

# A Qualitative Research Factors Affecting Patient Satisfaction and Loyalty: A Case Study of Smile Family Dental Clinic

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## ABSTRACT

This study aims to identify factors affecting patient satisfaction and loyalty in private dental practice using Smile Family Dental Clinic as a case study (Convenience Sampling). The researcher identified the factors (dental practice-related factors) which affect patient satisfaction and loyalty regarding their efforts to increase dental practice quality to respond to patients' demands and needs, influencing patient satisfaction and loyalty. The literature review indicated that previous studies in the healthcare sector confirmed the relationship mainly are from the quantitative design. Still, few support the dental care services (private dental practice) sector in the qualitative approach.

The researcher developed the theoretical framework from high valid sources of previous research and the consumer behavior model of Kotler & Keller (2016). The elements of dental practice-related factors include Prices, Facilities, Dentist Services, and Staff Services, which based on Kim et al. (2012), patient satisfaction and patient loyalty were based on previous research. Purposive Sampling in a total of 10 respondents from 3,689 cases of the clinic's population was in a data collection process through online Semi-structured interviews and content analysis adopting NVivo software.

The results showed that patients' perceptions of dentist services are essentially the most, followed by staff services, prices, and facilities. Satisfaction on factors effect on patient loyalty (Revisit and Recommendation Intention). Recommendation from peers or relatives influencing them to choose a clinic. A dentist's reputation is the most recommendation. Patients are satisfied with dentist and staff services responding to their needs and expectations. The reasonable price and the costs are not high, influencing their satisfaction. Facilities are the least important factor. Further research may help the decision manager develop a marketing plan and strategies in the private dental healthcare sector. The results could be applied to improve quality management and increasing customer satisfaction and loyalty in any company services sector.

**How to cite this paper:** Supaprawat Siripipatthanakul "A Qualitative Research Factors Affecting Patient Satisfaction and Loyalty: A Case Study of Smile Family Dental Clinic" Published in International Journal of Trend in Scientific Research and Development (ijtsrd), ISSN: 2456-6470, Volume-5 | Issue-5, August 2021, pp.877-896, URL: [www.ijtsrd.com/papers/ijtsrd44975.pdf](http://www.ijtsrd.com/papers/ijtsrd44975.pdf)



IJTSRD44975

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**KEYWORDS:** Factors, Dental Practice, Patient Satisfaction, Loyalty, Qualitative Study

## 1. INTRODUCTION

### 1.1. Background of the Research

Founded in 2016, Smile Family Dental Clinic is a private dental practice provider in Chonburi, Thailand. Nowadays, dental clinics have been expanded regarding the rapid growth of industries and their effect on increasing dental care service demands. The clinic provides a routine in screening, X-Ray,

tooth filling, tooth extraction, tooth impaction removal, endodontic treatment, dentures (the dental prosthesis), scaling (tooth cleaning), etc. Therefore, understanding the factors affecting patient satisfaction and the intention to revisit the patients' clinic (patient loyalty) benefits the clinic to improve the strategies and dental practice's quality.

Changing from a disease-centered concept to a patient-centered model is one of the most significant and comprehensive developments in the world's largest and most comprehensive healthcare sector. (Cortada et al., 2012) It is necessary to research to understand better the various characteristics of patient-centered care and its acceptability and comparative effectiveness in the healthcare setting. (Jayadevappa&Chhatre, 2011) Healthcare marketing impacts consumer behavior, which in turn has a significant effect on healthcare service decisions. (Kay, 2007) The patient-centered care approach creates a more appealing patient experience and is a fundamental practice for providing high-quality healthcare organizations. Patient satisfaction ratings have improved in organizations that have implemented patient-centered care. (Charmel & Frampton, 2008) The core of these enhancements is to ensure customer loyalty, whether through repeat visits to the clinic or marketing services. (Alhidari&Alkadhi, 2018)

The following dental practice-related characteristics were deemed critical: 1) dentist (dentist provides personal attention, the dentist uses most up-to-date techniques, dentist's concern for patient's pain and fear); and 2) dental practice location. 3) Facilities (ability to schedule an appointment conveniently, reasonable waiting time, convenient office hours, convenient physical location, and convenient parking). 4) Staff attitude and helpfulness; price; and other factors. Furthermore, the dental hygienist's services impact patient satisfaction and the likelihood of returning to the hospital. (Kim et al., 2012) Consumer satisfaction can influence the likelihood of a recommendation or a return visit and serve as an indicator of consumer loyalty. (Picón et al., 2014, Han & Hyun, 2015) Patient loyalty is also increased when patients are pleased with the services provided by the healthcare providers they use. (Anbori et al., 2010)

The qualitative approach is supported by a small number of studies, even though many studies support various factors that could influence patient satisfaction and loyalty in dental clinics. Smile Family Dental Clinic will be used as a case study, and the researcher will contribute in-depth qualitative research and clarification of these factors. It will assist the clinic manager in developing marketing strategies to improve the quality of the clinic or the quality of the dental practice and patient satisfaction and loyalty in the private dental healthcare sector.

## 1.2. Research Questions

RQ1: What are the factors that influence patient satisfaction in the clinic?

RQ2: What are the factors that influence patient loyalty in the clinic?

## 1.3. Research Objectives

RO1: To identify the factors that influence patient satisfaction in the clinic.

RO2: To identify the factors that influence patient loyalty in the clinic.

The results may help the dental clinic's manager (dentist) develop their strategies and improve dental practices' quality through these factors.

## 1.4. Research Limitations

Numerous studies support patient satisfaction predictors; a company's brand equity may influence patient loyalty. (Al-Borie et al., 2016), marketing mix services (Al-Qarni et al., 2013, Dorbos&Katsaliaki, 2017), age and gender differences (Akbar & Ayuandyka, 2018), trust (Al-Ansi et al., 2019). Also, dental services marketing (Asefzadeh et al., 2012), brand image (Cham et al., 2014, Asnawi, et al., 2019, Köseoğlu&Mutlu, 2019). Corporate social responsibility: CSR. (Martinez & Del Bosque, 2013, Hossain et al., 2019) Service quality (Li et al., 201, Jeon et al., 2014, Han & Hyun, 2015, Kitapci et al., 2014, Shabbir et al., 2016, Rocha et al., 2017, Meesala& Paul, 2018), physician communication style. (Cousin et al., 2012), emotional intelligence (Bhalerao et al., 2017), healthcare branding (Odoom et al., 2019). Thus, it may not include these factors in this study regarding the limited time.

