

ISSN 2730-2601

RICE Journal of Creative Entrepreneurship and Management, Vol. 2, No. 3, pp. 1-22,
September-December 2021

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doi: 10.14456/rjcm.2021.34

Received 25.08.21/ Revised 4.09.21/ Accepted 14.09.21

Tourists' Satisfaction with Products, Services and Quality Development of Hot Spring Wellness Tourism

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Abstract

Geothermal springs create the main tourism resource, offering remarkable sceneries, recreation facilities, and recognized value in treatments for health and wellness. The rapid growth of wellness tourism in Thailand, as well as hot spring tourism as one of the types of wellness tourism, which attracts domestic and international travelers to visit annually for a holiday activity. In this paper, the researcher reported tourists' satisfaction with products, services, and quality development of hot spring wellness tourism at Doi Saket, Thailand. This research aimed to (1) study tourists' satisfaction with the service products and service processes at the hot spring destination at Doi Saket, and (2) assess the quality development of the service providers at the hot spring destination in terms of creativity and uniqueness in health promotion. Both qualitative and quantitative research methods were used for data collection. The participants were 200 tourism stakeholders selected by purposive sampling; they were from the private sector, the public sector, the community concerned, and tourists visiting the hot spring destination at Doi Saket. As for data collection, the researcher used in-depth interview, participatory observation, focus group, participatory rural appraisal techniques to collect qualitative data, and a field survey on tourists' satisfaction with the products and services to obtain quantitative data. The obtained qualitative data were analyzed by content and frequency, whereas the quantitative data by percentage, means, and t-test. The results pointed to (1) the tourists' overall satisfaction with the hot spring service providers at a high level regarding environmental management as well as service process management; and (2) the tourism stakeholders wish to see a higher level of quality development for tourism products and services in terms of uniqueness in health promotion activities.

Keywords: *Tourist satisfaction, hot spring products and services, quality development, hot spring wellness tourism*

1 Introduction

Tourism is one of the driving forces of global economic growth and provides for 1 in 11 jobs worldwide. By giving access to decent work opportunities in the tourism sector, the society—particularly youth and women—can benefit from increased skills and professional development (<https://www.unwto.org/tourism-in-2030-agenda>, 2021). According to the report by UNCTAD and the UN's World Tourism Organization (UNWTO), in 2020, international arrivals fell by 73% from pre-pandemic levels in 2019, causing estimated losses of 2.4 trillion

US dollars in tourism and related sectors (Nebhay, 2021). Some countries use domestic tourism as one of the tools to recover its economy to mitigate the impact on jobs and businesses; and governments have taken an impressive immediate action to restore and re-activate the sector for domestic tourism to be restarted in some destinations (<https://www.oecd.org/coronavirus/policy-responses/rebuilding-tourism-for-the-future-covid-19-policy-responses-and-recovery-bced9859/>, 2020).

Thailand is one of the most visited countries in the world with 39.8 million international arrivals in 2019 as reported in Tourism Statistics Thailand 2020 (https://www.mots.go.th/more_news_new.php?cid=585, 2020). The tourism industry in Thailand was one of the most negatively affected industries by the COVID-19 pandemic. In 2020, the number of international tourist arrivals amounted to only around 6.7 million, which extremely decreased more than 80 percent from 2019 (Manakitsomboon, 2021). The domestic travelers will be a major tourist segment for Thailand's tourism in 2020; Kasikorn Researchviews that the high-end tourist segment will rebound back faster than other segments (<https://www.kasikornresearch.com/> Domestic travel faces new challenges post COVID-19, 2020). The Tourism Authority of Thailand (TAT) planned on increasing the number of visitors with more spending power or from the higher-end market of medical, health and wellness tourism. Particularly, medical tourism made a significant contribution to Thailand's economy, generating 3.1 billion US dollars in 2014 from building its image as a high-end tourism destination. According to the Tourism and Sports Ministry, Thailand received 6.7 million international visitors in 2020. When compared to 2019, the total of international visitors decreased by 83.21% from 39.9 million.

Table 1: The Statistics of Tourism Arrivals and Receipts 2010-2021

Year	Number of International Arrivals (million)	Receipts (billion US dollar)
2010	15.9	23.8
2011	19.2	30.9
2012	22.4	34.6
2013	26.5	41.8
2014	24.8	38.5
2015	29.9	44.9
2016	32.6	48.5
2017	35.4	57.1
2018	38.4	61.4
2019	39.8	65.1
2020	6.7	1.1
2021*	0.04	-

* January-June

Sources: Ministry of Tourism and Sports/ www.thaiwebsites.com (2021); <https://www.knoema.com/atlas/Thailand/Tourism-receipts/Thailand-International-tourism-receipts> (n.d.); Phakdeephrot (2020)

