa is a 'high-touch' service that encounters directly with the customers who have expectations to receive the delightful experiences and good value for money they spent. Also, customers have different preferences and expectations of service. The customers who have potential to spend on spa products and services, which included baby boomers, Gen X, and Gen Y should regularly be investigated in order to understand their preferences, needs, wants, expectations, and satisfaction levels. Thus, in addition to the investigation, recommendations and reviews from experienced spa-users can help spa businesses to improve their service quality. However, customers' perspectives of service quality and eWOM in spa business are limited in hospitality and tourism, and Thais rarely have been studied as sample group. Particularly, in the Pattaya city context as located in a strategic location and well-known as the world destination in a scheme of Creative Spa and Wellness Thailand 2019. This can support the competitive advantages of the location and competitiveness of spa entrepreneurs toward local income generation and employment (Pattaya Municipality, 2019). Therefore, this study aims to examine the eWOM and service quality dimensions, specifically from previous spa-goers in Pattaya, Thailand, as the case study.

## Research Objective

1. To explore the eWOM from experienced spa-goers in Pattaya, Thailand.
2. To examine the service quality from experienced spa-goers in Pattaya, Thailand.
3. To compare the satisfaction of service quality between senior spa-goers and non-senior spa-goers in Pattaya, Thailand.

## Scope of the Research

This study is designed to understand the factors of service quality of experienced spa-goers among generations in Pattaya by employing a mixed-methodology. The qualitative study was used to analyze eWOM from experienced spa-goers in Pattaya by applying a text mining technique. The quantitative approach was employed to collect the survey from the experienced spa-goers' satisfaction in Pattaya. 400 samples with a range of ages between 25-75 years have been determined as total sample size. The data was distributed to Thai spa-goers in Pattaya during 1 April to the end of July 2021.

## Conceptual Framework

According to previous studies, the current research borrows the fundamental framework of SERVQUAL introduced by Parasuraman, Zeithaml, & Berry (1988, pp. 39). The questions guidelines suggested by Parasuraman, Zeithaml, & Berry (1998, pp. 457), consisting of five factors of SERVQUAL (reliability, assurance, empathy, tangibles, and responsiveness) were borrowed to investigate the service quality of spas in Pattaya context. The spa-goers were classified into two groups, including senior and non-senior spa-goers, to compare the satisfaction levels among diverse groups (see Figure 1). The research questions of this study are 1) What are the experiences of Thai spa-goers towards the service quality of spas in Pattaya, Thailand? and 2) What are the different satisfaction levels toward the service quality of spas in Pattaya, Thailand, between senior and non-senior spa-goers?

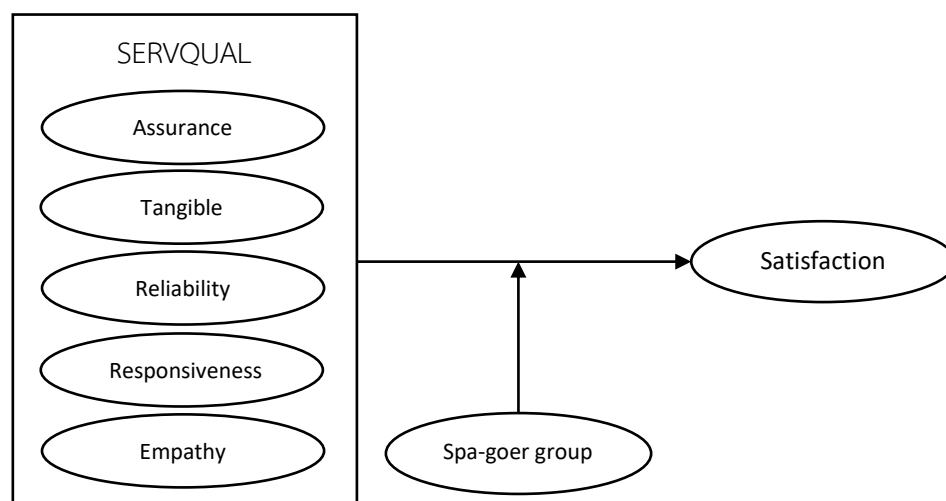


Figure 1: Conceptual Framework

## Literature Review

### Service Quality

The service quality structures have been developed and revisited by many scholars (Garvin, 1988; Gronroos, 1988; Parasuraman, Zeithaml, & Berry, 1988; Lehtinen, & Lehtinen, 1991; Dabholkar, Thorpe, & Rentz, 1996). According to this, its conceptualized by Parasuraman, Zeithaml, & Berry (1994, pp. 207), as a different perspective in order to define the gaps between expected service by performance and customer's monitoring and evaluation of perceived service that came from the service provider (Shahin, Mahdavi, & Shahmohammadi, 2017, p. 97). Also, the service quality modelling is aimed for examining the level of customer's satisfaction either or dissatisfaction (Boon-Itt, & Rompho, 2012, p.56), where comprises of five dimensions: (1) physical evidence and appearance (Tangible); (2) accurately performance with standardization (Reliability); (3) fast response and willingness of escorting incident (Responsiveness); (4) competency-based accountability in any conditions of standard operating procedures; SOP (Assurance); and (5) understanding how to identify towards defining the customer behaviors to take corrective active with flexible solutions (Empathy).

According to the scaling to measure service quality in different ways, there are lots of tourism and hospitality scholars to do so. Minh, Ha, Anh, & Matsui (2015, pp.90) investigated the service quality performance of the hotel from customer's perception via SERVPERF scales, where Salazar, Costa, & Rita (2010, pp.1) studied its evaluation scaling on consumer behavior in the associated firms. DINESERV was modified by Marković, Raspor, & Šegarić (2010, pp.125) for measurement of the customers' expectations and perspectives in 32 restaurants in the Opatija Riviera (Croatia). Furthermore, destination service quality scales especially in Dubai which included local transport, accommodation, cleanliness, hospitality, different activities, airport, language communication services are determined the re-visit of the visitor by intention and satisfaction (Abdulla, Khalifa, Abuelhassan, & Ghosh, 2019, pp. 307).

