

OPINIONS OF CUSTOMERS TOWARDS BRAND EQUITY OF A DENTAL CLINIC
ORGANIZED BY THE FACULTY OF DENTISTRY IN A PUBLIC UNIVERSITY



Presented in Partial Fulfillment of the Requirements for the
Master of Arts Degree in Business English for International Communication
at Srinakharinwirot University

May 2014

OPINIONS OF CUSTOMERS TOWARDS BRAND EQUITY OF A DENTAL CLINIC
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A MASTER'S PROJECT

BY

KANJANA KANWID

Presented in Partial Fulfillment of the Requirements for the
Master of Arts Degree in Business English for International Communication
at Srinakharinwirot University

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This study aimed to explore customers' opinions towards brand equity of the dental clinic organized by Srinakharinwirot University. The instrument of the study was a questionnaire based on four components of brand equity proposed by Aaker (1998) including brand loyalty, brand awareness, perceived quality, and brand associations. The participants of the study were 169 dental clinic customers. The questionnaire distribution and data collection were conducted in February, 2014. The data were analyzed by using percentage, mean scores, and standard deviations.

The results of the study revealed that overall aspects influenced brand equity of Srinakharinwirot University Dental Clinic at a high level. In the sequence of mean, it was found that perceived quality was the most influential aspect of brand equity of the dental clinic, followed by brand loyalty, brand associations, and brand awareness. The findings also revealed the most influential factor of each aspect as follows: in terms of perceived quality, reliability was considered the most important; as for brand loyalty, brand equity was highly affected by customers' consistency and continuity in purchasing; regarding brand associations, professionalism of the dentists played the most vital role in enhancing brand equity of the dental clinic; and the name of the dental clinic was perceived as the most influential factor of brand awareness.

ความคิดเห็นของผู้มารับบริการทันตกรรมต่อคุณค่าตราสินค้าของคลินิก
ทันตกรรมแห่งหนึ่งของคณะทันตแพทยศาสตร์ในมหาวิทยาลัยของรัฐ



เสนอต่อบัณฑิตวิทยาลัย มหาวิทยาลัยศรีนครินทรวิโรฒ เพื่อเป็นส่วนหนึ่งของการศึกษา
ตามหลักสูตรปริญญาศิลปศาสตรมหาบัณฑิต
สาขาวิชาภาษาอังกฤษธุรกิจเพื่อการสื่อสารนานาชาติ
พฤษภาคม 2557

กาญจนา การหิวด (2557.) *ความคิดเห็นของผู้มารับบริการทันตกรรมต่อคุณค่าตราสินค้าของคลินิกทันตกรรมแห่งหนึ่งของคณะทันตแพทยศาสตร์ในมหาวิทยาลัยของรัฐ.*
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การวิจัยนี้มีจุดประสงค์เพื่อศึกษาความคิดเห็นของผู้มารับบริการทันตกรรมต่อคุณค่าตราสินค้าของคลินิกทันตกรรมของคณะทันตแพทยศาสตร์ มหาวิทยาลัยศรีนครินทรวิโรฒ เครื่องมือที่ใช้ในการวิจัยคือ แบบสอบถามซึ่งพัฒนามาจากองค์ประกอบทั้งสี่ของคุณค่าตราสินค้าตามแนวคิดของอาร์เคอร์ (1998) ได้แก่ การรู้จักตราสินค้า ความสัมพันธ์กับตราสินค้า ความภักดีต่อตราสินค้า และการรับรู้คุณภาพตราสินค้า กลุ่มประชากรในการวิจัยคือผู้มารับบริการทันตกรรมที่คลินิกจำนวน 169 คน ผู้วิจัยได้ดำเนินการแจกแบบสอบถามและเก็บข้อมูลในเดือนกุมภาพันธ์ 2557 และนำข้อมูลที่ได้มาวิเคราะห์ผล โดยใช้ค่าร้อยละ ค่าเฉลี่ย และค่าเบี่ยงเบนมาตรฐาน

ผลการวิจัยพบว่าทุกองค์ประกอบของคุณค่าตราสินค้า มีอิทธิพลอย่างมากต่อคุณค่าตราสินค้าของคลินิกทันตกรรมคลินิกทันตกรรมมหาวิทยาลัยศรีนครินทรวิโรฒ โดยการรับรู้คุณภาพตราสินค้ามีอิทธิพลมากที่สุดต่อคุณค่าตราสินค้า รองลงมาคือ ความภักดีต่อตราสินค้า ความสัมพันธ์กับตราสินค้า และ การรู้จักตราสินค้า ตามลำดับ นอกจากนี้การวิเคราะห์ปัจจัยในแต่ละด้านพบว่าความน่าเชื่อถือมีสำคัญที่สุดต่อการรับรู้คุณภาพตราสินค้า ความต่อเนื่องในการใช้บริการคลินิกทันตกรรมเป็นปัจจัยที่สำคัญที่สุดของด้านความภักดีต่อตราสินค้า ความเชี่ยวชาญของทันตแพทย์มีความสำคัญที่สุดต่อด้านความสัมพันธ์กับตราสินค้า และชื่อของคลินิกทันตกรรมเป็นปัจจัยที่สำคัญที่สุดของด้านการรู้จักตราสินค้า

The master's project titled
“Opinions of Customers towards Brand Equity of a Dental Clinic Organized by
the Faculty of Dentistry in a Public University”

by

Kanjana Kanwid

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Srinakharinwirot University.

..... Dean of Graduate School
(Assoc. Prof. Dr. Somchai Santiwatanakul)

May, 2014

Master's Project Advisor

Oral Defense Committee

.....

(Ms. Sopin Chantakloi)

..... Chair

(Ms. Sopin Chantakloi)

..... Committee

(Dr. U-maporn Kardkarnklai)

..... Committee

(Ms. Aranya Srijongjai)

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CHAPTER I

INTRODUCTION

Background of the Study

The concept of brand equity has received considerable attention from manufacturers and marketers, as it is a widely used strategy for creating competitive advantages in the marketplace. Nigam and Kaushik (2011) stated that brand equity is the added value endowed to a product. It results from the successful establishment of a strong brand in a marketplace and is one of the most valuable assets of a firm. Strong brand equity allows firms to charge premium prices for their products and reduce their marketing cost. Consumers tend to purchase products with a well-known brand name rather than a less well-known one. In addition, brand equity enables firms to attract new customers and retain existing ones.

Building a strong brand yields a number of marketing advantages. This includes greater customer loyalty, higher resiliency to endure crises, and increased marketing communication effectiveness (Hoeffler & Keller, 2002). Ambler et al. (2002) argued that great effort should be exerted for creating and sustaining customer-based brand equity, in that the recognition of the importance of customers' value to a firm's asset increases over time. Farquhar (1989) stated that the brand has value only if it has meaning to the customer. Moreover, Cobb-Walgren (1995) insisted that it is important to understand how brand value is created in the mind of the consumer and how it translates into choice of behavior.

Measuring the brand equity from a customer's perspective is crucial in brand marketing. Krishnan (1996) mentioned that an investigation of customers' mindsets should be conducted before measuring any other aspects of brand equity because customers mindsets about brand is a starting point for understanding the brand. In addition, Barwise (1993) stated that the only way to predict marketing actions of brand is measuring the brand equity from the customers' perspectives.

Statement of the Problem

As Thailand's population ages, the demand for health services increases. In 2020, the value of healthcare expenditure is estimated to be \$25 billion, making the health care industry one of the keys of Thailand's economy. Healthcare expenditure in the nation is expected to grow by 8.4 % annually (Ongdee, 2012).

The dental care sector is a significant part of Thailand's health care industry as it plays an important role in the overall growth of the industry. The sector is currently in growth, driven by its aging population, increased awareness of oral care, and the rise in demand for preventive and cosmetic dental procedures. According to the Survey of National Statistical Office, the number of patients seeking dental treatment increased steadily from 7.4% of the population in 2006 to 9.3% in 2011. In 2011, 58% of patients used dental services at public hospitals, 38.5% at private clinics, and 3.2% elsewhere. Among the public service providers are dental hospitals and clinics run by public universities. In 2014, there are six dental hospitals and two clinics organized by the Faculty of Dentistry of certain public universities, including Chulalongkorn University, Chiangmai University, Mahidol University, Prince of Songkla University, Khonkaen University, Naresuan University, Thammasat University, and Srinakharinwirot University.

Among the dental clinics organized by the faculty of dentistry of public universities, Srinakharinwirot University Dental Clinic (SWU Dental Clinic) has been acknowledged for its popularity, established in 1997, SWU Dental Clinic has functioned as a teaching clinic for dentistry students, as well as providing dental services to the public. Dental services are mainly provided by members of the faculty of dentistry and dentistry students under the supervision of members of the faculty of dentistry (Srinakharinwirot University Dental Clinic, 2013).

According to the patient records of the dental clinic, the number of patients who use dental treatment services has continued to show positive growth. There were 20,857 dental patients in 2010; 21,707 in 2011; and the number of patients increased to 23,259 in 2012. Many factors have contributed to this growth, including the increased awareness of the problems associated with oral health, the new demand for dental cosmetics, as well as the favorable reputation the dental clinic brand has nurtured among the public (Srinakharinwirot University Dental Clinic, 2013).

The dental industry of Thailand has steadily grown. As reported by the Bureau of Sanatorium Healing Art (2012), in 2011 there were 3,396 dental clinics in Thailand, 1,283 in Bangkok and 2,113 in provincial areas. As such, dental service providers have faced aggressive competition in the marketplace, hence finding an effective marketing strategy is critically important. Dental care industry is a business related to brand equity. Since dental services are difficult for consumers to evaluate in advance, consumers try to reduce their risks by purchasing dental services from well-known brands or by engaging with word-of-mouth conversations before buying (Berry & Seltman, 2007). Therefore, branding has become strategically important for many health service providers as a brand with the higher equity generated significantly greater preferences and purchase intentions.

