



CONFERENCE PROCEEDINGS

INTERNATIONAL CONFERENCE ON ENTREPRENEURSHIP AND SUSTAINABILITY IN THE DIGITAL ERA (ICESDE) 2019

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ABOUT ASSUMPTION UNIVERSITY (AU)

The St. Gabriel Foundation, a worldwide organization founded in France in 1705, is responsible for the establishment and administration of Assumption University. The Foundation has been dedicated to education and philanthropic activities in Thailand for more than 100 years and it now operates 14 educational institutions providing all levels of education.

Assumption School of Business was initially founded in 1969, and in 1972 it became Assumption Business Administration College (ABAC). In 1975 the Ministry of University Affairs accredited ABAC and later in 1990 it was accredited as a fully-fledged university, and renamed as Assumption University (AU). The University is administered by a Council which takes policy initiatives and provides guidance for long-term planning and the formulation of control procedures. Today, AU is considered the leading private university in Thailand in the fields of Business, Management and Information Technology as demonstrated by the placement of many of its graduates in key management and technological positions in industry, government, banking and multinational conglomerates worldwide.

The University's curriculum is patterned after the American semester hour credit system and most textbooks are similar to those used in international universities. Graduates receive an education that is both globally marketable and flexible, leading to highly productive careers within the various sectors of society from which the students come and to which they aspire to be.

CAMPUSES

Assumption University maintains three campuses: the original campus located at Hua Mak, the new campus at Suvarnabhumi, and the City Campus, which is located on the 14th floor of the ZEN Department Store @ Central World in the center of Bangkok.

Hua Mak Campus

The original campus is a compact, vertical campus comprising 17 buildings with the tallest having a total of 16 floors. A small lake surrounded by lush gardens and seating is a focal point of beauty and tranquility. Food, convenience and service shops to support student needs surround the campus. This will become the home of postgraduate faculties in the near future.

The Suvarnabhumi Campus

The Suvarnabhumi Campus, constructed as a "University in a Park", comprises 200 acres of a beautifully landscaped assembly of mixed architecture surrounded by lush, tropical gardens and trees. Designed to host the university's undergraduate degree programs, it offers everything: a meeting/exhibition center, hotel, non-coeducational dormitories, a magnificent chapel, a museum, three academic halls, and much more.

The centerpiece of the campus is the Cathedral of Learning, a 39-storey tower which houses student support services, the library, reception halls, seminar rooms and offices. Transportation between the two campuses is convenient and inexpensive. Shuttles run throughout the day between various points in Bangkok and the Suvarnabhumi Campus.



**The International Conference of Entrepreneurship and
Sustainability in the Digital Era
ICESDE 2019**

*Assumption University of Thailand
July 12th, 2019*

ABAC City Campus

The new lifestyle and edutainment campus began operating in September 2007 on the 14th floor of the ZEN Department Store @ Central World, Rajdamri Road. This campus facilitates some classes for the master's programs, short-courses and seminars and will be the one-stop student service center for academic services, class services, finance services and other services.



MESSAGE FROM ASSUMPTION UNIVERSITY

The theme of the International Conference on Entrepreneurship and Sustainability in the Digital Era (ICESDE) truly reflects the principle of the upcoming Thailand's Ninth National Policy and Strategy for Research (2017 – 2021). From its current principle emphasizing the quality research works for balanced and sustainable development, the new national policy and strategy for research will soon focus on situating Thai educational system onto the community of intellectuality and learning, congruent with the country's economic, socio-political, and cultural mechanism. Such should be managed with efficient manners and potentials, competitive in the international arena.

As the Kingdom's pioneer of international learning module, Assumption University has always been aware of what academic and research works would bring to the institute and the community alike. Not only does a creation of research study form a principal mission of an institute, it also paves ways toward academic innovation. Creation of academic research means opportunity and inspiration for all concerned to act and react towards dynamism of their consumption, interaction at home and abroad, through which digital culture intertwines within ones' livelihood. The gathering of academics' members, graduate students, and scholars alike at this conference therefore bring about greater learning stages and true exchanging of knowledge principles.

Assumption University wishes to extend a warm welcome to all participants of this conference at our Hua Mak Campus. Our appreciation goes to the participating institutes, organizations, students and committees who make this event possible. May this conference lead to broader benefits for individuals, organizations, and society at large in a truly sustainable outcome.



**MESSAGE FROM THE DEAN OF GRADUATE SCHOOL
ASSUMPTION UNIVERSITY**



It is indeed a great privilege for the Graduate School of Business, Assumption University, to host the International Conference on Entrepreneurship and Sustainability in the Digital Era (ICESDE). The conference marks not only an important milestone of Assumption University, but also a significant event on which selective papers from both domestic institutes and international institutes would be presented and discussed. Such works reflect great efforts, endurance and integration of comprehensive perspectives.

We wish to extend our appreciation and our heartfelt thanks go to the scholars, professors, experts, and faculty members for their insightful selection of the research papers and for their suggestions. The Graduate School of Business owes it a great deal to the kindness, generosity, and guidance of the Executives of Assumption University, Deans and Directors of all schools concerned with the making of the conferences. A big thank is offered to all sub-committee members and the staff for their contribution and tireless assistance to have made this event possible.