In terms of the studies in the spa business, Giritlioglu, Jones, & Avcikurt (2014, pp. 191) analyzed six service quality dimensions: assurance and employee knowledge, healthy and attractive food, empathy, tangibles, responsiveness of service delivery and reliability of food and beverage provision in spa hotels in Turkey. Vryoni, Bakirtzoglou, & Ioannou (2017, pp. 12) supported those five dimensions and twenty-two items of service quality, willingness to help the customer (responsiveness), management support in problem solving situations (assurance), food and beverages (tangibles), feel secure from danger (assurance), employees' commitment to the comfort of their customers (empathy) and honest and empathic treatment of customers (empathy) had significant influence customers' satisfaction in a spa center in Greece. Also, five factors of SERVQUAL (reliability, assurance, empathy, tangibles and responsiveness) were investigated the spa visitor's satisfaction in the medicinal lake of Hévíz and the Pool Bath in Hungary (Lőke, Kovács & Bacsí, 2018, pp. 124). Similarly, Sangpikul (2019, pp. 538) employed five dimensions of service quality to analyze the content of online customers complaints at

day-spas in Thailand to understand their perceptions of the spa service. Thus, it is important to make certain that to know how to get along with customer expectations and perceptions could be adopted the service quality, in accordance with this, service providers can use a matter of this to evaluate their providing services among the customers/clienteles in a various aspect to end up with guests' satisfaction. Based on the aforementioned studies of service quality, this study classifies service quality factors into five dimensions, including tangibility, reliability, responsiveness, assurance, and empathy.

### **Spa Services among different Generations**

Following the using spa among the different groups of aged-differs. The baby boomers, Generation X and Generation Y were defined as “affordable spa-goers.” Baby boomers are between the ages of 55 and above, known as “senior spa-goers”, entering the official retirement age. They have disposable income, lots of time and use spas and wellness centers to help them maintain or improve their well-being (Rach, 2022). Thiersch (2020) explained that baby boomers are supposed to use spas for healing and stress therapy. Moreover, Generation X and Y have the strongest spending power and were defined as non-senior spa-goers. Generation X performed their spending of money and time for a medical spa, whereas the marketer preferred Generation Y as the potential customers. Social media seems to impact the later generation on receiving service of spa uses (Tang, Grace, Tan, & Leung, 2018, pp. 2167). Encountering unprofessional spa service, Gen Y customers will share information right away with followers. Also, Mondok (2019, pp. 23) mentioned that Millennium tourists are wellness-conscious and seek customized experiences in spa hotels and resorts. They prefer health and wellness services through healthy eating, indoor and outdoor physical activities. On the other side, the young American customers were interested in new experiences in hair, face and hand treatments and cosmetic medical spas (Johnson, & Redman, 2018). Patkowska, Pytel, Oleśniewicz, & Widawski (2017, pp. 280) claimed that senior spa-goers in Poland are an internally diverse group, as a result of health status and financial conditions. Hence, the quality of life is related to their behaviors in using spa activities and destinations. Cheung (2012, pp.139) suggests that older customers, such as baby boomers and Gen X, are more experienced and knowledgeable in products and service consumption and become more sensitive to the quality of service than younger customers. Viljoen, Kruger, & Saayman (2018, pp. 23) argued that distinguishing generational groups have different needs and preferences based on characteristics and travel behavior. Therefore, customers' perceived experience in various distinct target segments is advantageous in better understanding the nature of the market and improving appropriate service.

## User-Generated Content

As stated by Chua & Banerjee (2013, pp. 453), the UGC in online platforms, especially the experience sharing in social media platforms, have become the crucial tools for communication, and decision-making support, which also known as the electronic word-of-mouth (EWOM) The user-generated content (UGC) can be found in several forms, including microblogging, GPS or location-awareness services, social media, and forums, which sharing of content and creation of the several platforms can be developed by the user. In general, consumers, as well as tourists, are more likely to trust experience sharing from peers than advertisements from the product and service providers. The UGC in online platforms, especially the experience sharing in social media platforms, have become the crucial tools for communication, and decision-making support, which also known as the electronic word-of-mouth (EWOM) (Schroeder, & Pennington-Gray, 2015, pp. 592). In tourism sector, several studies investigate travelers' opinions, while some scholars called this type of study as social knowledge management (Xiang, Du, Ma, & Fan, 2017, pp. 55). The most popular social media platform for travelers is Tripadvisor.com since they have the largest number of users and reviews compared to other similar platforms. In order to understand the customers' satisfaction from these sharing data, the companies should pay attention to the sharing messages to effectively manage this marketing communication tool as well as maintain and improve the competitiveness of their products and services (Mariani, Mura, & Felice, 2018). For instance, Ju, Back, Choi & Lee (2019, pp. 4) employed sentimental and content analysis techniques to extract online review data and analyze key factors relating to the service quality and customer experience among Airbnb guests. Therefore, the current study intended to investigate the online review of spas in Pattaya by using the data from the Tripadvisor.com platform.

## Methodology

Following Ju, Back, Choi & Lee (2019, pp. 4), the current study aimed to discover the spa's key service quality factors among spa-goers by employing a mixed-methodology. Two stages were conducted. Stage 1 was qualitative research, which analyzed the online reviews of Pattaya spas by applying a text mining technique to determine the most mentioned service quality factors. Later on, the finding from stage 1 has served as the guideline and led to the questionnaire development in stage 2. The questionnaire data collected from experienced Pattaya spa-goers were analyzed by employing a quantitative approach.

### Stage 1

As stated earlier, the qualitative approach in stage 1, was conducted by applying the netnography analysis to examine the online opinions of Pattaya spa-goers collected from Tripadvisor.com, which was claimed to be the most prevalent travel social media among travelers (Schuckert, Liu, & Law, 2015; Filieri, Alguezaui, & McLeay, 2015). In order to collect

the online data, “Spas and Wellness Centers” category in Pattaya city was the main filter for identifying the qualified business and all reviews from 2012 to 2020 were scrapped by using Web Scraper program. To avoid the translation errors of the different languages, only the reviews with the most common language used, English, were collected. The data included along with each review were the reviewed spa business name, reviewer’s place of origin, spa rating, date of experience, travel type, and the review content.