Despite high competition in the dental industry, Srinakharinwirot University Dental Clinic has continued to show positive growth. Since brand equity highly influences purchase decision, the study customers' opinions towards the brand equity of the dental clinic is definitely beneficial to the dental care business.

Objective of the Study

The objective of the study is to examine brand equity of Srinakharinwirot University Dental Clinic as measured by its customers.

Research Question

What major aspects of brand equity have a significant effect on brand equity of Srinakharinwirot University Dental Clinic?

Significance of the Study

A thorough understanding of brand equity from customer's point of view is essential for successful brand management. As Keller (1993) stated that positive customer based-brand equity can lead to greater revenue, lower cost, and higher profit. As managers often have limited resources to implement branding strategies, this framework helps them to prioritize and allocate resources across brand equity components. Therefore, the obtained results will be beneficial for the dental clinic in applying the concept of branding strategies to gain competitive advantage and make wise management decisions as well as some implications for practitioners working in the dental industry.

Scope of the Study

This study aims to explore brand equity of the dental clinic organized by Srinakharinwirot University and questionnaires were used to collect the data from its customers. The questionnaire was based on the four aspects of brand equity concept according to Aaker (1998) including brand loyalty, brand awareness, perceived quality,

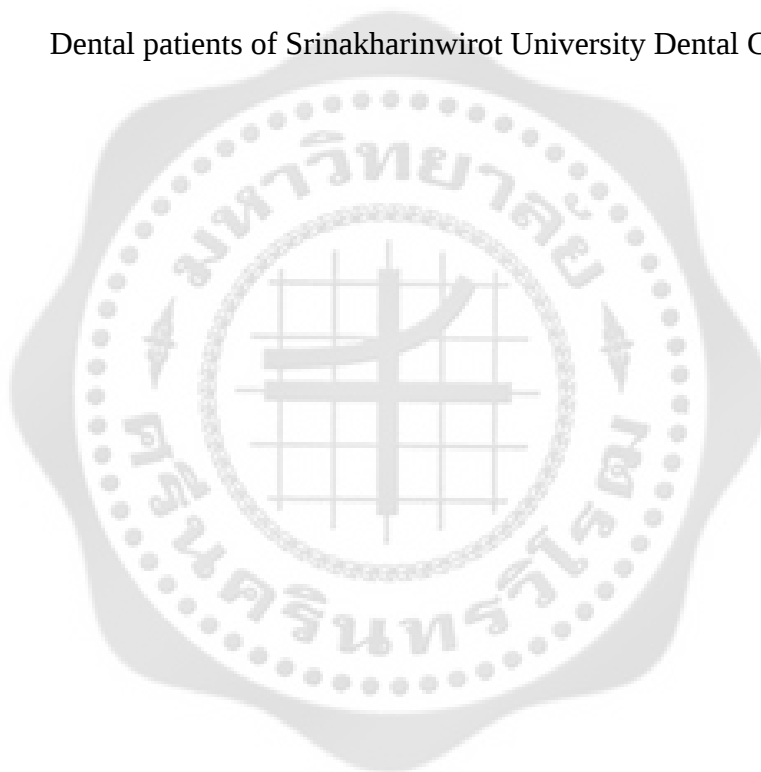
and brand associations. The questionnaire was randomly distributed to 169 patients of the dental clinic.

Definition of Terms

Definitions of terms used in the study are defined as follows:

Brand equity: A set of assets or liabilities linked to a brand name and symbol that add or subtract from the value provided by a product or service of a firm and/or that firm's customers (Aaker, 1998).

Customers: Dental patients of Srinakharinwirot University Dental Clinic





CHAPTER II

REVIEW OF RELATED LITERATURE

This chapter provides the related literature review as follows:

1. Brand
2. Brand Equity
3. Measuring Brand Equity
4. Previous Related Research

Brand

A brand is important to consumers and firms. To consumers, a brand enables them to differentiate a product from the countless items available in the market. Brands also provide a shorthand device or means of simplification, for their product decision (Keller, 2008). A brand is one of the most valuable assets of a firm. Brands offer firms legal protection for unique features of their products. Additionally, brands provide firms with a means of distinguishing their products from others in order to gain a competitive advantage in such a way that consumers perceive added value (Lertthongpaiboon, 2007).

According to the American Marketing Association (Kotler & Keller, 2006), a brand is a name, term, sign, symbol, or design, or a combination of them intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of competition. Moreover, Kotler and Keller (2006) stated that a brand is a product, but one that adds other dimensions to differentiate it in some way from other products designed to satisfy the same need. These differences may be rational and tangible—related to product performance of the brand—or more symbolic, emotional, and intangible—related to what the brand represents.

In summary, a brand offers a number benefits to customers and firms. Brands help consumers to perceive differences between products in the same product category. Brands function as a search cost reducer. This, along with past experience, assists customers in finding products which satisfy their needs. To firms, a brand is a means of legally protecting unique features and a signal of quality level to satisfied customers. Additionally, it is a valuable asset which allows a firm to gain competitive advantage.

Brand Equity

Brand equity has emerged as one of the most critical areas for marketing management in the 1990s. According to Farquhar (1989), brand equity is the added value to the firm, the trade, or the consumer with which a given brand endows a product. Brand equity is also defined as a set of assets and liabilities linked to a brand's name and symbol that add to or subtract from the value provided by a product or service to a firm and/or that firm's customers (Aaker, 1996).

Brand equity is important due to the quality-laden informational content that it provides when consumers process information about a particular product (Krishnan & Hartline, 2001). Additionally, strong brand equity helps a firm to establish and identify themselves in the market place and reduces vulnerability from competitors actions leading to higher margin and intermediary Co-operation (Aaker, 1996). High brand equity offers numerous competitive advantages to firms by reducing marketing costs due to brand awareness and loyalty. Moreover, products with strong brand equity are perceived as high quality, which allow firms to charge a premium price.

Aaker (1998) stated that there are five components of brand equity: brand loyalty, brand awareness, perceived quality, brand association, and other proprietary brand assets.

Brand loyalty. Brand loyalty is regarded as the core dimension of customer-based brand equity for management (Keller, 1993). It reflects a customer's deeply held

commitment to re-buy a preferred product or service consistently in the future, despite situational influences and marketing efforts having the potential to cause switching behavior (Oliver, 1997). Olsen, Bloemer, and Kasper (1995) stated that repurchase intention seems likely to be the core concept of customer loyalty. It is especially considered to be one of the best measurements of customer loyalty or customer constancy in marketing research and it is one of many ways to examine buyer loyalty behavior. Additionally, loyal customers are less price-sensitive. This means that loyal customers are less focused on price, and they are willing to pay more for a product or service (Keller, 1993).

Brand awareness. Brand awareness relates to the strength of the brand node in memory as reflected by consumers' ability to recall or recognize various brand elements such as brand name, logo, symbol, character, and slogan (Aaker, 1998). The higher the level of awareness of a brand, the more likelihood there is of this brand being considered when consumers make a purchase (Hoyer, 1990; Nedungadi, 1990). Moreover, Aaker (1991) claimed that when a brand is really well established, with high recognition created as a result of many exposures and usage experience, recognition tends to stay high over a long time-period.

Perceived quality. Perceived quality is the consumer's perception in the overall quality of the product, including both tangible and intangible characteristics. Additionally, it has various dimensions such as performance, features, reliability, serviceability, and style and design (Aaker, 1998). In the service industry context, several factors significantly influence customers' perceptions of quality such as the competence of the service providers and other tangibles including the physical facilities, the equipment, the appearance of personnel, and the responsiveness and willingness of the staff to help customers and provide prompt service (Aaker, 1991). In addition, Yoo,

Donthu, and Lee (2000) stated that a higher level of perceived quality increases the probability of choosing the brand instead of the competitors' brand, supporting a premium price, which in turn can create more profits for the company that can be used to reinvest in brand equity.

Brand associations. Brand associations refer to any direct and indirect attributes linked in the consumer's memory to a brand. Aaker (1991) categorized brand associations into eleven types, including: intangibles, customer benefits, relative price, use/application, user/customer, celebrity/person, lifestyle/personality, product class, competitors, and country of origin. These brand associations have obvious relevance because they provide a reason to buy. The unique, favorable and strong brand association leads to differential customers' responses, resulting in brand equity (Keller, 1993).

Other proprietary brand assets. Other proprietary brand assets refer to patents, trademarks and channel inter-relations proprietary assets. These assets prevent attacks by competitors on the organization. They also help in maintaining customer loyalty as well as the organization's competitive advantage (Aaker, 1998).

Aaker (1996) concluded that brand equity can be evaluated through brand loyalty, brand awareness, perceived quality, brand associations and other proprietary brand assets in five different dimensions shown in Figure1.