As an interdisciplinary forum, the conference brings together scholars, practitioners, and graduate students from the region and beyond to discuss their research findings on how environmental-friendly and socially-inclusive growth and success can be sustained in the digital era, in Thailand in particular as it recently embarked on Industry 4.0. Keynote and feature speakers will provide a variety of perspectives on the conference themes. I strongly wish that such creation of new knowledge at this forum—be it from the papers being presented or from the exchange and discussion over the presentations—would produce the added values on our mutual quest for knowledge, thereby benefiting our respective communities and countries.

K. Phothikitti

Asst. Prof. Dr. Kittu Phothikitti
Dean, Graduate Studies
Dean, Graduate School of Business
Assumption University of Thailand



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ABOUT ICESDE 2019

Introduction

Amidst the use of electronics and information technology in the digital community, people are living at an exponential pace, disrupted almost every industry in every country and the breadth and depth of the digital economy transformed the entire business systems, ranging from production and management to governance,

Billions of people are connected via mobile devices, with unprecedented processing power, storage capacity, and unlimited access to knowledge, multiplied by emerging technology breakthrough in fields such as artificial intelligence, robotics, the Internet of Things, autonomous vehicles, 3-D printing, nanotechnology, materials science, energy storage, and quantum computing.

Objectives

The sustainable entrepreneurship or social entrepreneurship is the business to solve problems related to social and environmental sustainability with good causes to turn global problems into business opportunities by sustainable innovation.

Challenges and Opportunities

Most large corporations or organizations gain from the digital economy to have direct and fast access to their customers or clients to raise their global revenues and reduce cost of business operations and improve the quality of life for populations around the world.

The challenges are that the Small and Medium – sized Enterprises (SMEs), or newly established and fast-growing business (Start – ups) must be digitally transformed to quickly meet a market demand, improve the communication channels their customers or clients, and offer innovative products, processed or services. They also need to create their sustainable digital transformation to serve any new customers' need, significantly disrupted existing industry value chains with agility, novelty, mobile digital platform, digital marketing research and development, quality and delivery speed of products/processes/services, and competitive price.

The opportunities of SMEs or start – ups are the customers or clients access to affordable products, processes and services in the digital planet. The possible opportunities are to create the niche market, a small market segment, to satisfy specific market needs, affordable price range, high quality products/processes/services, and demographics. For example, Grab taxi mobile application, online flight booking, product/process/service test before actual purchase via online store website, etc.

The Graduate School of Business, Assumption University of Thailand proudly invites presenters and participants to showcase their research at the International Conference on **Entrepreneurship and Sustainability in the Digital Era (ICESDE)** on July 12, 2019.

As an interdisciplinary forum, the conference will bring together scholars, practitioners, and graduate students from the region and beyond to discuss their research findings on how environmental-friendly and socially-inclusive growth and success can be sustained in the digital era, in Thailand in particular as it recently embarked on Industry 4.0 Keynote and feature speakers will provide a variety of perspectives on the conference.

Recommended Topics

Thailand 4.0

SMEs in Digital Economics

Higher Education in the Digital Era

Sustainability in the Digital Era



Fintech Start-ups
Health Care Industry
Hospitality and Tourism Management
Organization Development

Important Dates

Call for Papers

Submission Deadline:	20 January, 2019 – 15 April, 2019
Announcement of the Qualified Papers for Presentation:	15 May, 2019
Registration and Payment:	15 – 31 May, 2019
Deadline for Qualified Paper Submission:	10 June, 2019
Conference and Presentation:	12 July, 2019

Registration Fee

Paper Presenters	3,000 Baht for Members of Assumption University 4,000 Baht for Outside Participants
General Attendance	1,000 Baht



CONFERENCE ADENDA

**International Conference on
Entrepreneurship and Sustainability in the Digital Era(ICESDE) 2019**
Assumption University of Thailand, Hua Mak Campus
July 12, 2019

Time: 08:00-8:30	Registration
Time: 08:30-9:00	Welcoming Speech by Asst. Prof. Dr.Kitti Phothikitti, Dean of Graduate School of Business Opening Address by Rev. Bro. Dr. Bancha Saenghiran, President - Rector Magnificus of Assumption University
Time: 09:00-10:30	Keynote for International Graduate Research Conference “What is Happening Now in Thailand? What Should the Company Be Doing?” by Dr. Douglas Abrams
Time: 10:30-11:00	Opening Poster Presentation
Time: 11:00-12:00	Poster Presentation of Research Article
Time: 12:00-13:00	Lunch
Time: 13:00-14:00	Oral Presentation of Research Articles
Time: 14:00-15:00	Coffee break
Time: 15:00-17:00	Oral Presentation of Research Articles



KEYNOTE SPEAKER PROFILE

Dr. Douglas Abrams

Douglas Abrams is the founder and CEO of Expara and Expara IDM Ventures, Singapore's leading incubator fund. He has launched two seed stage (Expara IDM Ventures I and II) and two early-stage venture funds (Extream Ventures and Expara Ventures III) in Singapore since 2007. Douglas is the Managing Director of Expara Ventures Thailand, Expara Vietnam and Expara Malaysia. He was the founding partner of Parallax Capital Management, a funds management company, focused on real estate private equity investment and early-stage venture capital. Prior to coming to Singapore in 2000, Douglas managed information technology at JPMorgan for 14 years. From 1997 to 1999, he was the Global Markets Head of Internet Marketing, and from 1991 to 1997, he was the VP and Manager of Investment Banking Technology.