The spas and wellness centers shown on the platform included all types of wellness related businesses, for example, yoga studios, football fields, gyms, boxing clubs, etc., which must be excluded. From the results found in Tripadvisor.com, only 98 valid spas and wellness centers in Pattaya were included with a total of 1,199, from 1,266 valid scraped reviews. Prior to the text analysis, the review contents must be prepared by following the data cleaning and preparation processes. Firstly, Power BI was used to conduct the Word cloud analysis, while the stop words were utilized to exclude irrelevant words that should be ignored from the most common occurred word lists. Hsieh & Shannon (2005, p. 1283) suggested that the content analysis can be used as the text-mining technique, which can help categorizing the themes by borrowing the predefined codes. Furthermore, the additional codes or categories that arise from the study can be considered as the new findings that can contribute to the former theories or studies. According to the aforementioned framework, the five dimensions of SERVQUAL proposed by Parasuraman, Zeithaml & Berry (1988, pp. 39) and Parasuraman, Zeithaml & Berry (1994, pp. 207), namely, tangibles, reliability, responsiveness, assurance, and empathy were borrowed. The occur words from the reviews were categorized into themes according to the predefined codes and terms suggested by various studies.

According to Vijayarani, Ilamathi, & Nithya, (2015, pp.7), text-mining can be employed to discover valuable and useful knowledge from available data, while pre-processing technique is also essential for Natural Language Processing (NLP). Prior to the text mining analysis, the text processing utilized in the current study includes text normalization, tokenization, filtering, lemmatization, and stemming method were performed as suggested in previous studies (Allahyari, Pouriyeh, Assef, Safaei, Trippe, Gutierrez, & Kochut, 2017; Vijayarani, Ilamathi, & Nithya, 2015, pp. 9). Only English reviews were included and the stop words and words that should be ignored (i.e., a, and, the, I, you, we, they, he, she, it, etc.) were removed. The reviews were normalized in order to convert the capital letters to lower case to aid the text detection. Then, text tokenization was performed to separate the sentences into words. The filtering process was conducted to filter out unimportant reviews, words, symbols, and characters. Finally, the words were converted to the root of the terms (“comfortable” to “comfort”, “cleaned” to “clean”, etc.) by using text lemmatization technique. To validate the correctness and reliable coding, two researchers must evaluate the codes independently and come to the consensus that all terms and keywords are labeled with the appropriate categories. Therefore, the results of this stage were used as the foundation to develop the questionnaire in stage 2.



## Stage 2

Quantitative research using a questionnaire survey was employed in this part. The non-probably purposive sampling technique was used to recruit the respondents and gather the data from spa customers. Nunnally (1978, pp. 245) suggested that the sample size should be more than 10 times of the attributes number. In this study, there were 20 attributes in total, which indicates that the minimum sample size should be at least 200 samples. A total of 400 surveys were distributed to spa-goers with a range of ages 25-75 years both online and onsite. The online survey questionnaire was posted on travel blogs, social networking sites, and distributed via e-mail. The qualified respondents must be Thai tourists who had previously experienced in Pattaya spa business at least one time within two years. Totally, 322 questionnaires were returned, while 12 of them were incomplete and have been removed from the analysis. Therefore, 310 valid questionnaires were analyzed in the study. The questionnaire consists of two main sections, including Part 1. Demographic (respondents' profile and behavior in using spa service) and Part 2. SERVQUAL (20 attributes from five dimensions of service quality, namely, tangibles, reliability, responsiveness, assurance, and empathy), which were developed based on previous studies by Parasuraman, Zeithaml & Berry (1988, pp. 39) and Parasuraman, Zeithaml & Berry (1994, pp. 207). The dimension of tangibility contains four items, empathy was designed as five items, reliability was designed as three items, responsiveness was designed as three items and assurance was designed as five items. Respondents were asked to rank the perceived importance of service quality's items of spa experience in Pattaya. This research used a 5-point Likert scale, "1" = "strongly disagree" to "5" = "strongly agree." In addition, 30 responses were treated as the pilot study, which were excluded from the main survey, and pre-tested for the validity and reliability of the questionnaire in the main survey. The alpha coefficient was 0.910, which means the items have relatively high internal consistency. SPSS and AMOS were employed for questionnaire data analysis. The descriptive analyses reported the different characteristics of the respondents and dataset. Confirmatory Factor Analysis (CFA) was employed to test the consisting of validity, reliability of the scales and goodness of fit. Also, this research is conducted using ANOVA to determine whether the means of two or more independent variables are statistically significant differences among groups.

## Results

## Findings of Study 1

In this research, the word cloud technique was used to explore online reviews from tourists who have experienced day-spa in Pattaya. After cleaning irrelevant data, a total of 1,199 usable online reviews in Pattaya's "Spas and Wellness Centers" on TripAdvisor.com were analyzed. The majority of customers are from Asia (65.67%), followed by Europe (18.91%), the Americas (8.46%), Oceania (5.97%), and Africa (0.99%), respectively. According to the rating provided by users, the overall rating for Pattaya spa is 4.49. The collected data were first analyzed by using Word Cloud technique to discover the most occurred terms detected from the reviews, while "massage" is the highest occurrence term, followed by "spa" (see Fig. 2). The results present service quality derived from the spa-goers experience reviews, which include positive, neutral, and negative comments.



Figure 2: Word cloud for the “Spas and Wellness Centers” in Pattaya reviews.

Table 1 displays the most frequent words that occurred in the reviews. The findings reveal that the most frequent words from the reviews that consist of 72,409 words in total are mainly related to the type of service, e.g., massage (18.94%), spa (7.34%), setting (place, Pattaya, etc.). However, the words relating to SERVQUAL are less mentioned in the reviews.

**Table 1:** Top 30 most occurring words.

Word	Frequency	Percentage shown	Word	Frequency	Percentage shown
massage	1,481	19.22%	foot	135	1.75%
spa	574	7.45%	body	130	1.69%
place	503	6.53%	oil	127	1.65%
Pattaya	389	5.05%	sauna	127	1.65%
staff	386	5.01%	therapist	116	1.51%
relax	364	4.72%	price	113	1.47%
time	288	3.74%	onsen	109	1.41%
experience	264	3.43%	package	88	1.14%
service	260	3.37%	pool	83	1.08%
recommend	242	3.14%	baht	82	1.06%
thai	228	2.96%	people	75	0.97%
professional	220	2.85%	area	67	0.87%
friend	210	2.72%	atmosphere	66	0.86%
clean	202	2.62%	scrubb	66	0.86%
room	158	2.05%	yoga	64	0.83%
treatment	146	1.89%	facility	63	0.82%
hour	141	1.83%			
hotel	140	1.82%			
				7,707	100.00%

The words concerning ‘assurance’ (e.g., professional, trained, etc.) were the most highly mentioned by reviewers, which consisted of positive reviews (72.87%) and negative reviews (73.33%), followed by ‘tangibility’, ‘empathy’ and ‘responsiveness.’ The lowest percentage topic that reviewer stated was ‘reliability’, contained positive reviews (5.81%) and negative reviews (5%) (see Figure 3). The findings in this stage discovered that the majority of the spa-goers experienced massage and spa services, while the key factors that can lead to positive comments are assurance and tangibility attributes. The results led to the confirmation of previous research on SERVQUAL, while the discovered factors were used for the questionnaire development in Study 2 and for comparing the findings.