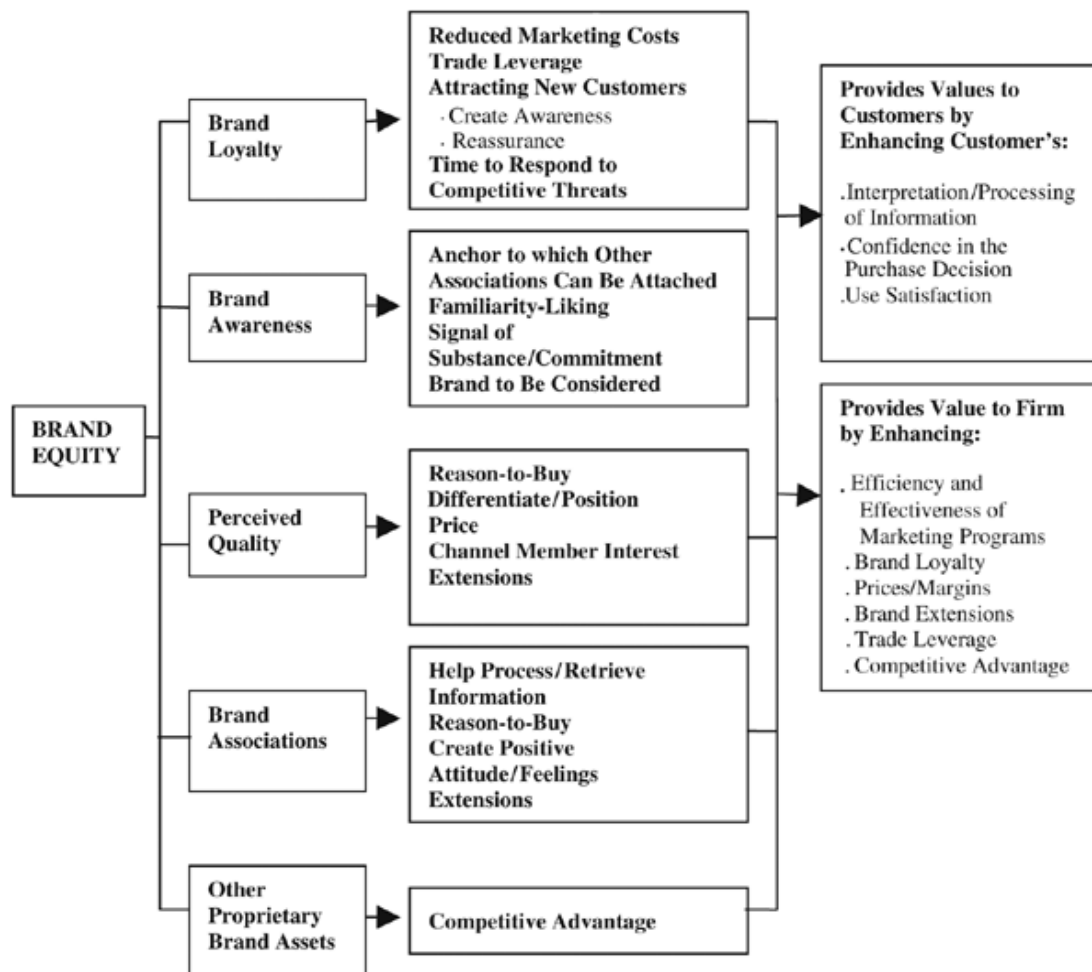


Figure 1. Five asset model of brand equity. Reprinted from *Building strong brands* (p.17), by D.A. Aaker, 1996, New York: The Free Press. Copyright 1996 by David A. Aaker.

Considering Aaker's model, strong interrelationships occur among the dimensions of brand equity. The last four brand equity dimensions: brand awareness, perceived quality, brand association, and other proprietary, can enhance brand loyalty, providing reason to buy and affecting user satisfaction. Even when they are not pivotal to brand choice, they can reassure the consumer, reducing the incentive to try others. Therefore, brand loyalty is both one of the dimensions of brand equity and is affected by brand equity and the other assets that generate equity. In the same way, perceived quality could

be influenced by awareness, associations, and loyalty (Aaker, 1996).

According to Aaker (1996) the brand equity model lists three ways of how brand assets create value for the customer. Firstly, brand equity can help a customer interpret, process, store, and retrieve a huge quantity of information about products and brands. Secondly, it can affect the customer's confidence in the purchase decision; a customer will usually be more comfortable with the brand that was last used, is considered to have high quality, or is familiar. Finally, perceived quality and brand associations provide value to the customer by enhancing the customer's satisfaction.

The model also assumes six ways that brand assets create value for the firm. Firstly, brand equity can enhance the efficiency and effectiveness of marketing programs. A promotion, for example, will be more effective if the brand is familiar and if the promotion does not have to influence a skeptical consumer of brand quality. Secondly, brand awareness, perceived quality and brand associations can all strengthen brand loyalty by increasing customer satisfaction and providing reasons to buy the product. Thirdly, brand equity will usually provide higher margins for products, permitting premium pricing and reducing reliance on promotions. Brand equity can also provide a platform for growth by brand extensions and can provide leverage in the distribution channel as well. Channel members have less uncertainty dealing with a proven brand name that has already achieved recognition and has established strong associations. Finally, a strong brand represents a barrier that prevents customers from switching to a competitor (Aaker, 1996).

The implication of model helps in managing brand equity and considers sensitive values to make informed decisions about brand-building activities. Brand equity is important at purchasing time as it influences customers and compete with the competitor's attractions.

Measuring Brand Equity

Kim, DiMicelli, and Khang (2004) stated that a number of alternative methods have been suggested for measuring brand equity. However, the most commonly accepted approaches to measuring brand equity are either financial or customer-related methods.

The financial perspective discusses the financial value brand equity creates to the business and is often referred to as firm-based brand equity (FBBE). Capon, Berthin, and Pitt (2001) stated that financial values such as potential earning, market value, and replacement cost can be criteria for the measurement of brand equity. Keller (1993) argued that a financial based approach to brand equity offered more unbiased insight into the value of the brand for accounting purposes, or for merger, acquisition, divestiture purposes. However, a financial approach provides a more precise insight into valuation of brands; it could be disadvantageous for managers to establish a brand strategy unless they are good at handling financial data.

On customer based perspective (CBBE), brand equity can be measured through customers' consideration sets, customer-based perceived quality, and preference/and or satisfaction (Capon et. al., 2001). The components of this concept are how differently customers react to the brand, how much they know and have experienced about the brand, and reactions to marketing (Keller, 2008). Keller (1993) mentioned that the customer-based brand equity is more practical for managers in that it provides for them a strategic vision of customer behavior that can be adapted to brand strategy. Yet, Ailawadi, Lehmann, and Neslin (2001) insisted that the measuring of customer mindsets cannot be objective and that it is difficult to calculate the precise figure because its measurement is based on consumer surveys.

Brand equity research in marketing has largely concentrated on customer-based approaches (Sun, 2004) as a thorough understanding of brand equity from the customer's

point of view is essential for successful brand management. As Keller (1993) explained that positive customer-based brand equity can lead to greater revenue, lower cost, and higher profit; it has direct implications for the firm's ability to command higher prices, a customer's willingness to seek out new distribution channels, the effectiveness of marketing communications, and the success of brand extensions and licensing opportunities. Thus, in this study, customer-based brand equity measurement was adopted.

Previous Related Research

Many studies relating to brand equity in various industries have been conducted; accordingly, research relevant to this study is summarized as follows.

Sun (2004) examined brand equity, perceived value, and revisit intention in the US mid-priced hotel segment. The results showed that brand loyalty obtained the lowest score among the four components: brand awareness, brand associations, perceived quality, and brand loyalty. Even though brand loyalty attained the lowest score, perceptions of brand loyalty among the same level of hotels were significant. This may indicate that brand loyalty is the most important dimensions of brand equity but it is difficult to manage. Therefore, managers should focus on improving loyalty programs to maintain high brand equity, so that they can earn advantages over other competing hotels. In addition, perceived value and revisit intention were also examined. The results showed that perceived value has an impact on the relationship between perceived quality and revisit intention. Therefore, a hotel that consistently offers quality services with a reasonable price will be able to retain high customer value, which in turn results in favorable revisit intent. Finally, the perceived value significantly affects revisit intent. This shows that customers are sensitive to the amount of money they spend. If they feel that a hotel has a good value for the money or the price including the room rate and other

fees for using the facilities at the hotel are reasonable to pay, customers will gladly stay again at the hotel.

Another study conducted by Tong and Hawley (2009) on measuring customer-based brand equity in sportswear market in China was investigated. The findings revealed that brand associations and brand loyalty had a significant effect on brand equity. Loyalty demonstrated the strongest impact, indicating the essential role of developing brand loyalty in building brand equity in the Chinese sportswear market. In addition, the results show that brand association is positively related to brand equity. This means that strong associations that support a competitively attractive and distinct brand position could create a favorable feeling and behavior toward the brand and lead to a strong sportswear brand in China. Moreover, the empirical data and statistical tests in this study did not provide enough support for the positive and direct relationship between perceived quality and brand awareness and brand equity, indicating that having high quality or having a brand name alone is not a guarantee of a successful brand in the sportswear industry.

The influence of brand loyalty on the amount a consumer is willing to pay for their preferred brand was explored by Jackson (2010). The purpose of the study was to establish a maximum price threshold of how much more brand-loyal consumers are willing to pay for their preferred brand compared to non-loyal consumers of a particular product. The results revealed that brand-loyal participants were willing to pay 10.3% more on average than non-loyal participants.

The research entitled, *“The Influence of Perceived Service Quality on Brand Image, Word of Mouth, and Repurchase Intention: A Case Study of Min-Sheng General Hospital in Taoyuan, Taiwan”* was conducted by Li (2010). The respondents of this study were 394 outpatients at Min-Sheng General Hospital in Taoyuan. The results

indicated that there is a positive relationship between patient-perceived service quality, brand image, word of mouth and repurchase intention. There was, however, a significant difference in patient-perceived quality and word of mouth when segmented by gender and income levels. According to the study, female outpatients were more satisfied with the hospital service quality and willing to recommend the hospital to others more than male outpatients. In terms of income level, the findings revealed that higher income patients can recognize a lower hospital service quality as compared to lower income patients. And there is a significant difference in patient-perceived service quality, brand image, word of mouth and repurchase intention when segmented by age levels. The findings indicated that younger patients were more dissatisfied with medical care services, in general, than older patients.