## 2. Literature Review

### 2.1. Factors (Dental Practice-Related Factors)

Patient satisfaction with healthcare providers (hospitals) should be improved by focusing on the facility's convenience, medical price, doctors, nurses, and staff, which will result in a high level of intent to return to the facility for further treatment. (Park et al., 2014) The following were the dental practice-related attributes that the consumer perceived to be significant (in the faculty of dentistry): The dentist (for example, quality of care, dentist's professionalism, patient explanation of treatment, and participation in the treatment decision, among other things). 2) Affordability and accessibility (examples are convenient times, the reasonable waiting time to get appointments, etc.), 3) The staff (their attitude and helpfulness), and 4) the price. (Kim et al., 2012) Thus, the factors that influence patient satisfaction and loyalty in the study (a dental clinic) are dentist services, staff services, facilities, and prices, which is based on Kim et al. (2012) and Park et al. (2014)

#### 2.1.1. Dentist Services

Dental patients desire a dentist with professional and interpersonal skills to reduce their anxiety while also

being completely satisfied with their visit. (Riley et al., 2014) When patients consult with doctors, they have high expectations of what will happen. After the meeting, they can discuss whether or not these expectations have been met, if necessary. When possible, the doctor should seek the patient's input and participate in the decision-making process. (Ladise et al., 2018) According to Kim et al. (2012), Dentist services are the dentist's practice of paying attention to patients, using the most up-to-date techniques, and caring for patients' pain and anxiety during dental procedures. Fernandez et al. (2016) suggested choosing a dentist for dental treatment should be based on the dentist's reputation and feedback from colleagues and family members. For more than two-thirds of patients (68.6%), the dentist's level of education played a role in their decision about which dental care provider they would go with. According to Dobros and Katsaliaki (2017), dentists strongly agree (Mean 3.96) that advertising should be avoided because it violates the ethical code established by the legislation.

Regarding dentist services, the dental practice could be characterized by the fact that the doctor is always well-dressed and clean, solicits patients' opinions, and encourages them to participate in decision-making. Consider the patient's desires and needs and try to meet them all at the same time. They should have sufficient expertise and be excellent at what they do. Furthermore, the doctor possesses interpersonal skills that can assist the patient in relaxing. (Rocha et al., 2017; Ladise et al., 2018; Akbar et al., 2019; Riley et al., 2014).

### 2.1.2. Staff Services

The attitude or helpfulness of the staff is essential when anyone comes to the Staff Services. (Kim et al., 2012) The attitude is a long-term tendency to react consistently to various affective, cognitive, and behavioral components. (Zikmund, 2003) In a dental practice, services such as scheduled plans and shorter wait times will increase patient satisfaction and encourage them to return more frequently. (Asefzadehet al., 2012) Personnel, the staff's attitude, and the staff's helpfulness are all referred to as staff services. Staff Services include individuals who can frequently assist patients, collaborate in their best interests, and provide personal attention. (Rocha et al., 2017) As a result, dental practice-related Staff Services are always willing to assist patients, collaborate in the patient's best interests, provide patients with personalized attention, ensure that they receive prompt service, and know their requirements. (Rocha et al., 2017)

### 2.1.3. Facilities

The term "medical facility" refers to a location that contains structures, equipment, and resources that have been provided for a specific purpose. The Cambridge Dictionary defines facilities as the extent to which a functional and technological infrastructure is in place to support healthcare delivery. (Alaiad& Zhou, 2013) Facilities impact patient satisfaction. (Thanveer et al., 2010)

According to some research, dental practice-related facilities are defined as the degree to which a dental clinic's administrative and infrastructure are in place to support dental care services. Following Kim et al. (2012), Rocha et al. (2017), and Akbar et al. (2019), the dental practice-related facilities include a convenient physical location with ample parking, convenient office hours, a clean and comfortable waiting room restroom, and a clean and comfortable waiting room floor. When it comes to dental practices, facilities with convenient parking, up-to-date equipment, wait time comparable to the appointment time, or the ability to schedule service are important considerations. It includes the cleanliness and consistency of the waiting area, toilet, and floor and the cleanliness of the materials and supplies used in the care.

### 2.1.4. Prices

The value of items with the unitality required to acquire a product or service is referred to as prices. (Al-Qarni et al., 2013) Many people believe that dental treatment is prohibitively expensive and that it has become increasingly so. (Wanget al., 1996) Offering services at reasonable prices is a crucial component of the pricing strategy in the healthcare industry. The cost of treatment impacts the quality of care and adherence to consistent pricing policies. (Sreenivas et al., 2013) More dentists are reducing prices, but somebody believes it indicates poor quality services. A competition-based pricing policy is being implemented to keep patients from switching between dentists and other healthcare providers. (Dobros&Katsaliaki, 2017) The importance of pricing in influencing purchasing decisions to use dental clinics regarding the dental care cost should not be expensive and should be within reach. (Bahadori et al., 2015, Desai & Chandawarkar, 2015). Dentists frequently criticize the commercialization of dentistry for emphasizing fees—discounts, competition, and treatment packages—instead of on the patient. (Porter & Grey, 2002). The costs of providing care determine the prices that patients pay. It is something that dental patients have taken into consideration. (Kay, 2007, Asefzadesh et al., 2012) Dental patient satisfaction is influenced by a variety of factors, including price