Health and wellness tourism accounts for a significant proportion of the world's tourism consumption, with components ranging from hot spring bathing for leisure and recreation, through mineral water use in health treatments under the supervision of highly specialized medical professionals, to water treatments in the wellness and beauty therapy sector and the use of mineral water for drinking purposes (Erfurt-Cooper & Cooper, 2009). Hot Springs are a natural phenomenon that has hot water flowing up from underground. Thailand has 112 hot springs in the northern, western, central and southern locations with hot water temperatures at the surface from 40 to 100 degrees celsius. Hot springs are not only for tourist attractions but also for power generation, industry, and agriculture (<http://www.absolutethai.com/hot-springs-in-thailand/>, 2021). Natural hot springs across Thailand have been developed into tourist attractions, and wellness resorts offering health packages combining mineral baths, Thai traditional massage, and fitness facilities. Doi Saket hot springs are one of seven hot spring destinations in Chiang Mai, a northern province in Thailand. The local community developed a sharing bathhouse where local villagers bathe themselves in the morning and evening, especially in winter as part of their rural lifestyle (Citylife, 2019). According to Matichon Online (2018), Doi Saket has been promoted as a spa town and a hot spring village tourism destination with outdoor thermal pools, private bathrooms, parking with landscape adjustment for wellness tourism attraction site for both domestic and international tourists. This spa town has two large hot springs temperature of 80 degrees celsius, and 4-5 smaller hot springs, some of which are used by the villagers to bathe, wash, boil eggs or use to blanch vegetables to preserve food. It is the use of natural resources as the way of life of the community like in Japanese Onsen.

In Thailand, hot spring tourism is still niche tourism and has not attracted a large number of tourists as it should be (<https://www.oxfordbusinessgroup.com/analysis/quantity-and-quality-efforts-promote-country-high-end-destination>, n.d.)/Thailand builds its image as a high-end tourism destination). Doi Saket hot springs are currently managed in an old-style management--lacking in both service design of modern tourism and integration of different sectors in development. From the researcher's observation, the current development does not seem to meet the needs of customers, and thus not being able to create value-added products and services. In this regard, the researcher would like to study tourists' satisfaction with products, services, and quality development of the hot springs for wellness tourism at Doi Saket. It was expected that the obtained findings can shed light on quality development by stakeholders--the government, the private sector, and the local community--to create a competitive advantage for this location. This was to attract domestic and foreign tourists with uniqueness of products and services in support of the *sustainable economy* of the local community (Jetjirot, 2021).

2. Research Objectives

There were two research objectives:

- (1) To study tourists' satisfaction with the service products and service processes at the hot spring destination at Doi Saket, and
- (2) To assess the quality development of the service providers at the hot spring destination in terms of creativity and uniqueness in health promotion.

The emphasis of this research was on customer satisfaction, hot spring products, services, and quality development. The results of the study were expected to identify customer satisfaction with products and services of the hot spring destination, in order to develop the quality of service providers to meet needs of stakeholders and tourists. The researcher planned to collect data from both samples of stakeholders and tourists at Doi Saket Hot Springs.

3. Literature Review and Related Research

This section covers literature review in various aspects: customer satisfaction, health and wellness tourism, hot spring tourism, products and services of hot spring tourism, quality development, Doi Saket Hot Springs, followed by related research in the areas of hot spring tourism, customer satisfaction with hot spring products and services, quality development by hot spring providers, and hot spring creative tourism.

3.1. Literature Review

3.1.1 Customer Satisfaction

Customer Satisfaction Theory (CSAT) is a key performance indicator that tracks how customers are satisfied with an organization's products and/or services. It's a psychological state that is measured by customer expectations and reflects evaluated relationship between a customer or consumer and a company, an environment, a product, or a service. Satisfaction involves one of three psychological elements: cognitive (thinking/evaluation), affective (emotional/feeling), and behavioral (action). Expectations are beliefs (likelihood or probability) that a product and/or service with certain attributes, features, or characteristics will produce certain outcomes (benefits or values), given certain expected levels of performance based on previous affective, cognitive, and behavioral experiences. Expectations are often related to satisfaction and can be measured by (1) value of the product/service fulfilling the expectation, (2) like/dislike of the product/service, (3) the expected level of performance versus the desired expectations, and (4) satisfaction often determined by the frequency of use (<https://www.qualtrics.com/au/experience-management/customer/customer-satisfaction-theory/>, 2021). Customer satisfaction can be defined as a measurement that determines how happy customers are with a company's products, services, and capabilities. Customer satisfaction information obtained from surveys and ratings, can help a company determine how to best improve or change its products and services (<https://www.asq.org/quality-resources/customer-satisfaction>, 2021)

According to Mothersbaugh & Hawkins (2016), marketers have discovered that it is more profitable to maintain existing customers than to replace them with new customers. Retaining current customers requires that they be satisfied with their purchase and use of the product. Thus, customer satisfaction is a major concern of marketers. One must have a thorough understanding of the potential consumers' needs and of their information acquisition processes to succeed at this task. However, creating satisfied customers and thus future sales, requires that customers continue to believe that the brand meets their needs and offers superior

value after they have used it. The product or service must deliver as much or more value than customers initially expected, and it must be enough to satisfy their needs.

3.1.2 Health and Wellness Tourism (GWI, 2021)

Wellness tourism is the powerful intersection of two large and growing industries: the \$2.6 trillion tourism industry and the \$4.2 trillion wellness industry. Holistic health and prevention increasingly determine consumer decision-making, and people expect to continue healthy lifestyles and wellness routines when far from home. The Global Wellness Institute (GWI) defines wellness tourism as a travel associated with the activity of maintaining or enhancing one’s personal wellbeing. Wellness tourism is often conflated with medical tourism—not only by consumers but in destination marketing. Sometimes the term “health tourism” is also used as a catch-all to describe many types of medical and wellness services and activities—from open-heart surgery and dental care to destination spas and yoga retreats—causing further confusion. In fact, these two sectors operate largely in separate domains and meet different consumer needs.