Yuliani (2011) explored the influence of brand equity on customer relationship management (CRM) performance in Indonesia. The goal of the research was aimed to examine the role of a hospital's reputation as an intervening variable in influencing the relationship of brand equity and CRM performance. According to the study, brand equity had a positive effect on CRM performance, which mean the better the brand equity, the better the CRM performance. Hospitals with high brand equity had a significant effect on customer interest in purchasing services and deciding to maintain a close relationship with the hospital. In addition, the results of the study revealed that brand equity had a positive effect on hospital reputation. The better the hospital brand equity, the better the hospital reputation. Positive reputation was a strategic factor for hospitals to gain profit as it plays an important role in sustainable purchasing behavior.

Mohan and Sequeira (2012) studied customer-based brand equity in the fast moving consumer goods industry in India. The study was based on the conceptualization of brand equity proposed by Aaker (1991). Data was collected from 826 consumers in

five major cities in India. The research findings showed that brand awareness, brand loyalty, perceived quality, and brand associations had a significant effect on brand equity. Brand association demonstrated the strongest impact, indicating the essential role of developing feels and thoughts with the brand in building brand equity of fast moving consumer goods. The results also portrayed the significant influence of brand loyalty to the development of brand equity. The empirical data and statistical tests in the study provided support for the positive and direct relationship between perceived quality and brand equity. Surprisingly, brand awareness emerged as a not-so important factor indicating that having a brand name alone was not a guarantee of a successful brand in the industry.

Mukherjee, Shamdasani, and Limbu (2012) carried out research focusing on determinants of brand equity in business-to-consumer services in the United States. The study was conducted in the context of airlines services. The overall findings indicated an overwhelming contribution of elements pertinent to the service encounter – servicescape and service personnel – to service brand equity. Servicescape and service personnel proved significant in driving perceived quality and awareness/associations, and consequently, brand equity for high-contact services. A high advertising/communications spending strategy also showed significant impact on brand equity. In the general context of services, there is indeed a greater likelihood that service marketers would provide maximum possible quality-laden cues in their communication campaigns, owing to the inherent challenge posed by intangibility of services

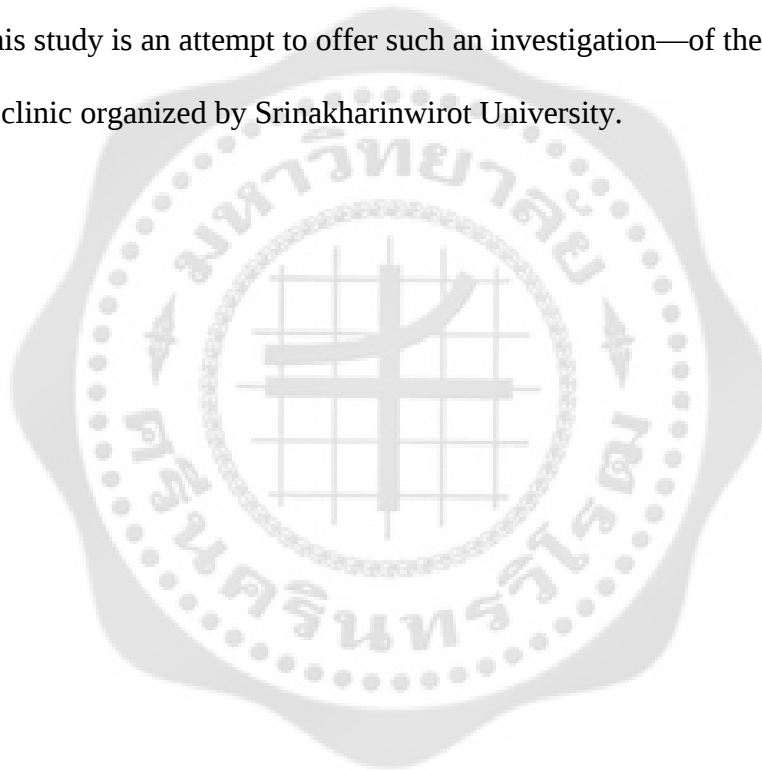
Hashim and deRun (2013) conducted research entitled “*Service Brand Equity: Cross-Sectional Analysis of Four Service Schemes in Malaysia*”. The aim of this research was to determine the dimensions of a successful branding strategy of services, to note each specific service’s sectors requirements, and to outline each sector’s differences.

The survey method was used in this study. The findings showed that different service categories such as health service, retail, hotel and banking in Malaysia posited different dimensions of service brand equity. This tended to suggest that, although service brand equity concept provided a significant description of how to brand a service; different services required different approaches the branding process. In addition, the findings also showed that the cultivation of brand awareness and brand meaning played an important role in explaining the service brand equity concept across the different service categories. In order to raise service brand awareness, advertising became one of the most significant tactics used in Malaysia, because it was regarded as a major factor in leveraging brand equity. Another important communication method of brand awareness in the service industry was word-of-mouth. The reason pertained to the intangibility and inseparability of service; customers found it was very difficult to evaluate alternatives and rely heavily on personal sources of information. In addition, the findings also showed that almost all dimensions of brand meaning had significant contribution in the service brands equity model. Interestingly, ambience exerted the strongest influence on customer's brand meaning variable. Services ambience such as facility aesthetics, layout accessibility, cleanliness, seating comfort, electronic equipment and display provided valuable tangible brand clues and later can affect customer's emotional, cognitive, and physiological responses towards the service.

Besides, Mackay et al. (2013) explored the influence of service brand equity on the strength of brand relationships in the fast food industry in South Africa. The findings indicated that three of the five service brand equity dimensions—namely, brand awareness, brand associations and brand trust—were found to positively and significantly influence customers' brand relationships with their fast food outlets. Brand trust, in particular, had the strongest influence on brand relationships. It was further determined

that an improvement in these three dimensions: brand awareness, brand associations and brand trust, will significantly and positively improve the strength of customers' brand relationships with their fast food outlets. Thus, if a fast food brand wishes to strengthen the relationship with its customers, the focus should be on creating brand awareness, broadening brand associations, and conveying trust regarding the brand to customers.

In summary, research on brand equity has been conducted in various fields of industries, but existing research on brand equity in dental industry is not broadly explored. This study is an attempt to offer such an investigation—of the brand equity of the dental clinic organized by Srinakharinwirot University.



CHAPTER III

METHODOLOGY

This chapter describes the methodology employed in the research. The chapter is divided into three sections: participants, research instrument, and procedures of the study.

Participants

The participants of the research were Thai customers who received dental services at the dental clinic organized by Srinakharinwirot University during the time of the study. The participants were randomly selected regardless of their demographics. According to the dental clinic's patient records, the average number of customers at the clinic was 300 per week. To determine the sample size effectively, the method of Krejcie and Morgan (1970) was employed. Based on this, the proper sample size for the population of 300 was 169.

Thus, the participants of this study were 169 customers of the dental clinic. The participants were asked to voluntarily participate in the study, and they were informed that the data provided would be used only in the study and be kept strictly confidential.

Research Instrument

The instrument for collecting the data in the study was a questionnaire. The researcher designed the first draft of the questionnaire by adapting four components of brand equity proposed by Aaker (1998) including brand loyalty, brand awareness, perceived quality, and brand associations. In this study, only the first four dimensions of brand equity were adopted because they represent customer's evaluations and reactions to the brand that can be readily understood by consumers, while the fifth components of brand equity

represents patents, trademark, and channel relationships address the firms' asset (Yoo & Donthu, 2001). A five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree), was used for measuring the level of agreement of the respondents to statements concerning the brand equity of the dental clinic. To validate the questionnaire, the researcher asked the project advisor to examine the content of the questionnaire, and any suggestions and comments were used to develop the reliable questionnaire.

In addition, the researcher conducted a pilot study to test the quality and efficiency of the questionnaire before it was used in the main study. The second draft of the questionnaire was trialed by means of random distribution to 17 customers, 10% of the total number of the participants in the main study. Accordingly, any unclear questions or ambiguous wordings were revised. Finally, the revised draft was used for collecting data at the dental clinic itself.

The questionnaire consisted of two parts as follows:

Part I: General information of the respondents

This section consisted of questions regarding personal background of the respondents such as: gender, age, education level, occupation, monthly income, and frequency of receiving dental services.

Part II: Brand equity of the dental clinic organized by Srinakharinwirot University. The second part was designed to explore the opinions of the respondents regarding the brand equity of the dental clinic. The respondents were asked to indicate the level of agreement on fifteen statements concerning four brand equity components proposed by Aaker (1998). The statements are as follows:

Brand loyalty. To measure brand loyalty, four statements were employed regarding the following four aspects of this component: customer's consistency and continuity in purchasing, word-of-mouth, brand trust, and willingness to pay a premium price.

Brand awareness. This section consisted of three statements. The statements related to brand name, identity, and logo.

Perceived quality. Four statements were employed to measure the perceived quality of the respondents. The statements are based on the following four factors influencing perceived quality: reliability, quality of dental services, physical facility, and responsiveness.

Brand associations. This section consisted of four statements and involved the following four components of brand associations: professionalism of the dentists, availability of dental services, reasonable fee for dental services, and popularity of the dental clinic.

Procedures of the Study

Data collection. The following steps were taken to achieve the objective of the study:

1. The researcher asked for permission to conduct research from the Dean of the Faculty of Dentistry, Srinakharinwirot University.

2. Copies of the questionnaire were randomly distributed to the customers at the dental clinic. The respondents were asked to voluntarily participate in the study and were requested to read the questionnaire carefully and rate all items. In addition, the respondents were given assurances that their responses would be kept confidential.

To gain diversity in the samples' demographic characteristics, the researcher distributed the questionnaires to the target group over five days, from 17th to 21st February, 2014,

Monday to Friday. Since the clinic is open between 9:00-12:00 and 13: 00-16:00, the data was collected during this period. 34 respondents were recruited randomly every day, and 169 respondents were recruited on the last day.