(dental fees). (Thanveer et al., 2010) Price has proven to be a crucial factor in determining buyer preference. Although consumers who have access to price information and price discounters put pressure on retailers to lower their prices, retailers are not required to do so. (Kotler & Keller, 2016) But Pricing dental services based on competition does not appear to be an option, according to the perception of most dentists (60 percent) (Dobros&Katsaliaki, 2017) Many people who would like to use healthcare services were deterred from doing so because of the high cost of healthcare services. (Anbori et al., 2010). The reasonable cost of dental services is a factor that influences marketing. (Asefzadeh et al., 2012) It was discovered that the price and the quality of services were related. Higher prices were associated with higher levels of care quality, and higher prices were associated with higher levels of care quality. (Whitney et al., 1997) The price represents the monetary value of services. Pricing for dental practices, including dental care costs, is affordable or not prohibitively expensive, the dental fee cost is reasonable, and the price versus quality ratio is appropriate. (Anbori, 2010, Sreenivas et al., 2013, Akbar et al., 2019)

## 2.2. Patient Satisfaction

Satisfaction is about the feelings of pleasure or disappointment experienced by a person after comparing the perceived performance (or outcome) of a product or service to expectations. If the performance or experience does not meet the customer's expectations, the customer is dissatisfied with the product or service. If it meets or exceeds the customer's expectations, the customer is satisfied. (Kotler & Keller, 2016) Currently available methodologies for evaluating healthcare programs consider patient satisfaction with their healthcare experiences as a factor in their evaluation. In this sector, patient satisfaction is regarded throughout the healthcare process. It reflects the extent to which the care provided meets the needs of the patients, meets the expectations, and provides an acceptable level of service. (Thanveer et al., 2010) In the context of a service, the consumer is the end-user of the service. Over the years, several studies have confirmed a link between consumer satisfaction and service provider loyalty. (Prayag et al., 2019) Patient satisfaction is the process of determining a patient's content with the services they are receiving from dental care that is organized and patient-centered delivery of high-quality healthcare to patients. (Fatima et al., 2017)

## 2.3. Patient Loyalty

Patient loyalty refers to the likelihood of a customer returning in the future, and it is a relatively accurate predictor of future behavior. (Alaid& Zhou, 2013) It is

a desirable behavioral intention to spread a positive word about a service provider and encourage others to use services. (Zarei et al., 2013) Loyalty is measured by the frequency of intentional revisited and recommended. (Kitapci et al., 2014, Yapp et al., 2018, Odoo et al., 2019). Customer loyalty and behavioral intention are terms that are frequently used interchangeably in marketing. (Chen & Tsai, 2007 as cited in Cham et al., 2014) Patient loyalty is measured by the likelihood of a patient returning and the likelihood of a patient recommending another. (Alaid& Zhou, 2013, Zarei et al., 2013)

The theoretical framework for this study was based on Kotler & Keller, 2016, Kim et al. (2012) and literature reviews such as Jeon et al., 2014; Lonial & Raju, 2015; Kondasani& Panda, 2015; Shabbir et al., 2016; Rocha et al., 2017; Meesala et al., 2018. Thus, the study on consumers' perceptions of dental practice quality factors affecting patient satisfaction and loyalty to a dental clinic (Smile Family Dental Clinic) is beneficial to marketing managers and dentists in developing a marketing strategy for their respective practices. The findings could help to improve the quality of dental procedures, patient satisfaction, and customer loyalty in the dental care services sector.

According to Kim et al. (2012), Esa et al. (2006), and Luo et al. (2006), Dental Practice-related Factors include prices, facilities, dentist services, and staff services.

## 3. Methods

### 3.1. Study Setting

The researcher conducted a qualitative case study in Smile Family Dental Clinic in Thailand through online interviews. (Semi-Structure Interviews)

Baskarada (2014) recommended case study research involves an intensive analysis of an individual unit such as a person, a community, or an organization. Strategies of case study and interviews are as shown in the appendix (Table 1-3). A convenience sampling selected Smile Family Dental Clinic according to GAO, 1990 (as cited in Baškarada, 2014)

### 3.2. Design and Sample

A qualitative study in primary care dentistry is practical and valuable. Semi-structured interviews from 13 respondents (stakeholders) are applied to this study. (Donalson et al., 2011) The qualitative research in satisfaction with the oral health services are also applied to this study. (Esa et al., 2006 and Luo, 2018)

Purposive sampling (Judgement sampling) is a sampling to select subjects that consider representative of the population and used quite frequently in qualitative research rather than generalizing to a larger population. (Jawale, 2012)

The population of Smile Family Dental Clinic's patients is 3,689 cases (as of March 1<sup>st</sup>, 2021). Approximately seventy percent (70%) of the Smile Family Dental Clinic's patients are age between 25-50 years old. Therefore, purposive samples are from the consumers who are age between 25-50 years old.

Malterud et al. (2016) suggested the sample size depends on the data that the researchers collected whether enough and quality to answer the research question. Usually, 6 to 10 participants-interviews are guided by the supervisor's experience in the healthcare sector.

In this case study, the sample (10 purposive samples) are as follows:

The respondents' criteria include 1) Smile Family Dental clinic's consumers 2) Who was the age between 25-50 years old 3) who attending for participation in online interviews for 20-40 minutes 4) cognitively able to participate 5) consumers must speak English. If not meet all these criteria, the researcher excluded from the participation.

### 3.3. Data Collection

The researcher conducted one on one, semi-structured interviews.

Personal interviews are more suitable for a qualitative study. The purpose is the interaction between interviewers and respondents to ask about perception and belief.

View of homogeneous explanation raises more issues through broad and open-ended inquiry and the research question's answer. (Zikmund, 2003, Choy, 2014, D'Souza, 2019) The good questions should be open-ended in a qualitative interview. It requires more than a yes/no answer. The length of interviews depends on the research topic.

However, the average of interviews lasts 20-60 minutes. Before starting an interview, respondents should be informed about the study and assurance about ethical principles, such as anonymity and confidentiality. It offers respondents some idea of what to expect from the interview. Listening attentively to what participants said is essential to recount their experiences as fully as possible, without necessary interruptions. (Gill et al., 2008) Thus, the interview process followed Gill et al. (2008) is shown in the appendix.

The Semi-Structured questions are open-ended based on the literature review and the consumer behavior model of Kotler & Keller. (2016) and Kim et al., (2012). Each interview took time 20-40 minutes. The main research questions were to answer,

“What are the factors that influence patient satisfaction in the dental clinic?”