The differences between health and wellbeing are:

- The medical paradigm treats poor health, injury, and illness, for example traveling to another place to receive surgery or dental treatment because it is more affordable, higher quality, or not available at home.
- Wellness refers to the proactive things to maintain a healthy lifestyle, reduce stress, prevent disease, and enhance our wellbeing. This is what motivates wellness tourism.

Global Wellness Institute (GWI) identifies two types of wellness travelers: (1) a traveler whose trip or destination choice is primarily motivated by wellness, and (2) a traveler who seeks to maintain wellness while traveling or who participates in wellness experiences while taking any type of trips for leisure or business. Every destination has its distinctive flavors in relation to wellness, linked with its local culture, natural resources, foods, and the like. Some travelers may be satisfied with a generic massage, exercise class, or smoothie. In particular, the millennial generation wellness travelers are interested in what the destination offers--that is, different from someplace else. These unique and authentic experiences, such as indigenous healing practices, ancient/spiritual traditions, native plants and forests, special muds/ minerals/ waters, vernacular architecture, street vibes, local ingredients and culinary traditions, history, and culture. There is always something unique to offer to wellness travelers because each destination is different.

Figure 1: Every Destination with Something Unique to Offer



Source: Global Wellness Institute (2021)

3.1.3 Hot Spring Tourism

A hot spring is a thermal spring having water warmer than 98°F (37°C); the water is usually heated by emanation from or passage near hot or molten rock (<https://www.dictionary.com/browse/hot-spring>, 2021). A hot spring, hydrothermal spring, or geothermal spring is a spring produced by the emergence of geothermally heated groundwater onto the surface of the Earth. The groundwater is heated either by shallow bodies of magma (molten rock) or by circulation through faults to hot rocks deep in the Earth's crust (Farmer, 2000). For thousands of years, humans have made use of hot springs for bathing, relaxation, or medical therapy. However, some are hot enough that immersion can be harmful, leading to scalding and, potentially, death (<https://www.nps.gov/subjects/geology/hot-springs.htm>, 2020). A hot spring or thermal spring has temperatures considerably higher than the air temperature of the surrounding region. Most hot springs discharge groundwater that is heated by shallow intrusions of magma (molten rock) in volcanic areas. However, some thermal springs are not related to volcanic activity (Rogers, n.d.). Erfurt-Cooper (2010) stated that natural hot springs or thermal springs are simply categorized by temperature as: (1) cold springs with temperatures less than 25⁰ C, (2) tepid springs with temperatures between 25⁰ C and 34⁰ C, (3) warm springs with temperatures between 34⁰ C and 42⁰ C, and (4) hot springs with temperatures above 42⁰ C.

People have enjoyed hot springs as physical relaxation for thousands of years. Even macaques or snow monkeys in Japan use hot springs to protect themselves from cold

stress. Hot spring baths (*onsen*) have been in use in Japan for at least two thousand years, traditionally for cleanliness and relaxation, but increasingly for their therapeutic value. In the Homeric Age of Greece, baths were primarily for hygiene, but by the time of Hippocrates, hot springs were credited with healing power. The popularity of hot springs has fluctuated over the centuries since then, but they are now popular around the world (Tubergen, 2002). In Thailand, hot springs have been used for a long time for direct bathing, boiling, and preserving agricultural products, curing and drying crops and foods (Charusiri et al., 2003).

Hot springs with high mineral content are often termed medicinal waters as a result of their physical and chemical characteristics and applied for thermal therapies to prevent illness as well as to restore health. The mineralization can become a major tourist attraction in its own right with spectacular results, as seen at Pamukkale in Turkey. Hot springs come in many forms and some emerge quietly out of the ground, but others arrive at the surface with great noise and visual effect, overwhelming in their unique natural forms. The geothermal manifestations, such as geysers, hot rivers, hot waterfalls, boiling lakes, and mud ponds are highly sought after as tourist must-see destinations worldwide, like Geyser in Iceland. While many hot springs are used only to serve as a draw-card for health and wellness spa tourism, the joint proximity to active volcanic environments offers some kind of added value. Visitors to hot springs range from domestic and international tour groups and people interested in nature and outdoor activities, scientists and researchers of unusual environments, to photographers and those who can afford the rather unique holiday experience. There has been a high number of hot spring environments with distinctive and unique natural surroundings in many countries that create economic value for the tourism industry (Erfurt-Cooper & Cooper, 2009). In addition, the healing powers of hot springs have been widely accepted in Europe and Japan as natural treatment options for various common ailments, such as boosting blood circulation, reducing stress and promoting sleep, relieving pain, and healing skin problems (Pope, 2020).

3.1.4 Types of Hot Springs in Asia

The example types of hot springs in Asia are:

- (1) Natural hot spring: Self-flowing hot spring within its original landscape, including seaside, forest, mountains, canyons, wetlands, bamboo forest, volcanoes. Emphasis is on the relaxing and restorative benefits of nature.
- (2) Leisure hot spring and Traditional Chinese Medicine (TCM): Relaxation and leisure tourism for the mass market. TCM-related services are added as a selling point: herb bath, wellness tea, and seasonal wellness buffet.
- (3) Spa hot spring: Spa resorts for the high-end market. Tranquil ambiance, 5-star service, and professional spa service. Sometimes TCM is added, for example, Brilliant Resorts, Banyan Tree, Sheenjoy.
- (4) Rehabilitation hot spring: More affordable, Asian-style sanatorium. It is now targeted mainly to seniors for basic body check, medical (usually traditional), recovery, physiotherapy, and fitness.