3. The completed questionnaires were analyzed to answer the objective of the study.

Data analysis. The data from the collected questionnaires were analyzed through the use of Statistical Package for Social Sciences (SPSS). Frequency and percentage were used to analyze the samples' personal profiles. A mean value was employed to analyze the level of customer agreement on the perception of brand equity of the dental clinic. The value of mean introduced by Pisarnbut (2007) was interpreted in the following ranges:

1.00 – 1.80 = Lowest

1.81 – 2.60 = Low

2.61 – 3.40 = Moderate

3.41 – 4.20 = High

4.21 – 5.00 = Highest

CHAPTER IV

FINDINGS

This chapter presents the findings from analysis data including the general information of the participants and the participants' opinions towards brand equity of a dental clinic. The data were collected from 169 customers at the dental clinic organized by Srinakharinwirot University. The data were analyzed by using Statistic Package for the Social Science (SPSS), and presented in frequency (F), percentage (%), mean (*M*), and standard deviation (*S.D.*), and followed by descriptive analysis.

General Information of the Participants

This section presents general information of 169 customers at the dental clinic, concerning gender, age, education level, occupation, monthly income, and frequency of receiving dental services. The data is presented below, in terms of frequency (F) and percentage (%), as shown in Table 1.

Table 1

General Information of the Participants (N=169)

General Information	F	%
Gender:		
Male	58	34.32
Female	111	65.58
Age:		
Less than 20	16	9.47
21-30 years old	54	31.95
31-40 years old	38	22.49
41-50 years old	19	11.24
51-60 years old	34	20.12
More than 60 years old	8	4.73
Education Level:		
Primary School	12	7.10
Secondary School	27	15.98
Bachelor's Degree	96	56.80
Higher than Bachelor's Degree	34	20.12
Occupation:		
Government Officers	47	27.82
States Enterprise Officers	9	5.33
Employee Officers	31	18.34
Business Owners	17	10.06
House Wives	14	8.28
Students	43	25.44
Others	8	4.73

Table 1 (Continued)
General Information of the Participants

General Information	F	%
Monthly Income:		
Lower than 10,000 Baht	34	20.12
10,001 - 20,000 Baht	54	31.95
20,001 -30,000 Baht	40	23.67
30,001 - 40,000 Baht	21	12.42
40,001 - 50,000 Baht	13	7.70
More than 50,000 Baht	7	4.14
Frequency of Receiving Dental Services		
Every 1-3 Months	29	17.16
Every 4-6 Months	70	41.42
Every 7-9 Months	11	6.51
Every 10 -12 Months	9	5.33
At your convenience	50	29.58

Table 1 shows the general information of the participants as follows:

In terms of gender, the majority (65.68 %) of the participants were female.

The remaining (34.32 %) were male.

The data gathered on age and education level revealed that the majority of the participants was between 21 and 30 years old (31.95%), while only 4.73 % of them were over 60. Additionally, most of the participants graduated from a university with a bachelor's degree (56.80%), whereas a few of them (7.1 %) had a primary school education level.

Regarding occupation and monthly income of the participants, the majority of the participants consisted of government officers (27.82 %), and students (25.44%).

Concerning monthly income, most of the participants (31.95 %) earned between 10,000 baht to 20,000 baht, while only a little number of them 4.14 % of them earned more than 50,000 baht monthly.

This study also explored the participants' frequencies of receiving dental services at the clinic and found that most of the participants (41.42 %) received dental services every 4-6 months, but only 5.33 % of them visited the clinic every 10 -12 months.

The Customers' Opinions towards Brand Equity of Srinakharinwirot University Dental Clinic

This part reveals the participants' opinions on brand equity of the dental clinic organized by Srinakharinwirot University. It consists of fifteen statements focusing on four aspects of brand equity proposed by Aaker (1998) including brand loyalty, brand awareness, perceived quality, and brand associations. The five-point Linkert scale was employed to measure the level of agreement concerning the four components of brand equity. The data of this part were presented in mean (*M*) and standard deviation (*S.D.*). Mean (*M*) was used to describe the average degree of the participants' opinions on the brand equity of the dental clinic. The mean scores were interpreted according to the mean range introduced by Pisarnbut (2007) as described in chapter 3 (see page 22).

The standard deviation (*S.D.*) indicated the variation in the distribution of the data.

The results are presented in Tables 2 to 6.

Table 2

Customers' Opinions towards Brand Loyalty of Srinakharinwirot University Dental Clinic

Brand Loyalty	M	S.D.	Meaning
1. Customers' consistency and continuity in purchasing dental services (You will keep getting dental services at this dental clinic.)	4.25	0.67	Highest
2. Word-of –mouth (You will recommend this dental clinic to the others.)	4.15	0.75	High
3. Brand trust (You believe that this dental clinic is better than the others.)	3.87	0.77	High
4. Willingness to pay a premium price (You will continue receiving dental treatment at this dental clinic even if the clinic increases the fee of dental services.)	3.80	0.78	High
Total	4.02	0.76	High

As presented in Table 2, the participants indicated the overall brand loyalty of the dental clinic at a high level ($M = 4.02$). The participants revealed that customer's consistency in purchasing the brand was at the highest level ($M = 4.25$), whereas the aspect of word-of-mouth was at high level ($M = 4.15$). Additionally, brand trust, and willingness to pay a premium price were rated at a high level with means of 3.87, and 3.80 respectively.

Table 3

Customers' Opinions towards Brand Awareness of Srinakharinwirot University Dental Clinic

Brand Awareness	M	S.D.	Meaning
1. Name (You can recognize the name of this dental clinic very well.)	4.05	0.93	High
2. Identity (When think of a dental clinic, this clinic is always the first one that you think of.)	4.00	0.97	High
3. Logo (You can remember the logo of this dental clinic very well.)	3.69	0.97	High
Total	3.88	0.91	High

As presented in Table 3, the findings reveal that brand awareness influenced brand equity of the dental clinic. The total mean score of participants' opinions on all aspects was at a high level ($M = 3.88$). The participants viewed that brand name, identity, and logo influenced brand equity of the dental clinic with means of 4.05, 4.00, and 3.69 respectively.

Table 4

Customers' Opinions towards Perceived Quality of Srinakharinwirot University Dental Clinic

Perceived Quality	<i>M</i>	<i>S.D.</i>	Meaning
1. Reliability (You trust the quality of dental services at this dental clinic.)	4.21	0.78	Highest
2. Physical facilities (This dental clinic is perceived as a modern clinic.)	4.06	0.69	High
3. Quality of dental services (This dental clinic provides high quality of dental services.)	4.03	0.79	High
4. Responsiveness (This dental clinic provides fast and effective dental services.)	3.87	0.77	High
Total	4.04	0.77	High

According to Table 4, the participants considered perceived quality of the dental clinic at a high level ($M = 4.04$). Among the four items related to perceived quality, the reliability of the dental clinic was rated at the highest level ($M = 4.21$), followed by the physical facilities ($M = 4.06$), the quality of dental services ($M = 4.03$), and the responsiveness ($M = 3.87$).

Table 5

Customers' Opinions towards Brand Associations of Srinakharinwirot University Dental Clinic

Brand Associations	M	S.D.	Meaning
1. Professionalism of the dentists (Dentists at this dental clinic are professional.)	4.10	0.78	High
2. Availability of dental services (All dental services that I need are available at this dental clinic.)	4.06	0.74	High
3. Popularity of the dental clinic (This dental clinic is popular.)	3.95	0.70	High
4. Reasonable fees for dental services (Fees for dental services at this dental clinic are reasonable.)	3.84	0.73	High
Total	3.99	0.74	High

Table 5 reveals that overall aspects of brand associations highly influence brand equity of the dental clinic ($M = 3.99$). The participants viewed that professionalism of dentists, the availability of dental services, the popularity of the clinic, and the reasonable fees for dental services influenced brand associations of the dental clinic with means of 4.10, 4.06, 3.95, and 3.84 respectively.

To summarize, the findings showed that overall aspects of brand equity including brand loyalty, brand awareness, perceived quality, and brand associations influenced brand equity of the dental clinic as shown in Table 6.

Table 6

Customers' Opinions towards Brand Equity of Srinakharinwirot University Dental Clinic

Aspects of Brand Equity	M	S.D.	Meaning
1. Perceived Quality	4.04	0.77	High
2. Brand Loyalty	4.02	0.76	High
3. Brand Associations	3.99	0.91	High
4. Brand Awareness	3.88	0.74	High
Total	3.80	0.88	High

According to Table 6, the participants indicated that all of the aspects— perceived quality, brand loyalty, brand associations, and brand awareness influenced brand equity at a high level ($M = 3.80$). The data from Table 6 show that among the four aspects, perceived quality was rated at the highest level ($M = 4.04$), followed by brand loyalty ($M = 4.02$), brand associations ($M = 3.99$), and brand awareness ($M = 3.88$).

Discussion, conclusion, limitations of the study, and recommendations for further studies are presented in chapter 5.

CHAPTER V

CONCLUSION AND DISCUSSION

This chapter contains three main sections: conclusion, discussion, and limitations of the study and recommendations for further studies.

Conclusion

This study aimed to explore customers' opinions towards brand equity of the dental clinic organized by Srinakharinwirot University. The instrument of the study was a questionnaire based on the four components of brand equity proposed by Aaker (1998) including brand loyalty, brand awareness, perceived quality, and brand associations. The questionnaire consisted of two parts: (a) general information of the participants, (b) the participants' opinions towards brand equity of the dental clinic. The participants of the study were 169 dental clinic customers, the number chosen according to the sample size from a given population of research proposed by Krejcie and Morgan (1970) (see Appendix C). Copies of questionnaire were distributed between February 17 and February 21, 2014. The data from the collected questionnaires were analyzed through the use of percentage and Statistical Package for Social Sciences (SPSS). The study found that the four aspects of brand equity including brand loyalty, brand awareness, perceived quality, and brand associations highly influenced brand equity of the dental clinic.