“What are the factors that influence patient loyalty in the dental clinic?”

Five key interview questions are shown in the appendix. The audio recording was adopted to reduce misinterpretation. The duration of data collection was between 17<sup>th</sup>-29<sup>th</sup> March 2021.

### 3.4. Data Interpretation and Analysis

The researcher reviewed the transcripts against the original audio recording to ensure that the text's conversion was accurate, according to Donaldson et al. (2011). In this study, the researcher analyzed data by content analysis adopting NVivoSoftware.

Erlingsson&Brysiewicz (2017) suggested that a common starting point for qualitative content analysis is the transcribed interview texts. The objective is to systematically transform a large amount of text into a highly organized and summary of key results. The initial step is reading and re-read the interviews to get some of the wholes. To gain a general understanding of what your participants are talking about. Then, start dividing up the text into smaller parts of meaning units. Onethen condenses these meaning units further. The next step is to label condensed meaning units by formulating codes and then grouping them into categories. Depending on the study's aim and quality of the collected data, one may choosecategories as the highest level of abstraction for reporting results, or the researcher can go further and create themes. The Glossary of terms that used in the hands-on guide to be doing content analysis is shown in the table (in the appendix)

Beyond the CODING Exploring & Visualizing Data in NVivo, Ziegenfuss (2020) recommended the process including 1) MEMOING& Annotations 2) Word Frequency & Text Search 3) Tabs to see the word cloud, cluster analysis, distribution across documents 4) Coding 5) Matrix and Compound and 6) Framework Analysis as shown in the appendix for NVivo's interpretation.

The researcher applied the analyzing process of Erlingsson& Brysiewicz (2017), Ziegenfuss (2020) and integrating it into this study.

### 4. Findings

The respondent's demographics and the priority of Dental Practice-related Factors from 10 Purposive sample's perceptions that reflect their satisfaction and loyalty are shown in table 1:

**Table 1. shows the Priority of Dental Practice-related Factors from 10 Purposive samples' perceptions.**

Respondents Date of Interview	Age /Gender	Dentist Services	Staff Services	Prices	Facilities
Peach 21-3-17	25-Male	1	3	2	4
Poom 21-3-17	48-Female	1	3	2	4
Yui 21-3-21	28-Female	1	3	4	2
Sand 21-3-27	27-Male	1	2	3	4
Poach 21-3-27	36-Male	1	2	4	3
Pae 21-3-28	25-Female	1	2	4	3
Dang 21-3-28	50-Male	3	4	1	2
Pang 21-3-29	37-Female	1	3	4	2
Lex 21-3-29	41-Male	2	1	3	4
Aom 21-3-29	34-Female	1	2	3	4
<b>Total</b>	<b>Age 25-50</b> (Average 35.1) <b>Male = 5</b> <b>Female = 5</b>	<b>1=8</b> <b>2=1</b> <b>3=1</b> <b>4=0</b>	<b>1=1</b> <b>2=4</b> <b>3=4</b> <b>4=1</b>	<b>1=1</b> <b>2=2</b> <b>3=3</b> <b>4=4</b>	<b>1=0</b> <b>2=3</b> <b>3=2</b> <b>4=5</b>

The priority of Dental practice-related Factors from respondent's perception as follows.

1. Dentist Services (8/10 of the respondents)
2. or 3) Staff Services (4/10 and 4/10 of the respondents)
3. or 4) Prices (3/10 and 4/10 of the respondents)
4. Facilities (5/10 of the respondents)

The patients' perceptions showed that Dentist Services is the highest essential factor, followed by Staff Services, Prices, and Facilities. The interpretation of adopting NVivo is shown in the appendix.

### Dentist Services

Dentist services were consistently the first factor mentioned by most participants in this interview survey. It is critical for the patient's choice to reflect their level of satisfaction and loyalty to the dental clinic, and this factor cannot be overlooked. Everything about the doctor, including their skills, communication, friendliness and politeness, and the clinic's reputation, is derived from the doctor's reputation. The doctor must carefully listen to the patient's needs and expectations—the treatment procedure must be performed so that the patient's fear and anxiety are alleviated. The doctor must communicate the treatment option to the patient and ensure that the patient is a part of the decision-making process. Before the procedure begins, the doctor must inform the patient of the cost or the price. If patients

are satisfied with their doctors, they are more likely to return and recommend them to others.

“Before I decide to go to the clinic, I have to search for the information. First, I search about the clinic from Facebook. Then, I must ask my friends which clinic is most recommended around my house. The doctor paid attention to my needs, listened to me carefully about what I want. I fear the needle. I considered about the doctor has good skills, polite and his experience.”

Peach (Case 1, a 25-year-old male)

Date of the interview on 2021-3-17

“If I need dental treatment, the first I recognize is about the doctor. The doctor gave me attention to what I want with my teeth. For example, my tooth filling lost, and the beautiful is my first choice. The doctor asked about my needs and what my expectation is. In my opinion, the patient should be a decision-maker. The reputation of the clinic is from the dentist's knowledge and skills. The recommendation of my peers and relatives influence my decision rather than a review in the social media.”

Poom (Case 2, a 48-year-old female)

Date of the interview on 2021-3-17

“Many times, I came to this clinic. I have the social assurance and come here for checking up and cleaning my teeth. The doctor has skills and



experience for many years. My friends recommended me to come to this clinic. The satisfaction on doctor make me come and talk to my friend about this clinic and doctor.”

Aom (Case 10, a 34-year-old female)

Date of the interview on 2021-3-29

“I recognize the name of the clinic before the name of the doctor. I know this clinic from my friend. My friend who works at the same factory recommend me this clinic. The good thing from my friend that she said about the doctor gave her nice explanation and treatment. I choose the clinic is close to me when I come to the fresh market near here.”

Pang (Case 8, a 37-year-old female)

Date of the interview on 2021-3-29

### Staff Services

Respondents mentioned staff services as being the second most crucial factor to consider. Satisfaction among patients is influenced by the attitude and helpfulness of the medical staff. Patient satisfaction and loyalty are affected by the service mind, which is friendly and pays attention to the patient's needs and expectations (revisit and recommendation intention). If patients are pleased with the service they receive, they are more likely to return and recommend the clinic to others.