(5) Sauna hot spring: An urban model for business and family use. Traditional sauna centers add more elaborate hot spring features, including foot massage relaxation (with TVs).

(6) Entertainment hot spring: Hot Spring combined with entertainment facilities to fill the low season for resort revenue and business. Target customers are mainly families and groups.

(7) Conference & exhibition hot spring: Hot spring resorts often have large conference and corporate entertainment facilities (especially Karaoke Television or KTV), to balance the peak and low seasons in hot spring operations.

(8) Agriculture hot spring: Destinations that combine hot spring resources with eco-tourism—farms for fresh produce. Land and water are often mineral-rich, resulting in better tasting produce.

(9) Real estate hot spring: Wellness real estate is a popular trend in a struggling real estate market. Hot springs greatly add credibility and value to these developments.

(10) Spiritual hot springs: Geological Survey of India identified 350 hot springs in India. Many hot springs are valued for their religious significance. During religious occasions, devotees come from far and wide to touch the waters as part of their rituals.

(<https://www.nps.gov/subjects/geology/hot-springs.htm>. (2020, February 10). Geology: Hot Springs/Geothermal Features.)

3.1.5 Health Benefits and Bathing Etiquette

According to Sood (2012), balneotherapy is the use of bathing as a form of medical treatment widely practiced in Japan. Balneotherapy’s benefits have been demonstrated by global peer-reviewed medical studies even though considered an “alternative medicine.” Sulfur and magnesium found in hot springs promote skin health, while the heat of these baths can reduce inflammation and pain, and boost the immune system. Japanese onsen must be at least 25^o C, and some get to 100^o C.

Onsen bathing is an important part of Japanese culture, and Cheung (2021) reported its proper and well-established etiquette as follows:

- Undress before entering. At the onsen, everyone is expected to get stark naked—no exceptions and non-negotiable.
- Onsen baths are meant for soaking only, meaning not supposed to clean in the bath, scrub clean before dip in, and don’t make a splash.
- The optimal way of soaking is to submerge in the water up to the shoulder, hair is not supposed to touch the water, no towels in the water either.
- Onsen is a singular experience but seriously, no photos and no mobile phones.
- Though many onsen hotels offer baths indoors, soaking in the hot spring waters outdoors is the best way to go, especially in winter when snowing.

- Most onsen baths are gender-segregated but mixed baths do exist. Most allow towels or swimsuits for modesty but the ancient ones might not—enter at own peril.
- For safety don't soak for too long. Drink plenty of water before and after, but avoid alcohol. Eating right before or after bathing is not recommended.
- Onsen is a place for relaxation; don't be loud and obnoxious while talking with your companions.
- Finally, as leaving, there's no need to rinse after the bath but do wipe dry before reentering the dressing area.

3.1.6 Wellness Tourism Quality Standards of Natural Hot Springs in Thailand

The standards of natural hot spring destination are intended to be a framework for managing natural hot spring destinations with an emphasis on setting the standards necessary for quality services. The safety of tourists is important and must not abuse natural resources and the environment. The natural hot spring wellness tourism standards are to be used by the establishments responsible for tourism destinations as a tool to verify their tourist destination standards. They convey important information to guide tourists' decision-making as well as to upgrade services at natural hot spring wellness tourism destinations in Thailand.

There are two components of quality standards of natural hot spring destinations as follows (www.tourism.go.th, 2014):

Component 1: Key standard of wellness tourism destination of natural hot springs for services essential for tourist attraction destinations.

Component 2: Perspective as a wellness tourism destination of natural hot springs as being unique in various fields, potential to support future developments, and utilization of the area for sustainability.

3.1.7 Doi Saket Hot Springs

Doi Saket Hot Springs are located at Doi Saket District, Chiang Mai, in the northern part of Thailand. They are natural hot springs originating from the plain which is surrounded by rice fields. The local authorities have developed the hot springs into a sharing bathhouse where local villagers come to bathe in the morning and cold evenings. The villagers usually bring bowls and bathe in the middle of nature and cool air, as a local rural lifestyle. There are two hot springs for bathing--the first as a public bath on the roadside. There are many private bathrooms at the hot springs, a pond for dipping feet, a hot spring pool, a pond for boiling eggs, restaurants, a coffee shop, and traditional massage areas. In 2018, there were Spa City and Onsen Villa as a major tourism project at Doi Saket to renovate, develop, and expand tourism business, and landscape the overall area with a swimming pool, a private plunge pool, a hot spring pond, a thermal bath building, toilets, traditional massage services, and parking spaces. The project was based on the sufficiency economy village tourism model to put the hot springs

at Doi Saket as one of the main destinations for wellness tourism for both domestic and foreign visitors.

3.2 Related Research

This section reports findings from research related to hot spring service quality, consumer satisfaction, and issues of concern for hot spring tourism.

Chen et al. (2009) studied the determinants for improving hot spring customer satisfaction. In the hot spring tourism industry, customer satisfaction has become a crucial issue for competitiveness. A company cannot implement several customer satisfaction improvements due to limited resources. The researchers asserted that companies should evaluate the relationships among success factors and paid attention to determinants for their improvement implementation. The results show “Environment Quality,” “Special Resource,” “Convenience,” “Food,” “Service Quality,” and “Facilities” as decisive factors for customer satisfaction. The findings generate important implications for hot spring management and practice, which can help hot spring operators to better plan and design effective improvement strategies to attract potential new consumers and retain their current consumers, though with limited resources.