Discussion of Major Findings

The following sections present the major findings in accordance with the objective of the research regarding major aspects that significantly affect on brand equity of Srinakharinwirot University Dental Clinic. In this research, participants were asked to

indicate their opinions towards four aspects of brand equity, including brand loyalty, brand awareness, perceived quality, and brand associations.

The findings showed that perceived quality was rated at the highest level with a mean score of 4.04, followed by brand loyalty, brand associations, and brand awareness with mean scores of 4.02, 3.99, and 3.88 respectively (see Table 6).

Perceived quality was rated according to four aspects: reliability, physical facility, quality of dental services, and responsiveness. Among the four aspects, customers perceived the reliability of the dental clinic at the highest level. The results showed that the reliability of the dental clinic was the most important aspect in the customer's perception. It can be plausibly assumed that the reliability of the dental clinic perceived by the consumers has a significant positive effect on brand equity of the dental clinic.

One possible explanation for the findings concerning the reliability is that dental services are provided to the public by members of the Dentistry Faculty who are not only professional dentists but also dental school professors. Generally, dental school professors are viewed as knowledgeable, skillful, and experienced in the area of dentistry. This is well supported by the interview of the dental clinic manager who revealed that the dentists have specialized in different fields of dentistry, namely, orthodontics, oral surgery, endodontics, prosthodontics, pediatric dentistry, oral diagnostics, periodontics, and general dentistry. In addition, most of the dentists obtained postgraduate certificates, and master's degrees in their areas of specialization from prominent institutions, either in Thailand or from abroad (S. Saengkyongam, personal communication, May 6, 2014). It can be plausibly assumed that the dentists' roles and specialties acted as a signal of high quality, thus customers highly relied on the services they provided. This is well supported by Aaker (1991) stating that the competence of the service provider is the

single most important factor enhancing the trust of customer. Furthermore, the results of the study were consistent with the findings of Mukherjee, Shamdasani, and Limbu (2012) who studied determinants of brand equity in business-to-consumer services. Their study revealed that servicescape and service personnel proved significant in driving perceived quality and awareness/associations, and consequently, brand equity for high contact services.

Additionally, the study revealed that among the four aspects of perceived quality, physical facilities, quality of dental services, and responsiveness also influenced perceived quality. In terms of physical facilities, the findings showed that it highly affected perceived quality of the dental clinic. Aaker (1991) stated that the physical facilities, equipment, and appearance of personnel imply quality. The most successful service providers have relied upon a very standardized facility and operating system. According to the interview of a dentist of SWU Dental Clinic, it was claimed that all dental equipment used in patient care was high quality, most of which was imported from Japan, Europe and the United States. For example, the panoramic and cephalometric digital X-ray machine was used in complex dental treatments, e.g., orthodontics, wisdom tooth exaction, oral pathology etc. The machine provided a sharp digital X-ray image, so all important diagnostic information, such as roots in the upper and lower jaw bones were sharply displayed, and bone structure was clear; therefore this machine enhanced diagnostic capabilities and provided for a more effective dental treatment (P. Norbno, personal communication, May 8, 2014). Moreover, the dental clinic manager added that the physical layout of dental clinic was arranged to assure its easy cleaning, and that it had adequate lighting and ventilation. Besides, the dental clinic had appropriate fire-fighting equipment, and emergency power capabilities (S. Saengkyongam, personal communication, April 29, 2014). The findings were consistent with the findings of the

study entitled, “*Service Brand Equity: Cross-Sectional Analysis of Four Service Schemes in Malaysia*” conducted by Hashim and deRun (2013). The results of the study revealed that facility aesthetics, layout accessibility, cleanliness, seating comfort, electronic equipment and display provide valuable tangible brand clues and later can affect customers emotional, cognitive, and physiological responses toward the service. Therefore, it can be plausibly assumed that physical facilities enhanced customer’s perception towards perceived quality of the dental clinic.

Furthermore, the quality of dental services was rated at a high level as an influential factor of brand equity. This can be well explained by the fact that there are two main factors enhancing high quality of dental services, dentists’ professionalism, and dental equipments. Firstly, there are different specialized dentists who focus on certain types of care, such as periodontics, oral surgery, and orthodontics. The specialties of dentists significantly act as a signal of high quality services. Secondly, high quality equipments are used in dental treatment, which enables the dentists to deliver high quality dental care and enhance their productivity. It can be assumed that the two factors can assure high quality of the dental services.

Another factor of perceived quality effect brand equity is responsiveness, the findings indicated that it influenced brand equity at a high level. This can be explained by the claim of Aaker (1991), that employees, working in teams, provide a very effective approach to quality improvement. The dental clinic manager revealed that teamwork skills of personnel which included dentists, dentist assistants, receptionists, and administrators, enhanced fast and effective dental services (S. Saengkyongam, personal communication, April 29, 2014). Thus, it can be assumed that the teamwork skills of the personnel influenced brand quality of the clinic.

In brief, customers considered perceived quality as the most significant aspect

influencing brand equity of the dental clinic, especially in terms of reliability. Customers highly relied on the dental services, provided by the members of the faculty. It can be plausibly assumed that the dentists' roles significantly affected the reliability of the dental clinic. This is well supported that perceived quality is one of the most important components of brand equity. A higher level of perceived quality increases the probability of choosing the brand instead of the competitors' brand, supporting a premium price, which in turn can create more profits for the company that can be used to reinvest in brand equity (Yoo et al; 2000).

Brand loyalty was found to be the second influential aspect among the four aspects of brand equity (see Table 2). Four factors of brand loyalty including customers' consistency and continuity in purchasing, word-of-mouth, brand trust, and willingness to pay a premium price were explored in the study. Interestingly, the findings indicated that the customers' consistency and continuity in purchasing dental services was rated at the highest level. According to the results of perceived quality aspect, customers considered perceived quality at a high level. This can be explained that customers highly trusted the quality of dental services of the dental clinic; therefore, they consistently receive dental services from the dental clinic. This is well-supported by the claim of Aaker (1991) that loyalty could largely arise from a brand's perceived quality. The findings were ascertained by the study regarding brand equity, perceived value and revisit intention in the US mid-priced hotel segment (Sun, 2004). The results showed that a hotel that consistently offers quality services with a reasonable price will be able to retain high customer value, which in turn results in favorable revisit intent. In addition, repurchase intention seems likely to be the core concept of customer loyalty. It is especially considered to be one of the best measurements of customer loyalty or customer constancy in marketing research and it is one of many ways to examine buyer loyalty behavior

(Olsen, 2002; Bloemer & Kasper, 1995).

Another factor of brand loyalty considered highly influential towards brand equity is word-of-mouth. The findings indicated that customers will recommend the clinic to others. This can be explained by the fact that customers perceived dental services of the dental clinic at a high level, also they highly relied on the dentists of the clinic.

Generally, if customers believe that a brand is a good quality and reliable, there is a high probability that they will recommend the brand to others. The findings were consistent with the results of Li (2010) who studied the influence of perceived service quality on brand image, word-of-mouth, and repurchase intention of a hospital in Taiwan. The study revealed that there is a positive relationship between patient-perceived service quality and word-of-mouth. Patients who are satisfied with the hospital service quality are willing to recommend the hospital to others. Moreover, when customers are willing to spread positive information to others, they are more likely to become loyal customers (Gremler & Brown 1999). Additionally, Reichheld and Sasser (1990) mentioned that loyal customers provide free advertising via word-of-mouth, and create more customers and profits to an organization.

With regard to willingness to pay a premium price, the findings indicated that it highly influenced brand equity. Customers revealed that they will continue receiving dental services at this clinic even if the dental clinic increases the fee of dental services. This may be plausibly explained by the fact that when customers had a high perception of dental services, they might decrease their price-sensitivity. According to Keller (1993) loyal customers are less price-sensitive. This means that loyal customers are less focused on price, and they are willing to pay more for a product or service. This is well supported by the study of Jackson (2010) concerning the influence of brand loyalty on the amount a consumer willing to pay for their preferred brand. The findings showed that brand-loyal

consumers are willing to pay more for a brand to which they are loyal compared to non-loyal consumers. Therefore, it can be plausibly assumed that brand loyalty reduces the effect of price sensitivity.

From the findings of the study regarding brand loyalty, it can be concluded that all aspects of brand loyalty including customers' consistency and continuity in purchasing, word-of-mouth, and willingness to pay a premium price highly affected brand equity of the dental clinic, especially in terms of customers' consistency and continuity in purchasing. This can be well explained by the fact that customers' perception towards perceived quality of the clinic was at a high level; thus they tended to continue receiving dental services at the clinic. This is well supported by Oliver (1997) stating that high quality enables consumers to recognize a brand's distinctiveness and superiority and leads to consumer satisfaction and loyalty. Additionally, brand loyalty is often the core of a brand's equity, as it is demonstrably linked to future profits, since brand loyalty directly translates into future sales (Aaker, 1991).

Regarding brand associations, four aspects associated to the brand of the dental clinic consisting of the professionalism of the dentists, the availability of dental services, the popularity of the dental clinic, and the reasonable fees for dental service were explored (see Table 5). According to the findings, customers were highly concerned with the overall aspects of brand associations.

The study revealed that most of the respondents associated the dental clinic with the professionalism of the dentists. This is consistent with the fact that customers perceived dental service quality of the dental clinic at a high level, especially in the aspect of reliability. This is well supported by Aaker (1991) stating that intangible factors, for example, perceived quality, technological leadership, and perceived value, effectively enhance brand associations. Therefore, it can be plausibly assumed that perceived quality

has a positive relationship with brand associations.