Douglas is an Adjunct Associate Professor at the National University of Singapore's (NUS) Business School, where he has lectured on New Venture Creation for undergraduates and Technopreneurship for graduate students since 2001. He has been a Visiting Professor in Venture Capital for the Sasin Graduate Institute of Business Administration at Chulalongkorn University in Bangkok since 2007. Douglas was the former Chairman of the Business Angel Network of South East Asia (BANSEA) and has been a Director since 2002. He served on the board of the Media Development Authority of Singapore (MDA) from 2009-2010.

Douglas graduated from the Annenberg School, University of Pennsylvania with a BA in Communications and received an MBA from The Wharton School.



ORAL PRESENTATION SCHEDULE

Date: 12 July 2019

Time 13:00-17:00 PM

Business Administration and Management

No.	Submission ID	Paper Title	Author(s)
1	3749	Determinants of Continue to Use Mobile Banking Application: A Case Study of AU Customers	Supawan Narongrit
2	3801	Increasing Intercultural Competencies Engagement for Undergraduate Students in Hong Kong	Chongyan Zhang
3	3803	An Investigation of Factors Influencing Repurchase Intention Towards A Smartphone Brand in Bangkok, Thailand	Arpaphat Khunto
4	3851	Factors affecting purchase intention of Apple Watch – the case of Bangkokians	Sutthawee Wiwatsawatdinont,
5	3849	The effects of beauty blogger recommendations on customers' online shopping intentions in Thailand	Dolporn Amnattham
6	3844	Impact of behavioral factors on investors' financial decisions in Thailand Stock Market	Jirat Sujiskulwong,
7	3789	Investigating the Determinants of Customer Loyalty towards a Commercial Bank in Myanmar: The Role of Service Quality and CRM Dimensions	Kyawt Shinn Thant Zin
8	3791	Antecedents of Customer Repurchase Intention towards a Dietary Supplement Product in Bangkok, Thailand	Intira Fongsamut



9	006	Relationship among Psychological Biases, Investment Experience and Investors' Decision Making in the Stock Exchange of Thailand	Jirasujaritthum, S.
10	009	Test of Market Efficiency on Stocks in Thai Property Development Sector Under Current Military Regime	Waralee Phichairatanaphong
11	3832	Factors influencing customer satisfaction on using XYZ online banking application	Natwadee Chaiparamat
12	005	Factors Influencing Women's Perception on Cosmetic Surgery: A Comparative Study on Baby Boomer, X, and Y Generations	Woranun Sornkarn
13	3752	A Dynamic Process Model of Service Quality, Customer Satisfaction Commitment and Trust on Word of Mouth towards Popular Coffee Shop in Bangkok, Thailand	Avin Sony
14	3840	Factors Impacting Impulse Purchase of new beverage products in Thailand.	Salida Natesuebsai
15	3770	An Empirical Study of Brand Loyalty Towards International Cosmetics Brand in Bangkok, Thailand	Wisara Poomparnich
16	002	Factors Influencing Online Purchase Intention of Health Beverages: A Study on Thai Senior Consumers	Suphatsorn Luewanitwong
17	3796	A study of factors influencing Online Clothing Purchase of Thai Female Customers towards an Online Shopping Website in Thailand	Nay Chi Khin Khin Oo
18	007	The Influence of Generation and Education Level on Personal Financial Planning in Bangkok, Metropolitan	Piroonchinda, N.
19	3772	An Evaluation of the Factors Affecting Brand Equity towards a Skin Care Product in Bangkok, Thailand	Orakanya Boonying
20	3755	An Empirical Research of Brand Loyalty and Brand Equity Towards an Outstanding Coffee Shop in Bangkok, Thailand	Peerawat Praphusak



21	3906	The Effect of Electronic Word of Mouth on Brand Image and Purchase Intention for Buying Condominium in Bangkok	Malairat Insawangso
22	3768	A Study of Factors Influencing Customers' Behavioral Intention towards Myanmar Restaurant in Yangon, Myanmar	Thin Thin Aung
23	3838	A Study of factors Influencing event satisfaction towards an International Energy Exhibition in Bangkok, Thailand,	Chayawat Phruksathum
24	004	Determining the appealing factor of Thailand's chef-table restaurant in Bangkok and their effect upon dinner's behavioral intention	Atip Rungrojpatanaseree
25	008	Is Gold a Hedge or Safe Haven in Thailand.	Natacha Thongsang
26	3777	Determinants of Intention to Purchase Organic Food among Healthy Consumer: An Empirical Evidence towards an Organic Restaurant in Bangkok, Thailand	Prapaporn Tungtanapong
27	3841	Effect of Perceptual Differences on Bangkok Consumers' purchase Intention of Hydroponic Vegetables	Peechada Dhanasunthorn,
28	003	Factors Affecting Generating Y Perception of Mobile Wallet: A Case Study of Users in Bangkok Metropolitan	Kanasaianan, T.
29	001	Identification of Secondary Tourist Sites' destination image and impact from government's tax incentive	Pisinee Phunthasu