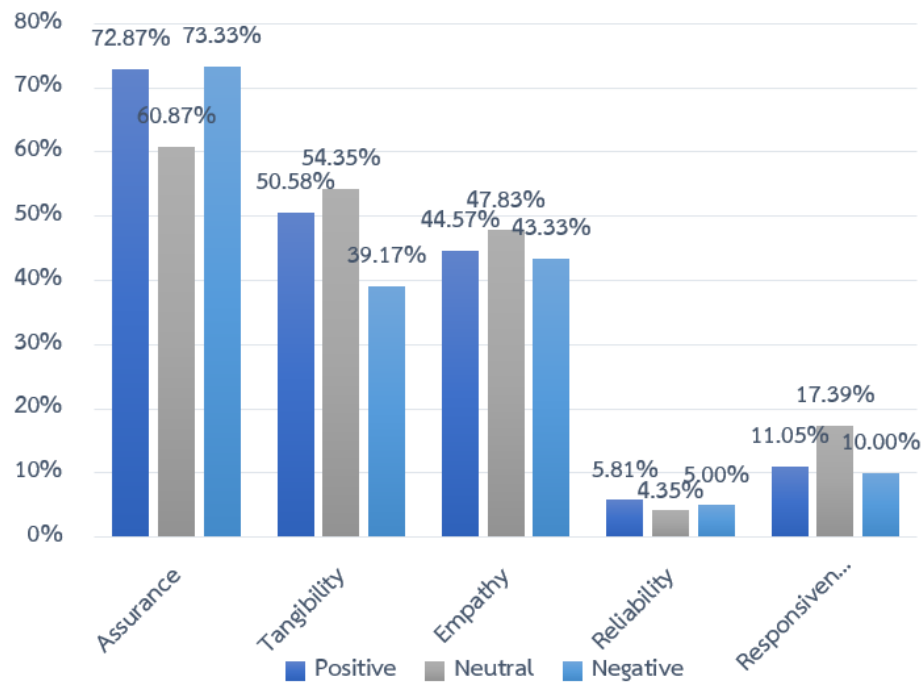


Figure 3: Frequencies of words in positive and negative categories. (n=1,199)

Further investigation was conducted to discover the keywords that appear frequently based on the SERVQUAL framework. Some keywords were borrowed from previous research, while the current research found that some specific terms relating to the unique spa services in Pattaya were mentioned the most. For instance, massage, oil, body, foot, sauna, scrub, etc., in 'assurance' theme (see Table 2). The SERVQUAL factors that had been mentioned most often are 'assurance' (2,625 times), 'tangibility' (1,354 times), 'reliability' (591 times), 'empathy' (570 times), and 'responsiveness' (567 times), respectively.

**Table 2:** Top 63 most occurring SERVQUAL terms

Assurance	Frequency	Tangibility	Frequency	Empathy	Frequency	Reliability	Frequency	Responsiveness	Frequency
massage	708	clean	190	friendly	190	relax	310	time	266
spa	312	room	143	help	72	train	54	hour	172
service	234	hotel	105	care	52	quality	51	long	48
professional	212	facility	82	customer	42	certain	24	polite	38
treatment	128	beauty	61	smile	33	standard	17	quick	14
oil	125	area	61	personal	16	rely	13	wrong	8
therapist	121	atmosphere	60	attention	13	perform	9		
body	111	comfortable	56	convenience	12	trust	2		
foot	96	special	52	specific	7				
sauna	68	view	51	praise	5				
scrub	60	environment	49						
skill	47	thai	48						
speak	21	light	36						
talk	20	facility	30						
explain	17	luxury	26						
personal	16	peaceful	23						
safe	12	soft	20						
answer	5	wear	19						
		dress	14						
		decorate	13						
		uniform	3						
<b>Total</b>	<b>2,625</b>		<b>1,354</b>		<b>570</b>		<b>591</b>		<b>567</b>

## B. Findings of Study 2

### Respondents' profile of the survey

A total of 310 spa-goers were women (61.3%) and men (38.7%). Most of respondents had completed undergraduate degrees (51.3%) and were married (58.1%). More than half of the respondents (58.1%) were aged between 57-75 years old (58.1%), followed by those in the 25-40 years age group (22.3%) and the 41-56 years age group (19.7%), respectively. Approximately 35.2% of respondents were business owners, followed by employees (26.1%), government employees or state enterprise offices (23.2%) and retired or homemakers (15.5%). Most spa-goers earned a monthly income between 15,001-25,000 Baht (30%).

Regarding the purpose of visiting Pattaya, 79.4% of respondents visited Pattaya more than the second time and heard about spa information from friends and relatives (50.6%), followed by internet (44.5%) and other channels (4.8%). The majority travel to Pattaya as a couple by private

car (42.6% and 83.5%, respectively). In terms of spa experience, the largest group of respondents (85.2%) have visited spas around 1-2 times per month. The main reason for visiting a spa was for stress relief and relaxation (89.4%) and 43.2% of respondents had a full body massage, followed by specific massage points such as neck and shoulder, feet and facial treatment (36.1%), Thai herbal hot compress (13.2%) and hydrotherapy (7.4%). The respondents went to day-spa at most (89%) while hotel and resort spa only reached 11% and they spent below 500 baht (49%) for spa expenses. Most of the respondents admit to falling asleep during a massage (48.1%), followed by playing with their phones (31%), talking with friends or other customers (12.6%), and reading a book (8.4%), respectively.