“Staff Services are the factors I pay attention with, similar as doctor. Staff must polite, respect to customers, and can answer what I ask or want to know. Anything staff could done for the customers are the essential factors make me satisfied, and for sure that is why I will come to use the clinic again”

Sand (Case 4, a 27-year-old male)

Date of the interview on 2021-3-27

“The services by the staff here are good as I want. They are so nice, polite, and helpful to me to make appointments also after-treatment information. The overall is very good.”

Lex (Case 9, a 41-year-old male)

Date of the interview on 2021-3-29

“Staff’s helpfulness and friendly make me feel satisfied with what they focus on my needs, such as giving me attentiveness and information and making the appointment. The waiting time not too long makes me feel confident.”

Pae (Case 6, a 25-year-old female)

Date of the interview on 2021-3-28

“Both staff and doctor are friendly. Give any information and knowledge that I would like to know. My needs in dental treatments are the first thing that I expect that doctor and staff can offer high quality and services to me.

Aom (Case 10, a 34-year-old female)

Date of the interview on 2021-3-29

### Prices

Prices ranked third on the list of the most critical factors affecting a dental practice's success. It is regarded as a contributing factor to patient satisfaction. The patient's perceptions of prices are not excessive but rather reasonable and appropriate for the quality. The cost should not be significantly more expensive than that of public hospitals and other clinics. If the patients are pleased with the prices, they are more likely to return and recommend the service to others.

“I came to this clinic because of my tooth problem in painful. Finally, I cannot keep it and need to take it out. The bad breathing and pain for several months.

The prices are the main I focus on. There are many clinics in this area. The prices are not high is my choice. Also, the quality must be good too.”

Dang (Case 7, a 50-year-old male)

Date of the interview on 2021-3-28

“The prices are important for me because I come to the clinic for a check-up every year. The online registration for social assurance covered 900 baht influences me to come because I do not have to pay the money. The prices are OK and acceptable.”

Peach (Case 1, a 25-year-old male)

Date of the interview on 2021-3-17

“Price should be reasonable compared with services and quality because now there are many dental clinics and it’s quite easy to compare prices such as in social media channel. But the Cheapest price is not the highest influence me; it

should be considered more in dentist’s experience and review a recommendation from others.”

Yui (Case 3, a 28-years-old female)

Date of the interviews on 2021-3-21

“In the matter of prices, it is very affordable. The prices are not too high compare to public hospitals. Sometimes, the clinic has promotions or gifts such as toothpaste, toothbrush, and dental floss. Importantly patients can call to inquiry about prices before entering the service for their decisions.

Poach (Case 5, a 36-years-old male)

Date of the interviews on 2021-3-27

### Facilities

When participants were asked about their satisfaction with the facilities, most of them mentioned the up-to-date equipment, technology, cleanliness, the waiting area, the parking lot, and the clinic's overall environment as reasons for their response. If the patients are pleased with the facilities, they may plan to return and even recommend the clinic to their friends and family.

“The second factor that is important for me is facilities or location. I prefer this dental clinic because that is nearly my home. The car park is enough, and a waiting area is enough, such as many chairs. The good environment surrounding,

clean place, and clean equipment influence me to select the clinic because it can make me feel relax and safe.”

Yui (Case 3, a 28-year-old female)

Date of the interview on 2021-3-21

“The clinic facilities such as location, cleaning, up-to-date dental technology, good decoration, and waiting areas are enough for all patients. And the parking area is comfortable.”

Dang (Case 7, a 50-year-old male)

Date of the interview on 2021-3-28

“The clinic’s environment is essential to maintain, especially during the COID-19, materials, equipment, and dental unit are clean. The clinic is clean and safe to prevent infection to the patients and has modern equipment. Disinfectants, including alcohol, to wash their hands and temperature measurements. They are keeping distancing screening for COVID-19 to protect the customer from receiving the services safely. The clinic has adequate lighting, including a comfortable atmosphere that satisfied me to come back to use the services next time.”

Poach (Case 5, a 36-year-old male)

Date of the interview on 2021-3-27

“The facilities of the clinic are important too. It looks good both outside and inside, good in temperature, the waiting area is appropriate, and looks clean. The parking area is important because I came here by car. Overall facilities are good.”

Lex (Case 9, a 41-year-old male)

Date of the interview on 2021-3-29

## 5. Conclusion and Discussion

### Summary of the findings

Patient perceptions of dentist services were found to be the most important factor, followed by perceptions of dental staff services, prices, and facility facilities in the study. Patient satisfaction with these factors influences patient loyalty (intention to return and to recommend). A referral from a friend or relative has an impact on their decision to choose a clinic. The most common recommendation is based on the dentist's reputation. Patients are satisfied with the dentist's and staff's ability to meet their needs and expectations promptly. The reasonable price and low costs impact their satisfaction and loyalty, as has the lack of high costs. The facilities are the least important factor to consider.

The results supported the Dentist Services of Riley et al. (2014) that patients are looking for a dentist who has interpersonal and professional skills to alleviate their anxiety and be satisfied with their dental appointment. Also, supported the study of Ladise et al. (2018), when patients consult with doctors, they have high expectations of what will happen. The doctor should solicit the patient's input and allow them to participate in the decision-making process. The results supported Kim et al. (2012), dentist services are the dentist's practice of paying attention to patients, using the most up-to-date techniques, and caring for patients' pain and anxiety. Moreover, it supported Fernandez et al. (2016) that if choosing a dentist for dental treatment, it was essential to consider the dentist's reputation and feedback from colleagues and family members.

The findings corroborated Rocha et al. (2017), who found that the staff is always willing to assist patients, works together in the patient's best interest, gives patients personal attention, provides prompt service, and is aware of the patients' requirements.

Following Anbori (2010), Sreenivas et al. (2013), and Akbar et al. (2019), the findings were consistent with Prices for dental care are affordable or not prohibitively expensive, the dental fee cost is reasonable, and the price versus quality ratio is favorable.