ABAC
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**The International Conference of Entrepreneurship and
Sustainability in the Digital Era
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July 12th, 2019*

CONFERENCE PROCEEDINGS



Determinants of Continue to Use Mobile Banking Application: A Case Study of AU Customers

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Abstract

The objective of this study is to examine the factors influencing continue to use mobile banking application which is measured by perceived ease of use, perceived usefulness, trust in mobile payment, compatibility and facilitating conditions. The researchers collected the data through self-administered questionnaire from 400 customers at Assumption University. The judgment, quota and convenience sampling procedures were adapted for data collection and Simple and Multiple Linear Regression were applied for data analysis in the study. The researchers found that perceived ease of use has an influence on perceived usefulness. Moreover, perceived ease of use, perceived usefulness, trust in mobile payment, compatibility and facilitating conditions have an influence on continue to use.

Keywords: Perceived ease of use, perceived usefulness, trust in mobile payment, compatibility, facilitating conditions

Introduction

Mobile banking service is invented by using technology adapted to the existing traditional financial service (Kim et al., 2009; Lee & Chung, 2009). It generates benefits not only to the users but also the banks. In term of banks, they can provide efficient service to facilitate customers, reduce costs, and create customer satisfaction and better performance at work (Alalwan et al., 2016; Cudjoe et al., 2015; Koenig-Lewis et al., 2010; Koksai, 2016; Shambare, 2013; Zhou, 2011). In this era, the mobile banking is the most important for all people especially for the working people or all customers who want to save time by using the online financial transaction. The smart phone becomes very important for statements and important account details. Mobile banking is becoming a global trend since the number of mobile banking user is growing (Kim & Kang, 2012).

Many researchers found various factors that influenced customer to continue to use mobile banking application. Ndubisi and Jantan, (2003) stated that "Perceived ease of use" allow customers to easily use the service and easy interactions which users experience from new application. Rigdon, Malhotra and Mathwick, (2001) mentioned that "Perceived usefulness" concerns on the benefits of new services that customers are going to use which impacts the services to improve performance of their job. Bock & Kuan, (2007); Lee et al., (2011) described "Trust in mobile payment" as the customers' trust and confidence in online payment transactions. They believe that those online services are secure and reliable. Doherty et al., (2003) described "Compatibility" as an integration of innovation and new technologies which helps to improve job performance.

Also Venkatesh et al., (2003) mentioned that "Facilitating conditions" is a service, that the customer believes in an organizational and technical infrastructure to support the system.

In order to study determinants of continue to use mobile banking application, the researchers focused mobile banking as Krungsri mobile application, hence, this research is to develop mobile banking application, to add more satisfaction and increase its member's usage. This will help the bank directly to save cost of personnel, time and place. This study also provides the bank to understand the key factors that influences to continue to use mobile banking application service. Therefore, the target population of this study is the present customer who have an experience to use Krungsri mobile banking at Assumption University including both of Huamak and Suvarnabhumi campuses. The purpose of this research is to examine the factors influencing of perceived ease of use, perceived usefulness, trust in mobile payment, compatibility and facilitating conditions on continue to use mobile banking application. This will benefit the bank industry to develop mobile banking application a culture towards their customers.

Research Objectives

The objective of this study is to examine the factors influencing continue to use mobile banking application in customers at Assumption University (AU), Thailand, the detail objectives are proposed as follows; To test the influence of perceived ease of use on perceived usefulness. To test the influence of perceived ease of use, perceived usefulness, trust in mobile payment, compatibility and

facilitating conditions on continue to use mobile banking application.

Literature Review

Continue to use

Hellier et. al., (2003) defined continue to use as a personal judgment to repeat using of a specific service. Fang et al., (2011) and Lin et. al., (2011) also stated that continue intention refers to the will to use again a specific service in the future by the customers. Han and Kim (2009) stated that behavioral intention consists of reuse and positive word of mouth can forecast the future consumption behavior of customers. Behavioral intentions can be expressed as reusing the banking application and recommending to friends or others in future (Oliver, 1996). Continue intention to use depends on customer's past experience (Wathne et. al., 2001). Thus, Bankole et al. (2011) found that continue to use intention positively influences mobile banking user behavior.

Perceived ease of use

Perceived ease of use explains the feeling of users when they use a particular system or technology which free from efforts (Davis, 1989; Cudjoe et al., 2015) and can easily learn, understand, and use (Rogers, 1962). One of the important factors affecting users to use mobile banking application services is when users doubts on how easy they can use the application especially those who are in their comfort zone (Moore and Benbasat, 1991). Perceived ease to use also explains the feeling towards experiences of users after using an application to complete their online transactions and the feeling is somehow positive reflecting how easy their lives can be (Ndubisi and Jantan, 2003). Moreover, perceived ease of use usually leads to the perceived usefulness (Davis et al. 1989). Normally, high-performance can be found in those who use the services in which they can also apply into their daily life activities.