### **Descriptive analysis**

From the analysis all of 20 items from five constructs of service quality of customers' experience in spa service. The constructs were classified as tangibility, assurance, responsiveness, reliability, and empathy. All indicators of each item were rated based on a 5-point Likert- scale ranging from 1 to 5. These items all received high mean scores, ranging from 4.25 to 4.41. The overall mean score for service quality items was 4.34. This indicates that spa-goers are satisfied with the service quality of spa business in Pattaya. The most important service quality item which received the maximum mean value was 'Courtesy of the staff' (mean = 4.41, SD = 0.670), which is in the assurance construct. The minimum value was 'the condition of facility and equipment' (mean = 4.25, SD = 0.667) in the construct of tangibility.

### **Reliability and validity**

Since the service quality was developed from the literature, a confirmatory factor analysis of the measurement model was tested to confirm the linear relationships (Yoon, & Uysal, 2005). The discriminant and convergence validities were examined. Table 3 presents all items obtain factors loading which are greater than 0.5 and ranged from 0.601 to 0.823. Also, C.R. (t-value) is greater than 1.96, which range from 9.742 to 13.597. Also, all indicators are statistically significant at  $p < .001$ . The construct reliability (CR) and the average variance extracted (AVE) were utilized to test the internal consistency of the factors. As shown in Table 4, all CR of the multi-item scales are in a range from 0.77 to 0.85, which are greater than the cutoff point of 0.7 (Nunnally, 1978, pp. 245-246). The statistical values of AVE are in a range of 0.51 to 0.55, which exceed the recommended criteria of 0.5 (Fornell, & Larcker, 1981, p. 49). All standardized factor loadings are statistically significant at the 0.001 level, and range from 0.60 to 0.82, which exceed the recommended threshold of 0.60 as suggested by Bagozzi & Yi (1988, pp. 82) indicating the convergent validity is satisfactory. Also, the correlation coefficient of each pair of concepts is smaller than 1 in the reliability of 95%, which fall between 0.45-0.59. Hence, the concepts achieve discriminant value.

**Table 3:** Results of Confirmatory Factor Analysis: Factor Loading Estimates and T-value

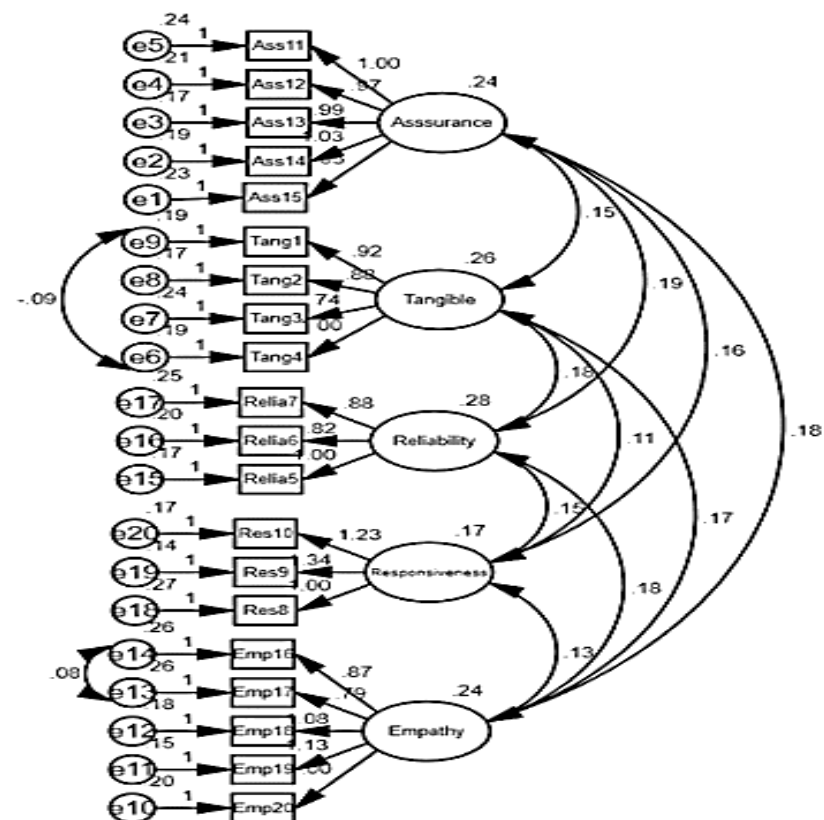
Factors	Mean	S.D.	Factor loading	t-value
<b>Assurance</b>	4.343	0.525		
Ass11 Feel personality safe and security			0.707	NA
Ass12 Promptness of explanation enquiries and answers			0.721	11.693
Ass13 Good communication skills			0.759	12.271
Ass14 Courtesy of the staff.			0.754	12.193
Ass15 Knowledge of the staff to answer the customer's' requirement			0.695	11.296
<b>Tangibility</b>	4.287	0.488		
Tang1 Well location establishment			0.735	9.839
Tang2 Appearance of the staff			0.735	11.388
Tang3 Appealing interior decoration			0.611	9.742
Tang4 The condition of facility an equipment			0.759	NA
<b>Reliability</b>	4.352	0.548		
Relia7 Problem-solving abilities of staff			0.687	NA
Relia6 Spa establishments perform according to agreed promises			0.699	11.698
Relia5 The staff knowledge of spa service			0.795	11.498
<b>Responsiveness</b>	4.351	0.549		
Res10 Politeness of staff			0.772	NA
Res9 Giving prompt and accurate service			0.823	10.646
Res8 Providing the promised service at the promised time			0.615	10.303
<b>Empathy</b>	4.352	0.522		
Emp16 The personnel focus on customers' interest			0.641	10.642
Emp17 Operating time are convenient to customers			0.601	9.970
Emp18 Giving customers individual attention			0.779	12.972
Emp19 Understanding the specific customers' needs			0.820	13.597
Emp20 Paying attention in customers' complaint			0.734	NA

Note: All factor loadings are significant at  $p < .000$ . Parameter fixed at 1.0 for the maximum-likelihood estimation. Therefore, t-values were not obtained (NA) for those fixed to 1 for identification purpose.

**Table 4:** Correlation, Reliability, AVE and Mean

	CR	AVE	Tangibility	Reliability	Responsiveness	Assurance	Empathy
Tangibility	0.842	0.510	1.000				
Reliability	0.775	0.540	0.551	1.000			
Responsiveness	0.768	0.550	0.450	0.589	1.000		
Assurance	0.771	0.530	0.512	0.586	0.667	1.000	
Empathy	0.847	0.520	0.586	0.581	0.549	0.664	1.000

Note: AVE=Average Variance Extracted. Mean values are based on 5-point scales. All correlations are significant at  $p < .01$ .