Lee et al. (2009) explored a demand-side perspective on the factors determining the attractiveness of Taiwan as a hot spring tourism destination. Three variables--“gender,” “age” and “perceived importance of accommodation”-- were significant predictors of the frequency of hot springs visits. The findings of this study suggested that hot springs proprietors should work closely with the government sector to ensure tourist safety and security and to extend the appeal of the hot spring tourism experience into health promotion and medical treatment. Hot spring proprietors seemed to focus on older males and were less concerned about the provision of quality accommodation.

Boekstein (2014) wrote a paper on “from illness to wellness--has thermal spring health tourism reached a new turning point?” to show a turning point for the thermal spring health tourism product from illness treatment to health promotion and wellness. The paper discusses the historical development and geographical distribution of thermal spring tourism, new highlighted developments, and those involved in local communities. It is concluded that the medicinal properties of thermal waters are now successfully used for wellness treatments. It is recommended that developing counties create thermal spring tourism products that combine thermal water resources with location-specific healing methods and cures, but are extended to incorporate surrounding natural and cultural attractions, and where possible, involve local communities for benefits and participation.

Thermal bathing facilities are in many countries and have an important and longstanding reputation for successful health and wellness treatments based on the use of geothermal waters sourced from natural hot springs. Today, one of the fastest-growing sectors of world tourism is health and wellness spa tourism. Many holiday destinations have offered the recreational use of geothermal springs in resorts and water parks combined with access to

medical thermalism under established standards. Associated geothermal phenomena, such as boiling lakes, mud ponds, and erupting geysers have also fascinated people wherever they occur and many have been developed into unique tourist destinations with a high visual impact (Erfurt-Cooper, 2010).

(Ladplee, 2019) examined tourists' behavior and satisfaction with health tourism at Hin Dad Hot Springs, Thong Pha Phum District, Kanchanaburi in four areas: Location, Facilities, Personnel (or Service providers), and Tourism Activities.

(1) Location: the site should provide more space for recreation in the surrounding area. Regularly checking the quality and quantity of minerals water of the soaking pond is to prevent microbes that cause diseases which may come from some other customers.

(2) Facilities: the operator should provide a private room zone for private mineral bath operated regularly, and increase a variety of restaurants for tourists to choose healthy food or proper diet.

(3) Personnel/Service providers: the service provider should increase the number of service staff members with knowledge about health tourism attractions around hot springs to be ready to serve tourists during operating hours. It is also recommended for service providers to wear uniforms so that tourists can identify them easily at Hin Dad Hot Springs.

(4) Tourism activities: the tour organizer should increase variety in activities and generate more activities with involvement of members of the community.

Hot spring tourism offers multiple aspects of cultural experience and physical and mental relaxation. It has increasingly attracted attention as it meets the high demand of tourists for physical and mental well-being due to people's stressful and competitive lifestyle in modern society. The aspects of health care and disease treatment are the fundamental value of hot spring tourism. For a comprehensive understanding of the health values of hot spring tourism, this paper reports the effects of hot springs on human health from the perspectives of heat, elements and functions as in bathing. It also shows the relationship between hot spring tourism and human health, thereby providing a conceptual reference for the future development of hot spring tourism.

4. Research Methodology

The researcher used a questionnaire to collect quantitative and qualitative data. Quantitative data dealt with the relationship between one aspect (an independent variable) and another (a dependent variable) and the customer satisfaction with the products and services of hot spring tourism destinations. The researcher tried to quantify the relationship between variables featured in the study: demographic profile, customer behavior, and mean values of products and services in hot spring tourism at Doi Saket, Chiang Mai, Thailand. Qualitative data were the respondents' viewpoints in response to the open-ended question regarding their satisfaction with quality of hot spring products and services.

4.1 The Respondents

The respondents were 200 customers and stakeholders of the hot spring tourism at Doi Saket, selected by purposive sampling.

4.2 Research Instrument

The study used both primary and secondary data to understand consumer behavior toward products and services in hot spring tourism. The researcher wanted to identify the customers' satisfaction toward products, service, and quality development at Doi Saket hot spring. The researcher used a questionnaire in four sections: (1) demographic profile, (2) tourists' behavior in hot spring tourism, (3) satisfaction with products and services, and (4) an open-ended question on quality development from tourism providers. The questionnaire put the respondents' satisfaction with product/ service quality on a Likert scale, ranging from 1=very dissatisfied, 2=dissatisfied, 3=neutral, 4=satisfied, 5=very satisfied. The researcher wanted to assess product and service quality in terms of environment, mineral quality, bathroom facility and private zone.

5. Results and Discussion

5.1 Demographic Variables

The respondents' demographic variables are presented in Table 2 as shown below.