Perceived usefulness

Perceived usefulness explains the believe of users that innovation and technologies can improve their job performances (Liao et al., 2012; Hanafizadeh et al., 2014; Davis, 1989; Alalwan et al., 2016; Ramdhony and Munien, 2013). In order to make changes and to adapt changes, customers always concern on the usefulness of services they are going to use. One of the key factors to make decision on using new services depends on benefits of the customers to receive (Venkatesh & Davis, 2000). This is called "Usefulness which refers to feeling of the customers on the benefits and potential of new services as well as the impact which contribute to their job performances (Mathwick et al., 2001). The customer's is required (Zhou et al., 2010). Therefore, by using mobile banking services, it helps to increase the facilitating conditions of using service.

Related Literature Review

Perceived ease of use and perceived usefulness

behaviors and response rely on the benefits they received and perceived from the new services they used (Adams et al., 1992). In addition, Gong and Xu (2004) explained that usefulness of trust and believe developed when new technologies meet customer's expectation. Awamieh and Fernandes (2005) said that usefulness generates advantages and benefits more than traditional services to the users.

Trust in mobile payment

Trust in online payment refers to the trustworthiness that an online payment provides to the users and have ability to create trust among users and customers. Online payment becomes more popular than mobile payment because users are convenient to use it. However, if the company or brand creates trust and benefits of mobile payment and communicates clearly to the users that it is reliable and comfortable, the customers will soon have trust on using mobile payment (Kuan and Bock, 2007; Lee et al., 2011). This might raise the perceived control or a component of flow. The users may have more confident to obtain positive benefits and will involve in the future. However, the trust in offline banking creates impact on online banking flow (Lee et al., 2007).

Compatibility

Compatibility becomes one of the key factors of behavioral intention (Rogers, 2003). It is an integration of innovation, available value, and potential as well as a combination of excellent operation for new technology helping to improve job performance (Lee et al., 2003). The dimension involved an innovation which can be applied to mobile payment services. This can develop the functions to respond user's need and expectation which helps to increase usefulness awareness of users when they use the service (Ding et al., 2004; Mallat et al., 2004). Compatibility influences positive adaptation and use (Al-Gahtani, 2003), which shows strong impact on using mobile banking (Wessels and Drennan, 2010). Therefore, compatibility will increase when using rate of mobile banking increase.

Facilitating conditions

Facilitating conditions means a technical and organizational infrastructure to support the system (Venkatesh et al., 2003) which involved in an adaptation of mobile service (Barati and Mohammadi, 2009). The relationship between behavioral intention and facilitating conditions of using services will develop the usefulness and perceived ease of use as mediator variables. For example, mobile banking requires some basic components and skills in order to complete the service. Such as in order to use mobile banking, an internet connection

According to Luarn & Lin, (2005) the researchers found that perceived ease of use have a positive effect on perceived usefulness. Perceived ease of use is an antecedent to perceived usefulness (Mathieson, 1991). Gu et al., (2009) found that the positive influence of

perceived ease of use on perceived usefulness of mobile banking.

Perceived ease of use and continue to use

Perceived ease of use is measured to be one of the most influential characteristics for the continuance intention to use new technology (Ramos-de-Luna et al., 2015). Davis (1989) mentioned perceived ease of use as an individual's opinion of using a specific system effortlessly and easily. Hong et al., (2006) defined perceived ease of use as an important factor influencing users' continue to use intention.

Perceived usefulness and continue to use

Davis (1989) revealed that usefulness can be explained as feeling of customers towards a new service whether it is able to generate benefits and help manager for their job performance when using mobile banking service. Hong et al., (2006) mentioned that perceived usefulness of user towards a new technology is the key factor of continuance intentions. Although the concept was formerly meant to interpret perceived usefulness in organizational basis, various studies towards new technology of continuance intention suggested that continuance intentions can be characterized by perceived usefulness (Kim, 2010).

Trust in mobile payment and continue to use

Trust refers to an intention of customer loyalty towards a service provider when having positive expectation on future behavior towards service provider (Zhou, 2013). Trust provides the users to obtain a positive effectiveness such as accurate, reliable and safe financial service while using mobile payment. According to Susanto et al., (2013), such activities will enhance user's trust and satisfaction to use mobile banking service continuously.

Compatibility and continue to use

According to Chemingui & Ben lallouna, (2013), the researchers revealed that the main factors accelerating the continue to use the mobile banking services has compatibility with customer's needs and the opportunity

Hypotheses

H1_o: Perceived ease of use has no influence on perceived usefulness.

H1_a: Perceived ease of use has influence on perceived usefulness.

H2_o: Perceived ease of use, perceived usefulness, trust in mobile payment, compatibility and facilitating conditions have no influence on continue to use.

H2_a: Perceived ease of use, perceived usefulness, trust in mobile payment, compatibility and facilitating conditions have influence on continue to use.