CHISQUARE/DF=2.418, CFI=.924, TLI=.908, RMSEA=.068

Figure 4: Results of CFA of the spa service quality scale

Moreover, the model analyses the relationships between all the constructs through a CFA to ensure its reliability and validity. The constructs were evaluated by the degrees of freedom by the chi-square ( $\chi^2 / df$ ), Comparative Fit Index (CFI), Tucker-Lewis Index (TLI) and Root Mean Square Error of approximation (RMSEA). Hair, Matthews, Matthews, & Sarstedt (2017, pp.111) suggested that degrees of freedom ratio with a range between 2 to 5 are acceptable levels for sample sizes exceed 200. Also, a value for CFI and TLI is recommended nearly or fit to 1, and the cut-off point is 0.9 to indicate a good model fit (Kline, 2013, pp. 178). The last



criterion is root mean square error of approximation RMSEA index, which presents how well a model fits a population, the values should not greater than 0.08. The measurement model indicated a good model fit with the following values: CMIN = 382.122,  $\chi^2/df$  = 2.418, CFI = 0.924, TLI = 0.908 and RMSEA = 0.068 (see Figure 4)

The data were then analyzed by using ANOVA on SPSS to compare the means of each construct. The findings reveal that senior spa-goers and non-senior spa-goers have different levels of satisfaction toward the Pattaya spas' SERVQUAL (see Table 5). The highest total means are detected in two constructs equally, including Reliability and Empathy (4.351, while the lowest mean is shown in the Tangibility construct (4.2871). In general, according to the results, the senior spa-goers tend to rate the satisfaction of service experiences higher than the non-senior spa-goers. The statistically significant differences can be observed in the Tangibility ( $F[2,309] = 9.008, p = 0.003$ ), Assurance ( $F[2,309] = 9.869, p = 0.002$ ), and Empathy ( $F[2,309] = 8.569, p = 0.004$ ).

**Table 5:** ANOVA results comparing generation non-senior spa-goers to senior spa-goers

Factor	non-senior spa-goers ( <i>n</i> = 130)	senior spa-goers ( <i>n</i> = 180)	Total Mean	F-Value	P Value
Tangibility	4.1904	4.3569	4.2871	9.008	0.003*
Reliability	4.3128	4.3796	4.3516	1.124	0.290
Responsiveness	4.2872	4.3963	4.3505	2.998	0.084
Assurance	4.2338	4.4211	4.3426	9.869	0.002*
Empathy	4.2508	4.4244	4.3516	8.569	0.004*

Note: \*. The mean difference is significant at the 0.05 level.

## Conclusion

Retaining the service quality is integral for spa business success. Examining customers' perspectives towards service quality provision allows spa hotel managers to understand how the services are provided to the customers. Development of a tool to evaluate SERVQUAL is vitally important to maintain and improve a good spa service in order to increase the perceived service quality that they offer to their spa-users. The exploratory findings in the qualitative research approach form the basis for the quantitative study. Text mining was the first process to extract keywords from eWOM of spa service in Pattaya. Also, the qualitative research aimed to gather more in-depth information to advance the understanding of the SERVQUAL dimensions. For quantitative study, survey approach was used for validating factors of service quality of Thai spa-goers among generations in Pattaya.

## Discussion

The results yield answers for the first research question, 1) What are the experiences of Thai spa-goers towards the service quality of spas in Pattaya, Thailand? The findings from the qualitative study were identified the five critical dimensions of SERVQUAL related to customer experiences, namely, assurance, tangibles, empathy, reliability, and responsiveness, which indicated that continuously monitoring online reviews is a crucial factor in the evaluation of customer satisfaction in products and services of spa business in order to help spa managers a better understanding of service quality in the business. When customers receive products and services is better than expected, resulting in satisfaction and favorable eWOM, whereas anger and disappointment occur when receiving products and service falls below the expectation, driving them to spread negative eWOM. According to the netnography, the group representing the highest mentioned was assurance related to ‘courtesy of the staff’, ‘good communication skills’, ‘knowledge of the staff to answer the customers' requirement’, ‘promptness of explanation inquiries and answers’ and ‘feel personality safe and security’. This is followed by tangibility, empathy, responsiveness, and reliability. This finding is in agreement with Sangpiku (2019, pp. 538) that the most importance of spa-quality service relies on staff performance. Before deciding to select a spa, customers have an expectation that they will have good experiences and good services from spa therapists.

Receiving unfavorable services can create bad feelings and dissatisfaction can drive them to complain about the spa establishment or spread negative comments publicly. Lagrosen & Lagrosen (2016, p. 670) supported the fact that the knowledge, attitude, and behavior of spa therapists enhance the quality of customer interaction. Especially, service is an intangible product that customers cannot touch or feel beforehand. Customers must purchase a service before having the actual experiences. Hence, staff should have the ability to transfer trust and confidence to customers. Also, the service’s facilities appearance and personal appearance can attract new customers to buy the service (Shanka, 2012, pp. 006).

Additionally, the findings of this study provide valuable insights to understand the perceived experience of Thai spa-goers towards the service quality of the spa in Pattaya. According to the second research question, what are the different satisfaction levels toward the service quality of spas in Pattaya, Thailand between senior spa-goers and non-senior spa-goers?, the segmentation was applied to justify two different groups. A survey spa in Pattaya presented that all travelers have a good experience in spa service, but there is a manifold difference in terms of service quality dimension divided by generation as follows; non-senior spa-lovers focused on reliability at the maximum, inferior responsiveness, empathy, assurance, and tangibles, respectively. Whereas senior spa-lovers emphasized empathy as a priority reception, followed by assurance, responsiveness, reliability, and the similar to non-senior spa-lovers is tangibles was at least perceived by spa-goers. This finding supports the study of Blešić, Popov-Raljić, Uravić, Stankov, Đeri, Pantelić, & Armenski (2014, pp. 492) that customers from different segments have a different perceptions of service quality. The decision to select a service business depends on age, gender, education, occupation, material status, and preferences. In

the spa market, of the five dimensions of the SERVQUAL model, reliability was the strongest relationship with the satisfaction of affordable spa-goers. Reliability is related to the staff's abilities and knowledge. Also, the service offered to customers must be reliable and perform with agreed promises. In addition, empathy was a determinant factor for elderly customers' satisfaction. Empathy is related to individualized care and personalized attention. Listening to the customers' complaints by resolving the problems promptly to make customers feel confident in a professional service style (Vryoni, Bakirtzoglou, & Ioannou, 2017, pp. 16). Therefore, it is necessary to increase the training of spa therapists in improving empathic communication skills to enhance elder customers' satisfaction.