Additionally, the study found that the availability of dental services also highly influenced brand equity of the dental clinic. This can be well explained by the fact that essential dental services are available at the dental clinic such as teeth cleaning, gum treatment, tooth filling, dental implants, orthodontics, dentures, dental surgery etc. Generally, customers would require different services at a health care business, and they would find it more convenient to visit the dental clinic offering a variety of special treatments. Thus, it can be plausibly assumed that the clinic is associated with the high availability of dental services.

Regarding the popularity of the clinic, the findings indicated that the popularity of the dental clinic highly affected its brand equity. This can be plausibly assumed by the fact that the name of the dental clinic is associated with the name of the university which has been established for 65 years. According to the fame, customers may feel that the dental clinic has higher quality than others and they have more trust in well-known clinic than general one. Thus, it can be plausibly assumed that using a name associated with the university's name enhances the popularity of the clinic.

Furthermore, the findings revealed that the customers claimed that dental service fees of the clinic are reasonable. This can be well supported by the fact that the dental clinic is run by the public university, thus the rates for dental services are based on dental service fees provided by the government, which is basically reasonable and affordable. For example, the cost for tooth cleaning of the dental is 200 – 600 Baht, while the price at private dental clinics or private hospitals is between 1,000 and 1,500 Baht. The price for orthodontics at the dental clinic is 35,000- 45,000 baht, while the same service at some private dental clinics is 42,000 – 69,000 Baht (Srinakharinwirot University Dental Clinic, 2014). Another plausible explanation of the finding is that most of the respondents

(32.95%) (see Table 1) had monthly income between 10,001 and 20,000 Baht, which is about the same as per capita income of Thai people, 13,709 Thai Baht (National Statistical Office, 2011). It can be plausibly assumed that the fees of the dental services are affordable; thus it can effectively attract this certain group of customers.

In brief, customers realized that all aspects of brand associations including professionalism of the dentists, availability of dental services, reasonableness of fees, and popularity of the dental clinic, influenced brand equity. The results of the study are consistent with the findings of the study regarding measuring customer based brand equity of the sportswear market in China conducted by Tong and Hawley (2009). The findings revealed that brand association is positively related to brand equity. This means that strong associations that support a competitively attractive and distinct brand position could create a favorable feeling and behavior toward the brand and lead to a strong brand.

Concerning brand awareness, the aspects of brand name, identity, and logo were explored. According to the findings, it was discovered that customers were highly concerned with the overall aspects of brand awareness (see Table 3).

Regarding brand name, the results showed that brand name was the most influential aspect of brand awareness, as the respondents agreed at a high level that they can recognize the brand name of the dental clinic easily. One possible explanation of the findings is that the name of the clinic is well-recognized as it uses the same name of Srinakharinwirot University, which has been established for 65 years. Since the university has been in the public for a long time, people easily recognize its name. This can be well supported by Aaker (1991) stating that old brand name created high recognition and leads to familiarity— that can drive the buying decision. In the absence of motivation to engage in attribute evaluation, familiarity may be enough. Having high

recognition of a brand name can create a competitive advantage to the firm. Additionally, the establishment of a strong name by high recognition creates an enormous asset.

Further, the asset gets stronger over the years as the number of exposures and experiences grows. As a result, a challenging brand finds it difficult to fight its way into the memory of the customer (Aaker, 1991). Accordingly, it can be plausibly inferred that having high recognition on the name of the clinic has a significant effect on the brand equity of the dental clinic.

Furthermore, customers revealed that they can easily recognize the logo of the clinic. The logo of the clinic is a tooth image together with a graph of an exponential curve. The tooth image is directly related to the dental profession and the graph is directly related to the university. The graph image in the logo is the same as the graph in the emblem of Srinakharinwirot University, which has been well recognized by the public in general. Since the logo of the dental clinic is the combination of two popular images, the image associated with the service type, and the emblem that has been associated with the university, customers can be quite familiar with the logo of the dental clinic and can possibly remember it accordingly.

In terms of brand identity, the study found that the dental clinic is always the first one when customers think of a dental clinic. This can be well supported by the results of this study regarding brand associations. According to the results, customers highly associated the brand of the dental clinic with professionalism of dentists, the availability of dental services, reasonableness of fees, and popularity of the dental clinic. These associations provide service attributes and customer benefits that provide a specific reason to purchase dental services of the dental clinic. It can be plausibly assumed that positive brand associations enhancing the dental clinic becomes the first one when customers think of a dental clinic.

In short, all aspects of brand awareness including brand name, identity, and logo influenced brand equity for customers. Aaker (1996) stated that brand awareness is a key and essential element of brand equity. Having a dominant brand provides a strong competitive advantage. In many purchase situations it means that no other brands will even be considered.

According to the findings in answering the research question, it can be concluded that the four aspects of brand equity including brand loyalty, brand awareness, perceived quality, and brand associations, significantly influenced brand equity of the dental clinic. The results suggested that perceived quality was considered as the most important aspect in affecting brand equity, especially in terms of reliability. As a result, the management should be highly concerned about this aspect in order to enhance brand equity of the dental clinic. Since dental services are difficult for consumers to evaluate in advance, consumers try to reduce their risks by purchasing dental services from reliable brands or by engaging with word-of-mouth conversations before buying (Berry & Seltman, 2007). Therefore, branding has become strategically important for many dental service providers as a brand with the higher equity generated significantly greater preferences and purchase intentions.

Limitations of the Study and Recommendations for Further Studies

Limitations and recommendations for further studies are as follows:

1. The number of participants was limited to 169 customers at a certain dental clinic; therefore it might not represent overall customers' opinions in general.

Accordingly, further studies should be conducted with a larger number of customers to effectively generalize the overall opinions towards brand equity of the dental clinic, and then the findings could yield a thorough understanding of the dental clinic customers in general.

2. This study employed a close-ended questionnaire focusing on participants' opinions towards brand equity of the dental clinic; therefore, it may not provide an in-depth result. An in-depth interview with customers, an open-ended questionnaire, and/or an observation are recommended for further studies to effectively capture more customer personal perspectives on the brand.

3. The study took into consideration consumers' opinions towards a brand of the dental clinic organized by the faculty of dentistry in a public university. Accordingly, further studies should be undertaken to compare the opinions of consumers between a brand of a dental clinic organized by the faculty of dentistry in a public university and a brand of a private dental clinic in order to discover differences in consumer responses. This information will provide more insights useful to management of the dental industry.

4. The study was conducted in a short period of time, and the respondents reflected the brand equity for a certain time only. For the optimum results, the study should be conducted consistently in a certain period of time, such as every six months or every year.

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APPENDIX A

QUESTIONNAIRE (ENGLISH VERSION)

QUESTIONNAIRE

This questionnaire is a part of the study “*Opinion of Customers towards Brand Equity of a Dental Clinic Organized by the Faculty of Dentistry in a Public University*”

Please fill out all questions, your responses will be useful for this research. All the responses will be used only for this study and kept confidential. Thank you for your kind cooperation.

Part I: General Information of Respondents

Directions: Please mark √ in the ☐ to the answer that is most applicable to you.

1. Gender

☐ Male	☐ Female
-------------------------------	---------------------------------
2. Age

☐ Less than 20	☐ 21-30
☐ 31-40	☐ 41-50
☐ 51-60	☐ More than 60
3. Education level

☐ Primary School	☐ Secondary School
☐ Bachelor's Degree	☐ Higher than Bachelor's Degree
Others.....	
4. Occupation

☐ Government Officers	☐ States Enterprise Officers
☐ Employee Officers	☐ Business Owners
☐ House Wives	☐ Students
Other (please specify.....)	
5. Monthly Income (Baht)

☐ Lower than 10,000	☐ 10,000 - 20,000
☐ 20,001 - 30,000	☐ 30,001- 40,000
☐ 40,001- 50,000	☐ More than 50,000
6. Frequency of Receiving Dental Services

☐ Every 1-3 Months	☐ Every 4-6 Months
☐ Every 7-9 Months	☐ Every 10 -12 Months
☐ At your convenience	

PART II: Brand Equity of Srinakharinwirot University Dental Clinic

Directions: Please indicate the level of agreement regarding brand equity of a dental clinic by marking (✓) on the provided columns according to your opinion.

Brand Equity of Srinakharinwirot University Dental Clinic	Level of Agreement				
	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Brand Loyalty					
1. You will keep getting dental services at this dental clinic.					
2. You will continue receiving dental services at this dental clinic even if the clinic increases the fee of dental services.					
3. You will recommend this dental clinic to others.					
4. You believe that this dental clinic is better than the others.					
Brand Awareness	1	2	3	4	5
5. You can recognize the name of this dental clinic Very well.					
6. You can remember the logo of this dental clinic very well.					
7. When thinking of a dental clinic, this clinic is always the first one that I think of.					
Perceived Quality	1	2	3	4	5
8. You trust the quality of dental services at this dental clinic.					
9. This dental clinic provides high quality of dental services.					
10. This dental clinic is perceived as a modern clinic.					
11. This dental clinic provides fast and effective dental services.					
Brand Associations	1	2	3	4	5
12. Fees for dental services at this dental clinic are reasonable.					
13. Dentists at this dental clinic are professional.					
14. All dental services that you need are available at this dental clinic.					
15. This dental clinic is popular.					