Material and Methodology

The objective of the study is to find the influence of perceived ease of use, perceived usefulness, trust in mobile payment, compatibility, facilitating conditions on continue to use Krungsri mobile application. The researchers apply descriptive research and survey research technique to set information for the target

to use it individually as a new lifestyle, the emotional aspect through the pleasure when using in mobile banking services. Compatibility can maintain and increase the number of mobile service users by creating innovation (Ding et al., 2004; Mallat et al., 2004).

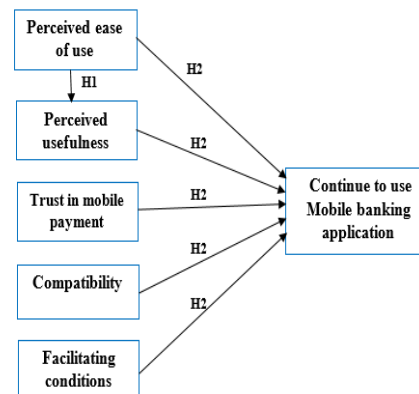
Facilitating conditions and continue to use

Mobile banking has been used as a new service where the users need some basic skills and the service itself needs internet connection while using it (Zhou et al., 2010). When more users are using mobile banking services, there are always more conditions facilitating the usage such as clear instructions or call center services, which facilitates are supported by staff to help customers to solve the problem. All of facilities intend to value customer satisfy leading to continue to use mobile banking application.

Conceptual Framework

The researchers develop the conceptual framework to find the determinants which have influence on continue to use mobile banking application towards Krungsri Mobile Banking Application at Assumption University.

Figure 1: The Conceptual Framework



population. The target population of this study is the customers who have experience in using Krungsri Mobile Banking Application at Assumption University both in Huamark and Suvarnabhumi campus. The researchers used the formula of (Zikmund, 2003) to define the sample size for this research which is calculated from, n = the minimum sample size, Z -score = square of the confidence level in the standard error units (1.96 for confidence level 95%), p = the estimated proportion of the success. For the sample; $p = 0.5$ (Bartlett et al., 2001), $q = (1-p)$ or estimated proportion of failures which is 0.5, E^2 = the square of maximum allowance of error between the true proportion and the sample proportion. Thus the formula can be described as follows:

$$n = \frac{Z_{\alpha/2}^2 pq}{E^2} \quad n = \frac{1.96^2 \times 0.5(1-0.5)}{(0.05)^2}$$

$$n = \frac{3.8146 \times 0.25}{0.0025}$$

$$n = 384.16 \text{ samples}$$

$$\approx 384 \text{ Samples}$$

Therefore, the sample size of this study is 384 samples. In this research, the researchers applied non-probability sampling method namely, judgment, quota, and convenience sampling to find the sampling unit. However, the researchers collected the data from 200 respondents at each location of Huamak and Suvarnabhumi campus.

The researchers developed a set of survey questionnaire (total 25 questions) which can be divided into 3 sections. All the questions are designed based on the previous studies. First section, is the screening question "Do you have experience use Krungsri mobile application?". This screening question help the researchers to collect the respondents who have experience in using Krungsri mobile application. For the Second section, the researchers used a five point Likert scale to measure the questions for each variable. Last section, is for the demographic factors including gender, age, education, occupation and income. The researchers have distributed 50 respondents as a pretest. After collecting the data, the researchers examined the reliability of questions by using Cronbach's Alpha shows in Table 1. Table 1 showed the reliability of statistics of

all variables are greater than 0.6 which means that the questionnaires are acceptable (Sekaran, 1992).

Table 1: The result of the Cronbach's Alpha test. (n=50)

No.	Variables	No. of items	Alpha (a-test)
1.	Perceived ease of use	3	0.857
2.	Perceived usefulness	3	0.755
3.	Trust in mobile payment	3	0.921
4.	Compatibility	3	0.895
5.	Facilitating conditions	4	0.842
6.	Continue to use mobile banking app	3	0.862

The data is collected through self-administered questionnaire from 400 customers at the two locations of Assumption University during January 28– February 22, 2019. After the surveys were collected, the data were encoded and analyzed by a statistical analysis software, which provides research findings based on statistical results such as frequencies, standard deviation, Simple Linear Regression and Multiple Linear Regression to test the influencing factors for dependent variables.

Results and discussion

The objective of this study is to examine the factors influencing continue to use mobile banking application base on five independent variables: perceived ease of use, perceived usefulness, trust in mobile payment, compatibility and facilitating conditions. The demographics data are described shows in Table 2.

Table 2: Summary of Descriptive analysis of demographics data result

Geographic information	Majority group of Respondents	Frequency of total respondents (f)	Percentage of total respondents (%)
Gender	Female	268	67%
Age	20 – 29 years old	176	44%
Education Level	Bachelor's degree of equivalent	318	79.50%
Occupation	Education personal	220	55%
Income	less than 10,000 baht	127	31.80%

The result of descriptive statistics demonstrated, that majority of the respondents are female which equals 67% (268 respondents). The majority of the age level the respondent is between 20 – 29years old which equals 44%(176 respondents) and the educational level of the majority of respondents is Bachelor's degree of equivalent which equals 79.50%(318 respondents). Most

of the respondents' occupation is education personal which equal to 55% (220 respondents). And the highest percentage of income level is less than 10,000 baht which equals 31.80%(127 respondents).