However, the tangible dimension is underestimated, location establishment, interior decoration, design of facilities, modern equipment, and staff's appearances affect service quality. Easy access and having enough parking spaces might attract new customers when driving pass the spa. Also, the lighting and room temperature are essential for helping customers feel comfortable during spa services. Hence, spa therapists frequently recheck lighting and the room temperature by asking customers to create a positive emotional experience (Sangpikul, 2019, pp. 541). The basic task of management in spa business for making strong relationships with customers, spa manager should continuously monitor changes in consumers' needs, including the standards of service that reflect identified customer demands. In addition, physical environments and service ambiances should be well-organized to motivate customers. Therefore, understanding the needs of each specific segment can help spa entrepreneurs to formulate market strategies in order to enhance financial performance and market share, as well as contribute to the customers' positive emotions through high quality services that motivate their return to the business.

## Recommendations

This research has some limitations to consider, which mainly lies in the samples. In stage 1, the reviews data collected for the analysis were only in English language, while Thai users rarely appeared in reviews. The findings from the opinion mining may not truly reflect the domestic Thai spa-goers. Besides, in stage 2, the reviews from senior travelers were also scarce, which limited the thorough understanding of the certain group of spa-goers' preferences and perspectives. Besides, even though Pattaya city is the world's well-known tourist destination, the specific context of the conducted research might lead to some limitations. The study was mainly focusing solely on the Pattaya city, Thailand, which might be partially generalized only for similar destinations that share some common characteristics.

Future research should consider testing the current outcomes on other destinations with other contexts in order to discover more generalized conclusions and all-comprehensive views of spa service quality. Therefore, constructive and useful findings should be discovered for improving the quality of spa service and enhancing spa-goers' experiences in a broader context.



## References

- Abdulla, S. A. M., Khalifa, G. S., Abuelhassan, A. E., & Ghosh, A. (2019). Antecedents of Dubai revisit intention: The role of destination service quality and tourist satisfaction. *Restaurant Business*, 118(10), 307-316.
- Allahyari, M., Pouriyeh, S., Assef, M., Safaei, S., Trippe, E. D., Gutierrez, J. B., & Kochut, K. (2017). A brief survey of text mining: classification, clustering and extraction techniques. *Proceedings of KDD Bigdas*, 1-13. <https://doi.org/10.48550/arXiv.1707.02919>.
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74-94.
- Berkup, S. B. (2014). Working with generations X and Y in generation Z period: Management of different generations in business life. *Mediterranean Journal of Social Sciences*, 5(19), 218 - 229.
- Blešić, I., Popov-Raljić, J., Uravić, L., Stankov, U., Đeri, L., Pantelić, M., & Armenski, T. (2014). An importance-performance analysis of service quality in spa hotels. *Economic research-Ekonomska istraživanja*, 27(1), 483-495.
- Boon-Itt, S., & Rompho, N. (2012). Measuring service quality dimensions: An empirical analysis of Thai hotel industry. *International Journal of Business Administration*, 3(5), 51-63.
- Cheung, B. C. M. (2012). *A Study of the Interrelationship of Spa Guests' Motivation, Perceived Service Quality, Value, Satisfaction, and Behavioral Intentions*. Doctoral dissertation, Graduate College, Oklahoma State University.
- Chua, A. Y., & Banerjee, S. (2013). Reliability of reviews on the Internet: The case of Tripadvisor. *Proceedings of the World Congress on Engineering & Computer Science: International Conference on Internet and Multimedia Technologies* (pp.453-457). San Francisco, USA. [http://www.iaeng.org/publication/WCECS2013/WCECS2013\\_pp453-457.pdf](http://www.iaeng.org/publication/WCECS2013/WCECS2013_pp453-457.pdf).
- Dabholkar, P. A., Thorpe, D. I., & Rentz, J. O. (1996). A measure of service quality for retail stores: scale development and validation. *Journal of the Academy of Marketing Science*, 24(1), 3. DOI: <https://doi.org/10.1007/BF02893933>.
- Donaldson, R. & Carter, M. (2021). *Generation gap*. Retrieved June 16, 2021, from <https://www.spabusiness.com/spa-business-magazine/Generation-gap/33887>.
- Filieri, R., Alguezaui, S., & McLeay, F. (2015). Why do travelers trust TripAdvisor? Antecedents of trust towards consumer-generated media and its influence on recommendation adoption and word of mouth. *Tourism Management*, 51, 174-185.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Garvin, D. A. (1988). *Managing quality: the strategic and competitive edge*. New York: Free Press.



- Giritlioglu, I., Jones, E., & Avcikurt, C. (2014). Measuring food and beverage service quality in spa hotels: A case study in Balıkesir, Turkey. *International Journal of Contemporary Hospitality Management*, 26(2), 183-201.
- Global Wellness Institute. (2018). *Global Wellness Economy Monitor 2018*. Retrieved June 15, 2021, from <https://globalwellnessinstitute.org/industry-research/2018-global-wellness-economy-monitor/>.
- Gronroos, C. (1988). Service quality: The six criteria of good perceived service. *Review of Business*, 9(3), 10-13.
- Hair Jr, J. F., Matthews, L. M., Matthews, R. L., & Sarstedt, M. (2017). PLS-SEM or CB-SEM: updated guidelines on which method to use, *Int. J. Multivariate Data Analysis*, 1(2), 107-123.
- Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277-1288.
- International Spa Association. (2020). *Types of Spa*. Retrieved November 8, 2020, from <http://experienceispa.com/resources/spa-goers>.
- Johnson, E. M., & Redman, B. M. (2018). *Spa: A comprehensive introduction*. Florida: American Hotel & Lodging Educational Institute.
- Ju, Y., Back, K. J., Choi, Y., & Lee, J. S. (2019). Exploring Airbnb service quality attributes and their asymmetric effects on customer satisfaction. *International Journal of Hospitality Management*, 77, 342-352.
- Kline, R. B. (2013). *Exploratory and confirmatory factor analysis*. In Y. Petscher & C. Schatsschneider (Eds.), *Applied quantitative analysis in the social sciences*. New York: Routledge.
- Lagrosen, Y., & Lagrosen, S. (2016). Customer perceptions of quality—a study in the SPA industry. *European Business Review*, 28(6), 657-675.
- Lehtinen, U., & Lehtinen, J. R. (1991). Two approaches to service quality dimensions. *Service Industries Journal*, 11(3), 287-303.
- Lőke, Z., Kovács, E., & Bacsı, Z. (2018). Assessment of service quality and consumer satisfaction in a Hungarian spa. *The Central European Journal of Regional Development and Tourism*, 10(2), 124-146.
- Marketeer (2020). *Spa and Massage, the Key Player*. Retrieved January 8, 2021, from <https://marketeeronline.co/archives/138860>.
- Mariani, M. M., Mura, M., & Di Felice, M. (2018). The determinants of Facebook social engagement for national tourism organizations' Facebook pages: A quantitative approach. *Journal of destination marketing & management*, 8, 312-325.