Table 2: The Respondents' Demographic Variables

Variables	Details	Frequency	Percent
Gender	Male	95	47.5
	Female	105	52.5
Age group	Less than 20	11	5.5
	21-30	55	27.5
	31-40	53	26.5
	41-50	26	13.0
	51-60	36	18.0
	Older than 60	19	9.5
Marital status	Single	74	37.2
	Married	119	59.8
	Divorced/Widowed	6	3.0
Level of education	Primary school	21	10.5
	High School	54	27.0
	Vocational Certificate/Diploma	23	11.5
	Bachelor degree	89	44.5
	Master degree	8	4.0
	Higher than master degree	5	2.5
Occupation	Officers	28	14.0
	Private company employees	28	14.0
	State enterprise employee	12	6.0
	Agriculturist	21	10.5
	Businessman/Owner	18	9.0

Variables	Details	Frequency	Percent
	Retiree/Unemployed	8	4.0
	Workers	35	17.5
	Students	33	16.5
	Others	17	8.5
Monthly income (baht)	Less than 5,000	40	20.0
	5,001-10,000	44	22.0
	10,001-15,000	30	15.0
	15,001-20,000	39	19.5
	20,001-25,000	19	9.5
	More than 25,000	28	14.0

Most of the tourists who visited Doi Saket Hot Springs, Chiang Mai were 105 females (52.5%), and 95 males (47.5%). Most tourists were between 20-30 years old at 55 (27.5%), followed by 31-40 years old at 53 (26.5%); 51-60 years old at 36 (18.0%); 41-50 at 26 (13.0%).

5.2 Consumer Behavior

Table 3: Customers' Behavior at Doi Saket Hot Springs

Variables	Details	Frequency	Percent
Address	Chiang Mai	127	63.8
	Others	72	36.2
Information channels	Relative/friend	114	57.3
	Travel agency	8	4.0
	Radio/television	9	4.5
	Internet	29	14.6
	Magazine/Journal	15	7.5
	Advertising/Public Relations	-	-
	Others	24	12.1
Vehicle for traveling	Private car	154	77.0
	Bus	12	6.0
	Motorcycle	31	15.5
	Bicycle	3	1.5
Number of participants	Alone	28	14.0
	2-4 people	117	58.5
	5-7 people	40	20.0
	8-10 people	14	7.0
	More than 10 people	1	.5
Number of times to visit hot springs	First time	101	50.5
	More than 1 time	99	49.5
Number of times to do activities or using services at hot springs	once a week	34	17.1
	once a month	45	22.6
	2-3 times a month	22	11.1
	others	98	49.2

Variables	Details	Frequency	Percent
Service rates in hot spring tourism	Less than 100 baht	109	54.5
	101-200 baht	58	29.0
	201-300 baht	21	10.5
	More than 300 baht	11	5.5

Customer behavior in terms of decision-making is shown in Table 3. The respondents made their decision on visiting the hot springs as follows: most of the visitors were local people (127=63.8%) living in Chiang Mai; 72 (36.2%) from other provinces, 114 (57.3%) decided to visit the hot spring by information from friends/relatives, 154 (77.0%) traveled by private car, 117 (58.5%) traveled with 2-4 people on the trip, 45 (22.6%) preferred to spend time at the hot spring once a month, 109 (54.5%) were willing to pay less than 100 baht per person.

5.3 Objectives of Traveling

Table 4: Objectives of Traveling to Doi Saket Hot Springs

Objectives of Traveling	Frequency	Percent
Relaxation/Recreation	146	73.0
Cure disease	14	7.0
Meet friends	10	5.0
Stress relief	30	15.0

Table 4 shows the objectives of tourists visiting Doi Saket Hot Springs: 146 (73%) traveled to this place for relaxation/ recreation, 30 (15%) came to relieve stress, and 14 (7%) visited for disease-treatment.

5.4 Service Activities for Tourists

Table 5: Service Activities for Tourists at Doi Saket Hot Springs

Service Activities at Hot Spring Tourism	Frequency	Percent
Mineral bath/hot spring bath	152	76.0
Spa massage	57	28.5
Have a meal	75	37.5
Buy souvenirs	11	5.5
View the scenery	31	15.5
Others	1	.5

Note: Respondents can answer more than one activity.

Table 5 reports service activities for tourists at Doi Saket Hot Springs: 152 (76%) enjoyed mineral bath or hot spring bath, 75 (37.5%) visited this place to have a meal, and 57 (28.5%) came for spa massage.

5.5 Customer Satisfaction

Table 6: Customer Satisfaction with Products and Services at Doi Saket Hot Springs

Customer Satisfaction with Products and Services at Doi Saket Hot Springs	Mean	SD.
The hot spring tourism destination has an appropriate environment for service use.	3.83	0.697
The hot spring tourism destination is equipped with facilities apposite for service use.	3.84	0.697
Reasonable service.	3.88	0.748
Cleanliness of the water for appropriate in-service use.	3.86	0.722
The utilization of the area is clearly allocated, with space for various activities/services conveniently.	3.91	0.803
There is privacy for each user.	3.92	0.761
Hot spring tourism has safety management of the destination.	3.90	0.77
Hot spring tourism destination is easily accessible by large vehicles, such as cars, buses, or sightseeing vehicles.	4.03	0.83
There are other types of tourism activities/services within the hot spring tourism destination.	3.84	0.80
There are signs or other types of media to show the types of use of the natural hot springs, such as for bathing, for foot baths, for cleansing, and the like.	3.91	0.82
There are signs or other types of media to show the benefits of using the hot spring tourism destination.	3.71	0.73
There are signs or other types of media to show how to soak/bath in hot springs.	3.72	0.79
There are signs or other types of media to display advice, announcements, or cautions for users with congenital diseases.	3.68	0.89
Message displayed in badges or other media contains complete and detailed content.	3.68	0.82
Message displayed in signs or other types of media is easy to understand.	3.74	0.78
Messages displayed on signs or other media are in both Thai and English.	3.80	0.83
The place has installed signage or other types of media clearly visible.	3.80	0.77
There is a sign or device indicating the water temperature in the hot spring/bath service area.	3.72	0.95
No bad smell in hot spring room/hot spring bath/pool.	3.72	0.78
There is enough light for the service area thoroughly.	3.90	0.73
There are rooms/bath pools especially for the disabled or the elderly.	3.70	0.82
Handrails or other devices are installed for convenience and safety of the disabled or the elderly.	3.77	0.81
There is a cold water or shower to alternate or in combination with a hot spring bath.	3.82	0.80
There is an alarm bell to call in the private room/ bath pool in case of an emergency.	3.71	0.87
There is an alarm bell to call in the common room/ bath pool in case of an emergency.	3.67	0.89
There is a watch that can be seen clearly and easy to look at all times.	3.74	0.82
Total	3.81	0.50