Hypothesis testing analysis

There are two types of inferential statistics in this study: Namely Simple and Multiple Linear Regression



analysis. The Simple Linear Regression analysis tests the hypothesis H1 and Multiple Linear Regression analysis tests the hypotheses H2. Table 3 shows the summary of hypothesis testing of this study.

Table 3: Summary of Hypothesis Testing

Hypothesis	Standardize Coefficient Values (β)	Significant Value	Results
H1 ₀ : Perceived ease of use has no influence on perceived usefulness.	.568	.000	Reject H1 ₀
H2 ₀ : Perceived ease of use, perceived usefulness, trust in mobile payment, compatibility and facilitating conditions have no influence on continue to use.			
Perceived ease of use	.159	.001	Reject H2 ₀
Perceived usefulness	.128	.008	Reject H2 ₀
Trust in mobile payment	.116	.010	Reject H2 ₀
Compatibility	.260	.000	Reject H2 ₀
Facilitating conditions	.228	.000	Reject H2 ₀

From the analysis of hypothesis one, the result showed that there is a significant influence of perceived ease of use on perceived usefulness with the Beta value of ($\beta = .568$, sig. < .05). It can be concluded that the easier of the use more usefulness of mobile banking. Also the results of hypothesis two showed that there is significant influence of perceived ease of use ($\beta = .159$, sig. < .05), perceived usefulness ($\beta = .128$, sig. < .05), trust in mobile payment ($\beta = .116$, sig. < .05), compatibility ($\beta = .260$, sig. < .05) and facilitating conditions ($\beta = .228$, sig. < .05) on continue to use. By considering the beta coefficient, the compatibility has highest beta(β) value which is equal to .260. This means that Krungsri mobile app in terms of compatibility influences continue to use the most. It can be concluded that the customer will continue to use Krungsri mobile application when the application is complete.

Conclusion and Recommendation

The objective of this study is to examine the factors influence of perceived ease of use, perceived usefulness trust in mobile payment, compatibility and facilitating conditions on continue to use mobile banking application. According to the result of hypothesis one, the researchers found that perceived ease of use has an influence on perceived usefulness because users believe that its mobile application is clear, easy to understand and can help to make financial transactions fast as expected. According to the result of hypothesis two, the researchers found that perceived ease of use, perceived usefulness, trust in mobile payment, compatibility and facilitating conditions have an influence on continue to use Krungsri mobile application.

The researchers would like to suggest that in order to improve and develop technology further, as well as to increase the number of users, the bank should continue to develop its current platform in order to make it easier to use and more useful for the customer. To improve compatibility, the bank should offer a new form of financial management services, which complement its current platform in order to stimulate the continue to use of the service. To improve the facilitating conditions, the bank should have an easy to understand manual. The manual should however not be complicated and easy to read. Increasing contact channels to improve convenience is also another suggestion. To improve perceived ease of use, the bank needs to develop the application to be more convenient and increase the efficiency of usage because currently there are online payment channels from non-financial institutions which can be top-up to that application without opening an account at Bank of Ayudhya. To improve perceived usefulness, the bank should give priority to service channels by finding new partner

shops or companies which allow users to make transactions via mobile applications such as bill payment, and pay for products and services that are wider and more comprehensive. To improve trust in mobile payment, the bank should continue to focus on upgrading its security system, and communicate to users for its security system in order to build confidence towards the application and make financial transactions via the Krungsri mobile application safely.

Further Study

Since mobile payment system is one the newest trends in Thailand there can be some opportunities for extending this study. The researcher focus on independent variables including perceived ease of use, perceived usefulness, trust in mobile payment, compatibility and facilitating conditions toward continue to use on Krungsri mobile application. There can be other factors that may influence continue to use mobile banking application such as source credibility, parasocial interaction (Bhattacharjee & Sanford, 2006; Li, 2013). Therefore, the future research should focus on different variables to study thoroughly to provide more understanding of user perceptions toward mobile banking application. Moreover, the researchers decided to distribute questionnaire at Assumption University in Bangkok, Thailand. Therefore, this result represents the users of specific location. Thus the researchers suggest for further study to extend difference locations in Thailand as well as different geographical areas such as other Universities or other provinces Thailand in order to get more different attitudes for Thai people all over the country. Furthermore, the researchers select to study the payment via Krungsri mobile application only. Therefore, this result represents the users of specific Krungsri mobile banking application. Thus, the researchers suggest that other researchers in the future may apply the research framework for other banking services in order to understand more about mobile banking industry of Thailand.

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ress.