The findings supported Facilities in terms of convenient parking, up- to-date equipment, the cleanliness of the waiting area, toilet, and floor, as well as the materials supplies used for care, which confirmed the findings of Kim et al. (2012), Rocha et al. (2017), and Akbar et al. (2017), among others (2019).



## Significance of the Study, Implications, and Contributions

Previous research has demonstrated that dental services impact patient satisfaction and the likelihood of returning to the hospital. (Kim and colleagues, 2012) Consumer satisfaction is a factor in the willingness to recommend and return to a business, both of which are customer loyalty and retention indicators. (Picón et al., 2014, Han & Hyun, 2015) If patients are satisfied with their healthcare providers, they are more likely to recommend them to others. (Anbori et al., 2010) The results supported these previous studies.

This qualitative study supported Kim et al. (2012) that four essential dental practice-related factors including Dentist Services, Staff Services, Prices, and Facilities. Semi-structured interviews can be used to understand better how respondents perceive the critical elements of a dental practice. It is beneficial for the dental clinic to improve dental practice quality following these areas essential for the patients' well-being. Satisfaction with these factors impacts patient loyalty to the clinic (return visit intention and referral intention). The clinic's directors (dentists) could, as a result, improve the overall quality of their dental practice to increase patient satisfaction and loyalty in the private dental care sector. Furthermore, managers can improve quality management while simultaneously increasing customer satisfaction and behavioral intention to service brands in other sectors.

Semi-Structured interviews assisted the clinic's managers (dentists) in developing appropriate strategies to increase patient satisfaction and loyalty through these factors due to the findings. Because of the limited time available, other factors will not be considered in this study. As a result, the researchers should include more variable factors that may impact patient satisfaction and loyalty in future research. Furthermore, the quantitative approach should be considered and expanded to include other clinics in the areas or other countries. The findings may be used to improve the ability of service companies to meet the needs and expectations of their customers. Customer satisfaction and loyalty are increasing due to this, which leads to increased financial and corporate performance.

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## APPENDIX

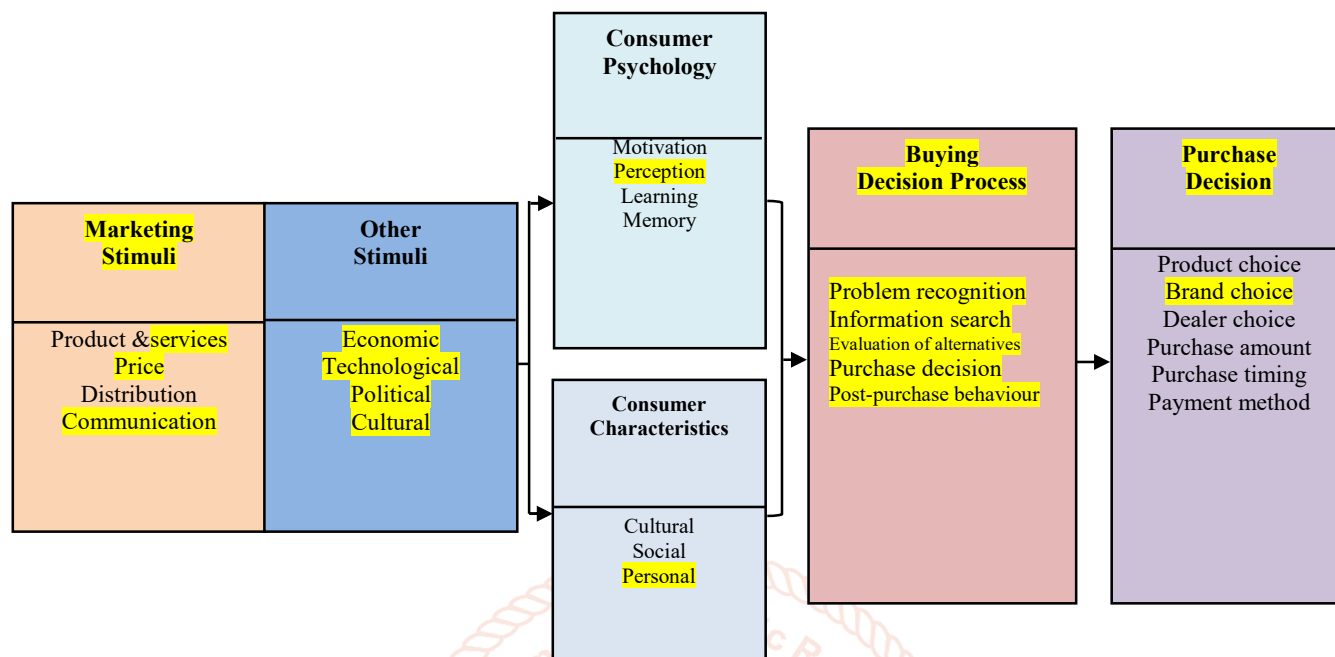


Figure 2. shows the model of consumer behavior (Kotler & Keller, 2016: 187)

Table 1: Instance Selection in Case Studies. (GAO, 1990 as cited in Baškarada, 2014)

Selection Basis	When to use and what questions it can answer
Convenience	Case selected because it was expedient for data collection purposes.
Bracketing*	What is happening at extremes? What explains such differences?
Best Cases*	What accounts for an effective program?
Worst Cases*	Why isn't the program working?
Cluster*	How do different types of programs compare with each other?
Representative*	Instance chosen to represent important variations.
Typical*	Instances chosen to represent a typical case.
Special interest*	Instances chosen based on an unusual/special attribute.
Probability	What is happening in the program, and why?

Table 2: Strategies for the Selection of Cases (Flyvbjerg, 2001 as cited in Baškarada, 2014)

Selection Basis	When to use and what questions it can answer
Extreme/deviant case	Extreme or unusual case.
Maximum variation case	Cases which are quite different on one dimension.
Critical Case	A case with strategic importance to the general problem
Paradigmatic Case	A prototypical case.