APPENDIX B

QUESTIONNAIRE (THAI VERSION)

แบบสอบถามเพื่อการวิจัย

แบบสอบถามนี้เป็นส่วนหนึ่งของงานวิจัยเรื่อง “ความคิดเห็นของผู้มารับบริการทันตกรรมต่อคุณค่าตราสินค้าของคลินิกทันตกรรมแห่งหนึ่งของคณะทันตแพทยศาสตร์ในมหาวิทยาลัยของรัฐ” ผู้วิจัยใคร่ขอความร่วมมือของท่านในการตอบแบบสอบถาม ความคิดเห็นของท่านจะเป็นประโยชน์อย่างยิ่งในการวิจัยครั้งนี้ ผู้วิจัยจะเก็บข้อมูลที่ได้รับไว้เป็นความลับ และขอขอบพระคุณทุกท่านที่ให้ความร่วมมือในการตอบแบบสอบถาม

ส่วนที่ 1 ข้อมูลทั่วไปของผู้ตอบแบบสอบถาม

คำชี้แจง โปรดทำเครื่องหมาย ✓ ลงในช่อง ☐ ที่ตรงกับข้อมูลความเป็นจริงของท่าน

1. เพศ

☐ ชาย☐ หญิง

2. อายุ

☐ ต่ำกว่า 20 ปี☐ 21 – 30 ปี☐ 31 – 40 ปี☐ 41 – 50 ปี☐ 51 – 60 ปี☐ มากกว่า 60 ปี

3. ระดับการศึกษา

☐ ประถมศึกษาหรือเทียบเท่า☐ มัธยมศึกษาหรือเทียบเท่า☐ ปริญญาตรีหรือเทียบเท่า☐ สูงกว่าปริญญาตรี

4. อาชีพ

☐ ข้าราชการ☐ พนักงานรัฐวิสาหกิจ☐ พนักงานบริษัทเอกชน☐ เจ้าของธุรกิจ☐ แม่บ้าน☐ นักเรียน/นักศึกษา☐ อื่นๆ.....(โปรดระบุ)

5. รายได้ต่อเดือน

☐ น้อยกว่า 10,000 บาท☐ 10,000 - 20,000 บาท☐ 20,001 - 30,000 บาท☐ 30,001 - 40,000 บาท☐ 40,001 - 50,000 บาท☐ มากกว่า 50,000 บาท

6. ความถี่ในการใช้บริการด้านทันตกรรมที่คลินิกแห่งนี้

☐ ทุก 1-3 เดือน☐ ทุก 4-6 เดือน☐ ทุก 7-9 เดือน☐ ทุก 10 – 12 เดือน☐ แล้วแต่ความต้องการ

ส่วนที่ 2 คุณค่าของตราสินค้าของคลินิกทันตกรรมมหาวิทยาลัยศรีนครินทรวิโรฒ

คำชี้แจง โปรดพิจารณาว่าท่านเห็นด้วยกับข้อความดังต่อไปนี้มากน้อยเพียงใดโดยทำเครื่องหมาย ✓ ลงใน
ช่องที่ตรงกับระดับความคิดเห็นของท่าน

คุณค่าตราสินค้าคลินิกทันตกรรมมหาวิทยาลัยศรีนครินทรวิโรฒ	ระดับความคิดเห็น				
ด้านความภักดีต่อตราสินค้า	ไม่เห็นด้วย อย่างยิ่ง	ไม่เห็นด้วย	ไม่แน่ใจ	เห็นด้วย	เห็นด้วย อย่างยิ่ง
	(1)	(2)	(3)	(4)	(5)
1. ท่านจะใช้บริการคลินิกทันตกรรมแห่งนี้ต่อไป					
2. ท่านจะใช้บริการคลินิกทันตกรรมแห่งนี้ต่อไปแม้ว่าจะมีการขึ้นค่าบริการ					
3. ท่านจะแนะนำให้ผู้อื่นมาใช้บริการคลินิกทันตกรรมแห่งนี้					
4. ท่านเชื่อว่าการบริการของคลินิกทันตกรรมแห่งนี้ดีกว่าของคลินิกทันตกรรมอื่นๆ					
ด้านการรู้จักตราสินค้า	1	2	3	4	5
5. ท่านสามารถจดจำชื่อคลินิกทันตกรรมแห่งนี้ได้เป็นอย่างดี					
6. ท่านคุ้นเคยกับโลโก้ของคลินิกทันตกรรมแห่งนี้					
7. เมื่อมีการกล่าวถึงคลินิกทันตกรรม ท่านนึกถึงคลินิกทันตกรรมแห่งนี้เป็นอันดับแรก					
ด้านการรับรู้คุณภาพตราสินค้า	1	2	3	4	5
8. คลินิกทันตกรรมแห่งนี้มีความน่าเชื่อถือ					
9. คลินิกทันตกรรมแห่งนี้ให้บริการด้านทันตกรรมที่มีคุณภาพสูง					
10. คลินิกทันตกรรมแห่งนี้เป็นคลินิกที่ทันสมัย					
11. คลินิกทันตกรรมแห่งนี้สามารถให้บริการได้อย่างรวดเร็วและมีประสิทธิภาพ					
ด้านความสัมพันธ์กับตราสินค้า	1	2	3	4	5
12. ค่าบริการของคลินิกทันตกรรมแห่งนี้มีความเหมาะสม					
13. ทันตแพทย์ของคลินิกทันตกรรมแห่งนี้มีความเชี่ยวชาญในการตรวจรักษา					
14. คลินิกทันตกรรมแห่งนี้สามารถให้บริการที่ตรงกับความต้องการของท่าน					
15. คลินิกทันตกรรมแห่งนี้เป็นคลินิกที่มีชื่อเสียง					

APPENDIX C

KREJCIE AND MORGAN'S TABLE

Krejcie, Robert V.; & Morgan, Darlyn M. (1970, Autumn). "Determining Sample Size for Research Activities," *Educational and Psychological Measurement*. 30: 607-610.

DETERMINING SAMPLE SIZE FOR RESEARCH ACTIVITIES

ROBERT V. KREJCIE

University of Minnesota, Duluth

DARLYN W. MORGAN

Texas A & M University

The ever increasing demand for research has created a need for an efficiency method of determining the sample size needed to be representative of a given population. In the article "Small Sample Technique." The research division of the National Education Association has published a formula for determining sample size. Regrettably a table has not been available for ready easy reference which could have been constructed using the following formula.

$$S = \frac{X^2 NP(1-P)}{d^2(n-1)} + X^2 P(1-P)$$

S = required sample size

X^2 = the table value of chi-square for 1 degree of freedom at the desired confidence level

N = the population size

P = the population proportion (assumed to be .50 since this would provide the maximum sample size).

d = the degree of accuracy expressed as a proportion (.05)

No calculations are needed to use Table 1. For example, one may wish to know the sample size required to be representative of the opinion of 9000 high school teachers relative to merit pay increase. To obtain the required sample size enter Table 1 at N = 9000. The sample size representative of the teachers in this example is 368. Table 1 is applicable to any defined population.

Table 1
Table for Determining Sample Size from a Given Population

N	S	N	S	N	S
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	2500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	132	1000	278	75000	382
210	136	1100	285	100000	384



APPENDIX D

CONSENT LETTER



บันทึกข้อความ

199
31 ม.ค. 2557

ส่วนราชการ บัณฑิตวิทยาลัย มหาวิทยาลัยศรีนครินทรวิโรฒ โทร. 15664

ที่ ศธ 0519.12/5๖๐

วันที่ ๒๑ มกราคม 2557

เรื่อง ขอความอนุเคราะห์เก็บข้อมูลเพื่อการวิจัย

เรียน คณบดีคณะทันตแพทยศาสตร์

เนื่องด้วย นางสาวกาญจนา การหวิด นิสิตระดับปริญญาโท สาขาวิชาภาษาอังกฤษธุรกิจเพื่อการสื่อสารนานาชาติ มหาวิทยาลัยศรีนครินทรวิโรฒ ได้รับอนุมัติให้ทำสารนิพนธ์ เรื่อง “ความคิดเห็นของผู้มารับบริการทันตกรรมต่อคุณค่าตราสินค้าของคลินิกทันตกรรมแห่งหนึ่งของคณะทันตแพทยศาสตร์ในมหาวิทยาลัยของรัฐ” โดยมี อาจารย์โสภณ จันทะคล้อย เป็นอาจารย์ที่ปรึกษาสารนิพนธ์ ในการนี้ นิสิตมีความจำเป็นต้องเก็บข้อมูลเพื่อการวิจัย โดยขอใช้สถานที่คลินิกทันตกรรมของคณะทันตแพทยศาสตร์ เพื่อขอให้ผู้มารับบริการทันตกรรมตอบแบบสอบถาม ในระหว่างเดือนกุมภาพันธ์ 2557

จึงเรียนมาเพื่อขอความอนุเคราะห์ให้ นางสาวกาญจนา การหวิด ได้เก็บข้อมูลเพื่อการวิจัย และขอขอบพระคุณอย่างสูงมา ณ โอกาสนี้

ไว้ ณ บัดนี้

นางสาวกาญจนา การหวิด

ดร. สมชาย สันติวัฒนกุล (รองศาสตราจารย์ ดร.สมชาย สันติวัฒนกุล)
คณบดีบัณฑิตวิทยาลัย

เป็นต้น

โดย นางสาวกาญจนา การหวิด

ในพริบตา ณ วันที่ ๒๑ ม.ค. ๒๕๕๗

(นางสาว)
ม. 57

สำนักงานคณบดีบัณฑิตวิทยาลัย

โทร. 0-2649-5064

หมายเหตุ : สอบถามข้อมูลเพิ่มเติม กรุณาติดต่อ นิสิต โทรศัพท์ 087-960-3391



VITAE

NAME: Miss Kanjana Kanwid

DATE OF BIRTH: January 3rd, 1983

PLACE OF BIRTH: Kalasin

ADDRESS: 11/15, Pracharatbumpen Road, Khaykhwang,
Bangkok, 10310

EDUCATION BACKGROUND:

2006 Bachelor of Arts (English) from Mahasarakham
University

2014 Master of Arts (Business English for International
Communication) from Srinakharinwirot
University