The customers’ satisfaction with products at Doi Saket Hot Springs tourism is shown in Table 6. The respondents were positive to the hot spring tourism destination at Doi Saket as shown by high mean value of satisfaction: (1) easy access by large vehicles, such as cars, buses or sightseeing vehicles with high satisfaction at 4.04; (2) privacy at 3.92; (3) signs or other types of media to show the benefits of using the hot spring tourism destination at 3.91; (4) safety management at the destination and sufficient lighting in the service areas at 3.90, respectively.

5.6 Pearson Chi-square

Table 7: Number and Chi-square of the Relationship between Status and Travel Objectives

Objectives of Traveling	Status						Pearson Chi-square P = .000
	Single		Married		Divorce		
	Number	%	Number	%	Number	%	
Relaxation/Recreation	48	67.6	92	78.0	4	66.7	
Cure disease	4	5.6	8	6.8	1	16.7	
Meet friends	4	5.6	4	3.4	0	0	
Stress relief	15	21.1	14	11.9	1	16.7	
Total	71	100	118	100	6	100	

* Significantly at the .05 level

Statistical assumptions

H₀: p = 0 Objectives of traveling is not dependent on status

H₁: p ≠ 0 Objectives of traveling is dependent on status

P (probability) = 0.000, α (significance level) = .05

Therefore, the P-value is less than the value α, so rejected H₀ and accepted H₁.

In conclusion, the objectives of traveling are dependent on the status at the significance level .05.

Table 7 shows the objectives of traveling as dependent on status at the significance level 05. Single visitors (48 of 71 = 67.6%) traveled for relaxation/recreation while married visitors (92 of 118 = 78%) also made their trip for relaxation/recreation. The other four divorced visitors (4 of 6 = 66.7%) shared the same traveling objective.

5.7 Mean, S.D. and t-test

Table 8: Mean, S.D and t-test of Product/Service Satisfaction at the Hot Springs Classified by Gender

Hot Spring Products/Services	Male		Female		t	P
	Mean	S.D	Mean	S.D		
The hot spring tourism destination has an appropriate environment for service use.	3.82	.684	3.84	.712	-.156	.876
The hot spring tourism destination is equipped with facilities apposite for service use.	3.88	.666	3.81	.725	.773	.441
Reasonable service	3.83	.709	3.93	.783	-.943	.347
Cleanliness of the water for appropriate in-service use.	3.97	.721	3.77	.714	1.957	.052
The utilization of the area is clearly allocated, with space for various activities/services conveniently.	3.93	.815	3.90	.795	.197	.844
There is privacy for each individual user.	3.88	.797	3.95	.729	-.626	.532
Hot spring tourism has safety management of the destination.	3.91	.800	3.90	.735	.022	.983
Hot spring tourism destination is easily accessible by large vehicles such as cars, buses, or sightseeing vehicles.	4.06	.755	3.99	.898	.616	.539
There are other types of tourism activities/services within the hot spring tourism destination.	3.90	.777	3.78	.816	1.121	.264
There are signs or other types of media to show the types of use of the natural hot springs, such as for bathing, for foot baths, for cleansing, and the like.	3.89	.765	3.92	.867	-.244	.808
There are signs or other types of media to show the benefits of using the hot spring tourism destination.	3.71	.650	3.71	.797	-.061	.952
There are signs or other types of media to show how to soak/bath in hot springs.	3.73	.791	3.71	.797	.131	.896
There are signs or other types of media to display advice, announcements, or cautions for users with congenital diseases.	3.75	.825	3.63	.947	.968	.334
Message displayed in badges or other media contains complete and detailed content.	3.63	.730	3.73	.899	-.826	.410
Message displayed in signs or other types of media is easy to understand.	3.66	.738	3.82	.810	-1.399	.163
Messages displayed on signs or other media are in both Thai and English.	3.82	.758	3.78	.892	.358	.721
The place had installed signage or other types of media clearly visible.	3.82	.743	3.78	.800	.384	.701
There is a sign or device indicating the water temperature in the hot spring/bath service area.	3.74	.970	3.70	.934	.259	.796