## Interview Process

Table 3: Interview Process (Kasunic, 2010 as cited in Baskarada, 2014)

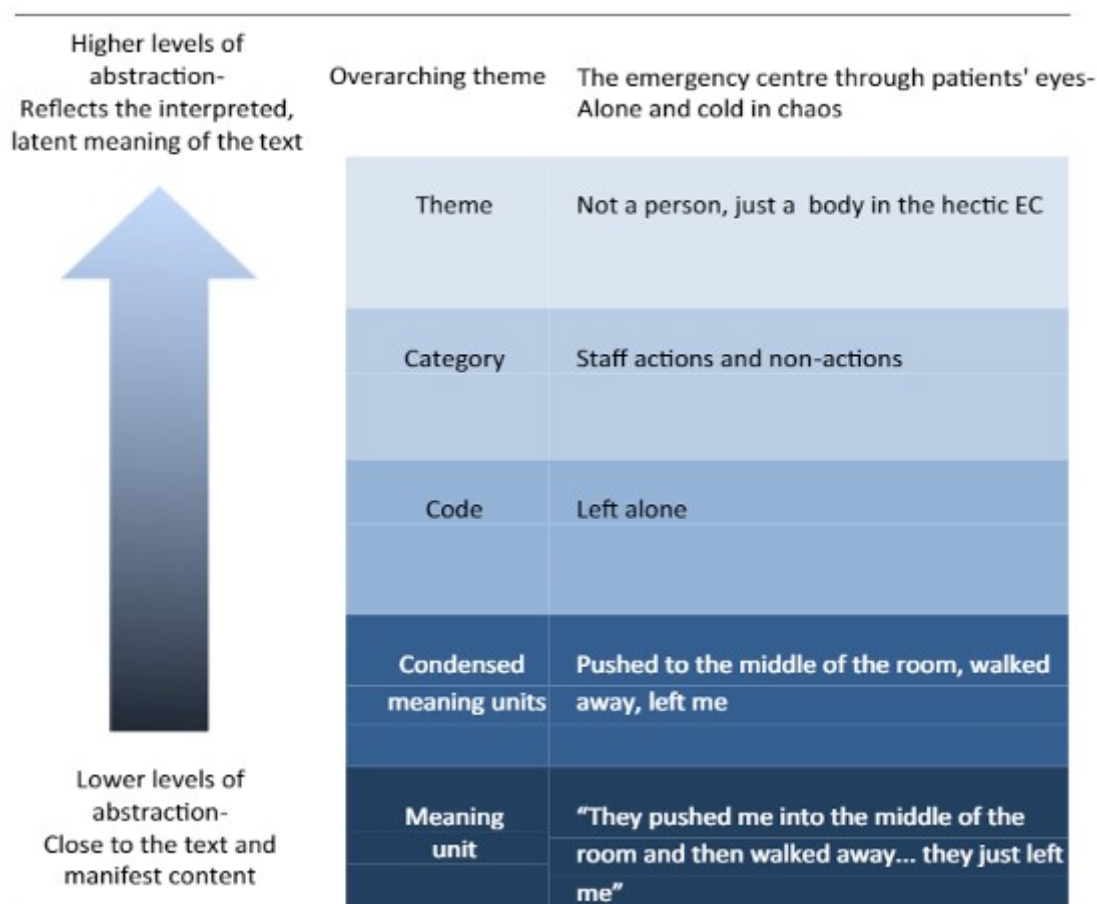
Process	Details
Orientation	Introductions and exchange of contact details. Description of the study and the interview process. Clarification of any expectations regarding non-attribution, sharing of data, and any other issues.
Information Gathering	The interviewer uses a questionnaire to guide the interview and to record Responses
Closing	The interviewer reviews the key points, any issues, and/or action items, and confirms accuracy with respondent. The interviewee is Invited to provide feedback on the interview process. The interviewer thanks the interviewee and seeks permission for any future contact.



**Table 1. Glossary of terms as used in the hands-on guide to be doing content analysis.**

Glossary of terms	Details
Condensation	Condensation is a process of shortening the text while still perceiving the core meaning.
Code	A code can be thought of as a table, a name that most exactly describes what this condensed meaning unit is about—usually, one or two words long.
Category	A category is formed by grouping those codes. Codes are related to each other through their content or context. In other words, codes are organized into a category when describing different aspects, similarities, or differences of the text's content that is together. When the analysis has led to a plethora of codes, it can help first assimilate smaller groups of closely related codes in sub-categories. Sub-categories related to each other through their content can then be grouped into categories. A category answers question about who, what, when, or where? In other words, categories are an expression of manifest content such as what is visible and obvious in the data Category names are factual and text.
Theme	A theme is an expression of an underlying meaning, such as latent content, found in two or more categories. There are expressing data on an interpretative (Latent) level. A theme answers questions such as why, how, in what way, or by what means? A theme is intended to communicate with the reader on both an intellectual and emotional level. Therefore, poetic, and metaphoric language is well suited in theme names to express underlying meaning. Theme-names are very descriptive and included verbs, adverbs, and adjectives.

Source of Table 1: Erlingsson&amp;Brysiewicz (2017: 94)

**Figure 1. Example of analysis leading to higher levels of abstraction from manifest to latent content. (Erlingsson&Brysiewicz, 2017: 94)**

**Beyond the CODING Exploring & Visualizing Data in NVivo, Ziegenfuss (2020) recommended the process as the following table.**

**BEYOND THE CODING Exploring & Visualizing Data in NVivo: Donna Ziegenfuss ([donna.ziegenfuss@utah.edu](mailto:donna.ziegenfuss@utah.edu))**