- Marković, S., Raspor, S., & Šegarić, K. (2010). Does restaurant performance meet customers' expectations? An assessment of restaurant service quality using a modified DINESERV approach. *Tourism and Hospitality Management*, 16(2), 181-195.
- MGR Online. (2021). *SHA+ Phuket Sandbox*. Retrieved June 16, 2021, from <https://mgronline.com/south/detail/9640000054297>.
- Minh, N. H., Ha, N. T., Anh, P. C., & Matsui, Y. (2015). Service quality and customer satisfaction: A case study of hotel industry in Vietnam. *Asian Social Science*, 11(10), 73-85.
- Mondok, A. (2019). New generations–new trends in the spa industry. *Economica*, 10(2), 21-26.
- Nunnally, J. C. (1978). *Psychometric Theory* (2<sup>nd</sup> ed.). New York: McGraw-Hill.
- Rach, S. (2022). *Over a third of baby boomers set to retire later than spa*. Retrieved June 8, 2022, from <https://www.ftadviser.com/pensions/2022/03/28/over-a-third-of-baby-boomers- set-to-retire-later-than-spa/?page=2>
- Salazar, A., Costa, J., & Rita, P. (2010). A service quality evaluation scale for the hospitality sector: Dimensions, attributes and behavioural intentions. *Worldwide Hospitality and Tourism Themes*, 2(3), 383-397.
- Sangpikul, A. (2019). The analysis of customers' e-complaints and service quality at spa services in Thailand. *E-review of Tourism Research*, 16(6), 519-545.
- Schroeder, A., & Pennington-Gray, L. (2015). The role of social media in international tourist's decision making. *Journal of Travel Research*, 54(5), 584-595.
- Schuckert, M., Liu, X., & Law, R. (2015). Hospitality and tourism online reviews: Recent trends and future directions. *Journal of Travel & Tourism Marketing*, 32(5), 608-621.
- Shahin, A., Mahdavi, Z., & Shahmohammadi, F. (2017). Comparative analysis of the viewpoints of customers, employees and managers based on the developed model of service quality gaps-with a case study in the travel agents at the centre of the city of Tehran. *International Journal of Productivity and Quality Management*, 21(1), 97-111.
- Shanka, M. S. (2012). Bank service quality, customer satisfaction and loyalty in Ethiopian banking sector. *Journal of Business Administration and Management Sciences Research*, 1(1), 001-009.
- Pakdee, K., Aswin, S., & Siridech K. (2020). Thai World Class Spa Business Development in Thailand towards Sustainability, *Journal of Health Science*, 29(6), 1147-1156.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12-40.



- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1994). Alternative scales for measuring service quality: a comparative assessment based on psychometric and diagnostic criteria. *Journal of Retailing*, 70(3), 201-230.
- Patkowska, J. M., Pytel, S., Oleśniewicz, P., & Widawski, K. (2017). The 21st Century Trends in Senior Tourism Development Among the Baby Boomer Generation. *International Conference on Tourism Dynamics and Trends*. (pp. 280-299). Faculty of Tourism and Finance University of Seville, Spain. <http://www.tourismtrendsconference.us.es/wp-content/uploads/2017/12/PROCEEDINGS-BOOK-Toursimtrends-2017-new.pdf>.
- Pattaya Municipality. (2019). *Creative Spa and Wellness Thailand 2019*. Retrieved June 8, 2020, from <https://www.pattaya.go.th/2019/05/22/hr-2112/>.
- Tang, I. L. F., Grace, C. S. H., Tan, C. T., & Leung, R. W. (2018). Understanding generation Y's favorite spa scent, spa food versus spa service experience. *J Tourism Hospit*, 7(4), 2167-0269.
- Thiersch, A. R. (2020). *The forgotten generation-Med spas and generation X*. Retrieved June 30, 2021, from <https://www.americanmedspa.org/blogpost/1633466/300685/The-Forgotten-Generation-Med-Spas-and-Generation-Xtag=AmSpa%27s+Med+Spa+%26+Aesthetic+Boot+Camps>.
- Vijayarani, S., Ilamathi, M. J., & Nithya, M. (2015). Preprocessing techniques for text mining-an overview. *International Journal of Computer Science & Communication Networks*, 5(1), 7-16.
- Viljoen, A., Kruger, M., & Saayman, M. (2018). Ageing in a modern era: evidence from South African resort spa visitors. *Southern African Business Review*, 22(1), 1-34.
- Vryoni, S., Bakirtzoglou, P., & Ioannou, P. (2017). Customers' satisfaction and service quality of spa centers in Greece. *Acta Kinesiologica*, 11(1), 12-18.
- World Health Organization. (202). *Achieving 70% COVID-19 Immunization Coverage by Mid-2022*. Retrieved June 30, 2021, from <https://www.who.int/news/item/23-12-2021-achieving-70-covid-19-immunization-coverage-by-mid-2022>.
- Xiang, Z., Du, Q., Ma, Y., & Fan, W. (2017). A comparative analysis of major online review platforms: Implications for social media analytics in hospitality and tourism. *Tourism Management*, 58, 51-65.
- Yoon, Y., & Uysal, M. (2005). An examination of the effects of motivation and satisfaction on destination loyalty: a structural model. *Tourism Management*, 26(1), 45-56.