Hot Spring Products/Services	Male		Female		t	P
	Mean	S.D	Mean	S.D		
No bad smell in hot spring room/hot spring bath/pool.	3.78	.717	3.66	.832	1.044	.298
There is enough light for the service area thoroughly.	3.88	.666	3.92	.784	-.375	.708
There are rooms/bath pools especially for the disabled or the elderly.	3.75	.729	3.66	.903	.750	.454
Handrails or other devices are installed for the convenience and safety of the disabled or the elderly.	3.80	.681	3.74	.918	.524	.601
There is a cold pool or shower to alternate or in combination with a hot spring bath.	3.79	.770	3.85	.837	-.552	.581
There is an alarm bell to call in the private room/ bath pool in case of an emergency.	3.69	.868	3.73	.874	-.308	.759
There is an alarm bell to call in the common room/ bath pool in case of an emergency.	3.68	.918	3.66	.867	.163	.871
There is a clock that can be seen clearly, easy to look at all times.	3.78	.844	3.72	.801	.518	.605
Total	3.8135	.48055	3.8073	.52678	.085	.932

* Significance level = 0.05

Table 8 shows the different levels of customers' satisfaction of products and services at Doi Saket Hot Springs as classified by gender. The results revealed that the satisfaction level of product/services was not significantly different at 0.05. The male and female visitors of Hot Spring 4 did not differ in their criteria in judging products and services of the hot springs.

5.8 Services Delivered at Doi Saket Hot Springs

From the researcher's observations and interviews with the stakeholders, that is, local chiefs, government administrators, community, and tourists at Doi Saket Hot Springs, they were concerned with two issues: (1) the standards of natural hot spring wellness tourism attractions, and (2) the potential of Doi Saket as a wellness tourism destination

5.8.1 The Main Standards of Natural Hot Spring Wellness Tourism Attractions

The stakeholders expressed their concern as follows:

- (1) The quality of hot springs, water has a high temperature but there is a limitation in foul smell of sulfur. The host should find ways to reduce the smell of water with the use of herbs to deodorize the bathroom.
- (2) Private and common hot spring bathrooms/hot spring bath pond/swimming pool should be separated for men and women. The soaking room should be clearly divided for men/women in the areas of the swimming pool and massage, including the water system for separate sections.
- (3) There must be clear separation of male and female shower/toilet/changing rooms. Toilets require regular cleaning.

- (4) Security management needs upgrading from water temperature indicating devices to personnel training in tourism safety management at regular times and in emergencies.
- (5) Overall tourism destination environmental management is good but should provide more trash bins in various spots to keep the surrounding clean. They recommended planting large trees for more shady areas.

5.8.2 Potential Of Doi Saket for a Natural Hot Spring Wellness Tourism

Destination

- (1) Doi Saket Hot Springs could be a good tourism attraction, with water temperature up to 90 C. Egg boiling ponds and various hot spring products are appealing to tourists; more activities should be added to the day-tour schedule.
- (2) The place can accommodate more tourists with a variety of services, such as body massage, foot bath and massage, soaking room, private/communal bathrooms, and hydrotherapy swimming pool. The location is large and easily accessible; the host can modernize it with appropriate landscaping with boutiques or shops, eating areas and activity/ service points—with clear signs for direction.
- (3) The host should provide more staff to guide hot water bathing. More are requested of resting spots, sitting areas, and parking space.
- (4) There should be a clear-cut policy from the local authority on land use for sustainable tourism.

6. Conclusion and Future Research

6.1 Conclusion

The researcher concluded the study with three major points:

- (1) Consumer satisfaction with products and services in hot spring destinations.
Overall, the respondents were satisfied with the hot spring tourism products and services and the top 5 were: tourists are most satisfied with accessibility by large vehicles with an average of 4.03, followed by privacy for each user with an average of 3.92, signage/media usage with an average of 3.91, destination safety management and adequate lighting for the destination with the same mean of 3.90, respectively.
- (2) Service processes in hot spring destinations.
The service process of the hot springs at Doi Saket has four steps: (1) Hospitality, (2) Reception (Front Stage), (3) Back Support Unit (Back Stage Action), and (4) Support Process Unit.
- (3) Quality of service providers in hot spring destinations.
Doi Saket Hot Springs have temperatures up to 90 degrees celsius that can boil eggs in a few ponds; the location is spacious and can be modernized and allocated into proportions for various functions. The hot springs have a variety of products, such as Thai massage, foot bath, hot bath, private/communal bath, hydrotherapy pool, local homestay, shops and restaurants. The respondents identified such limitations as too few activities within tourist attractions, the small number of staff, services not up to

expected standards, limited parking space, a few resting points, and food shops. In such a scenario, service providers have to create more attractive products and develop the quality of service especially by the training standards of staff and service quality development.

For a hot spring tourism destination to reach customers successfully, managers need to recognize the target markets to customize their products and services to match the needs of different customers. This research showed quality and service as an essence of hot spring tourism. The findings of this research pointed to most respondents' decision-making by motivation from friends and relatives. The key objective of the customers to visit hot springs was for relaxation with mineral bath/ hot spring bath at Doi Saket. Price is also one of the key factors in attracting visitors to spend their time on organized activities and services. It is important that the host be creative in attracting and satisfying customers to the extent of deciding to revisit Doi Saket.

6.2 Future Research

The researcher suggested further studies in hot spring tourism, particularly the facilities and services of the destination, the quality of mineral water, and other recreational activities. In addition to the issues on products and services of the hot springs, it would be possible to investigate further into other related areas, especially such crucial determinants as *service process management*, *staff management*, *hot spring destination management*, and *holistic hot spring wellness*. Future research on these identified issues could be carried out in new geographical areas in Thailand. This is to have a comprehensive picture of customers' choice of hot springs for their varied needs so that managers can adjust their products, services and relevant facilities creatively and effectively.

7. The Author

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