Strategy/Tool	What	Why	When	Where	How to & Tips
<b>Strategy:</b> Memoing and Annotations	<ul style="list-style-type: none"> <li>Helps you keep reflective memo notes, and record insights you have and keeps "your thoughts" separate from the imported text</li> <li>You can import notes from word or Evernote and make them part of your project or link memos directly to sources (only one memo per source)</li> <li>Annotations are notes but on specific content (works like a comment features in word)</li> </ul>	<ul style="list-style-type: none"> <li>As you code or get ideas about your research it is important to document as you go, if you don't you will forget</li> <li>You can code your own thoughts from memo docs and use that to triangulate what you are seeing or use your memo codes to make sure you have not missed anything.</li> <li>Annotations can help you track problems in your transcripts, tag words for further investigation</li> </ul>	<ul style="list-style-type: none"> <li>Can memo on nodes, sources, etc.</li> <li>can set up a folder of unlinked research progress memos that can be coded</li> <li>You can memo a node as you get ideas about connections and relationships as you are coding</li> <li>Use memos to record insights from queries</li> <li>Annotations can be searched but not coded</li> </ul>	<ul style="list-style-type: none"> <li><b>Memo folder</b> (navigation menu) – you can add subfolders and organize by drag and drop</li> <li>To see annotations you have added in the project: go to <b>Collections</b> (navigation menu) and click on annotations to see all of your annotations</li> <li>In the <b>VIEW</b> menu you can toggle on and off annotations</li> </ul>	<ul style="list-style-type: none"> <li>You can add pictures as well as text to memos (like a wordle or word tree)</li> <li>When in a source or node if you right click that will add a memo to that document.</li> <li>To add an annotation you must first select something to annotate and then add an annotation</li> <li>One memo per document but can have many annotations</li> <li>Import from Evernote – <b>EXTERNAL DATA</b> menu – From Other Sources</li> </ul>
<b>Strategy:</b> Queries: Word Frequency and Text Search  <b>Tools:</b> tabs to see word cloud, cluster analysis, distribution across documents	<ul style="list-style-type: none"> <li>Finds the most frequently used words used, or</li> <li>Finds all places text is used</li> </ul>	<ul style="list-style-type: none"> <li>Look for words that might be used as Nodes (codes)</li> <li>Look to see where words appeared in different sources</li> </ul>	<ul style="list-style-type: none"> <li>In the beginning of your project to look for commonly occurring words</li> <li>As you are coding and looking for words to refine node names</li> <li>As you are writing – look for quotes containing words</li> </ul>	<ul style="list-style-type: none"> <li><b>QUERY Menu</b> - Text Search and Word Frequency Query</li> <li>After you run the word frequency – use the right tabs to see word cloud, cluster analysis</li> <li>After you run the text search use tabs to search different source types</li> </ul>	<ul style="list-style-type: none"> <li>Check the <i>Add to project box</i> so you can go back and rerun and edit</li> <li>Experiment with the exact/similar slider to find synonyms</li> <li>Use tabs to see different representations</li> </ul>
<b>Strategies &amp; Tool:</b> Queries: Coding	<ul style="list-style-type: none"> <li>Simple coding queries – to look at one node with some</li> </ul>	<ul style="list-style-type: none"> <li>If you want to tease out some particulars about a node (like</li> </ul>	<ul style="list-style-type: none"> <li>Use after you code (coding queries only)</li> </ul>	<ul style="list-style-type: none"> <li><b>Query Menu</b> and click on coding and</li> </ul>	<ul style="list-style-type: none"> <li>Check the <i>Add to project box</i> so you</li> </ul>

**Source of Table2.Ziegenfuss (2020)**

Strategy/Tool	What	Why	When	Where	How to & Tips
	<ul style="list-style-type: none"> <li>classification categories</li> <li>Advanced code queries – to look at multiple nodes and classifications</li> </ul>	<ul style="list-style-type: none"> <li>looking only at age or gender comments)</li> </ul>	<ul style="list-style-type: none"> <li>find text that has been coded)</li> <li>Can help when writing to look at some more specific information or frequency numbers</li> </ul>	<ul style="list-style-type: none"> <li>make a decision simple or advanced</li> <li>Select classification criteria to limit</li> </ul>	<ul style="list-style-type: none"> <li>can go back and rerun and edit</li> <li>You can make any coding query you run a new node</li> </ul>
<b>Strategies &amp; Tools:</b> Queries: Matrix, Compound	<ul style="list-style-type: none"> <li><b>Matrix:</b> Lets you look at frequency numbers of coding that is cross compared with classification criteria or other source material</li> <li><b>Compound:</b> combining different types of queries (ex. A text search query and a coding query)</li> </ul>	<ul style="list-style-type: none"> <li><b>Matrix:</b> To help you see patterns in the data that will help you make connections in the text</li> <li><b>Compound:</b> I use this most often to find particular text across nodes</li> </ul>	<ul style="list-style-type: none"> <li>During analysis of the text</li> <li>You really cannot do this type of query until you know what you are looking for – Decide what you want to know and then select the appropriate type of query</li> </ul>	<ul style="list-style-type: none"> <li><b>Query Menu</b> and click on matrix query or compound query</li> </ul>	<ul style="list-style-type: none"> <li>Once the matrix is created you can add color to see patterns better, change from frequency to percentages and other number values</li> <li>Can click in each cell to see the associated data</li> <li>You can export to excel</li> </ul>
<b>Strategy &amp; Tool:</b> Framework Analysis	<ul style="list-style-type: none"> <li>This is just a matrix where you can pull data in or summarize so you can compare (rows – case nodes/interviews etc) and columns theme nodes (codes)</li> <li>It shows all of the text that has been coded for a node but in a spreadsheet format (which you can export into excel)</li> </ul>	<ul style="list-style-type: none"> <li>Sometimes it is helpful to see things in one screen (ex looking at all the coded nodes for one interviewee to see relationships or connections)</li> <li>Lets you see the intersection of sources and nodes easily</li> </ul>	<ul style="list-style-type: none"> <li>After you are finished coding and want to start the analysis of codes</li> <li>As you are writing might help too to see nodes across people or a person with related nodes</li> </ul>	<ul style="list-style-type: none"> <li>When you create a framework matrix it is stored under the <b>Source</b> (navigation menu) – you will see a framework matrix folder You can right click and add a new one</li> <li>To Auto Summarize: With the framework open, go to <b>ANALYZE</b> menu and click on Auto summarize (far right)</li> <li>Each summary you create is a separate file that is pulled in a matrix (so can use</li> </ul>	<ul style="list-style-type: none"> <li>To create a blank map:</li> <li>You need to open a blank framework and then populate with what you want to compare</li> <li>You can click on blank cells and summarize or automatically summarize</li> </ul>

**Source of Table (Continue).Ziegenfuss (2020)**

## Interpretation & Analysis was based on NVIVO