Increasing Intercultural Competencies Engagement for Undergraduate Students in Hong Kong

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Abstract

Hongkong plays a significant role in China's Belt and Road policy at present. There needs for increasing young generations, especially undergraduate students, to possess the good quality of intercultural competencies and ability to engage with Hong Kong's multiple-cultural social environment. This study mainly employs to synthesize related literature reviews. Then, this study aimed to explore eight key intercultural competencies for undergraduate students in Hong Kong and finding what is effective intercultural competencies engagement for undergraduate students from Hong Kong. Finally, this study attained conclusions and suggested according to future globalization trends and Hong Kong's special needs to make policies to support sustainable development for the university students' competencies engagement in Hong Kong.

Keywords: Globalization, Intercultural competencies, Higher education, Hongkong

Introduction

The need for global citizenship for university students in Hongkong. Since Hongkong's colonial history, it opened society to other countries early, there are multiple ethnicities in Hongkong from historical immigrant, later, for Hongkong's business and financial industrials developed, here attracted many different culture identities in its society, nowadays, Hongkong service beyond Hongkong, it has triangulation function among Hongkong, mainland China, Asian area and global social, therefore, university students need to be citizen with global perspectives, such as trilingual communicators (Mandarin, Guangdong accent, English), as a good bridge between Hongkong and beyond Hongkong (Simm & Marvell, 2017).

The need for university student leadership development on global perspectives in Hongkong context, because the needs for the global citizenship as future criteria, university students as youth generations in Hongkong, they are future Hongkong's social change leaders, equipped with global mindset and mental set very important, especially university student leadership development, Hongkong's Higher Education Institutions need to design student leadership development programs with global perspectives for undergraduate students, to impact on undergraduate students self-knowledge and their leadership competencies with global (Simm & Marvell, 2017).

The need to study a framework to impact on intercultural competencies engagement for future university students education beyond Hongkong and

mainland China. As accelerating pool to Hongkong's social change, Hongkong's universities need to realize how to teach undergraduate students to possess intercultural knowledge, skills, and attitudes, what indicators will impact on undergraduate students intercultural competences, they want to explore and develop a framework to positively influence Hongkong's undergraduate students, and then, contribute to Hongkong's internationalization and globalization (Simm & Marvell, 2017).

Intercultural Competencies for Undergraduate Students in Hong Kong

Intercultural competencies in Higher Education Institutions, the need for a comprehensive factors, actually, international Higher Education Institutions around the World, they did research about how to educate their undergraduate students intercultural intelligence, because these international HEIs want to internationalization and globalization, to extend their resources and opportunities beyond their local, and then, leading their local society to be internationalization and globalization, therefore, how to impact on intercultural competencies for undergraduate students in HEIs around the World also is key topic (Lilley & Barker & Harris, 2016).

In the 21st century, internationalization and globalization ask global citizenship to possess key learning skills like collaboration, communication, critical thinking, creativity, all of them, these have individually different cultural assumptions, metaphors, since that, how the understanding of these cultural differences become considerable. Consequently, intercultural competencies for



undergraduate students in the 21st century want to be collaborative, communicative, creative and critical (Beagan, 2015).

Global Synergy, it came up with Chinese University of Hongkong, original purpose is to develop undergraduate students who studied in CUHK intercultural competences, it is as a training programs to undergraduate students in CUHK, after that, leading university students in Hongkong have good global mindset, to be a qualified communicators in bilateral and global context, this is different from business Global Synergy, in Higher Education Institutions, it regards a mindset, but, business sector regard it as strategies to synergy resource and marketplace in a global context (Holmes, 2014).

Emotional Intelligence, undergraduate students who are studying in HEIs in HongKong, they need to underpin their emotional intelligence based on bilateral and global context, emotional intelligence as key to deal with interpersonal skills in one society, students could control their emotion and expression with cultural diversity, as they met or meet culture differences (Robson, 2011).

Social Intelligence, Universities in Hongkong developed training programs to force students interpersonal skills, communication skills such active listening skills, facilitating skills, universities according to their stakeholders' expectation for future employees who should possess sufficient effective communicative skills to society in Hongkong, because Hongkong welcomes persons who are eligible to communicate with multiple languages effectively and efficiently, they can understand general culture in global perspectives and specific culture in Hongkong especially social context, according to these cultural differences, they can be as good communicators, nowadays, especially Hongkong increasing trades and other fields touch with mainland China, future Hongkong's generations need to possess good Mandarin Chinese Proficiency (MCP), and either has good English Proficiency and Guangdong Language Proficiency (GDLP), therefore, as future Hongkong's generations, they had better has triangulated language skills in their society, for HongKong's social needs. (Lilley & Barker & Harris, 2016).

Cultural Intelligence, as students in Higher Education Institutions in Hongkong, they want to teach undergraduate students by culture dimensions, they can understand individualism culture and collectivism culture well, as qualified citizen of Hongkong, especially young generations, they had better to possess ability to be a bridging to deal with cultural differences, because Hongkong has characteristic of culture diversity, as youth Hongkong's generations and future social leaders, they need to have potentials for triangulation cultures, to employ bridging strategies for

leading collective decision-making by win and win as core value (Lilley & Barker & Harris, 2016).

Global Intelligence, as a qualified citizen in Hongkong, either future social change leaders, undergraduate students need for ability to do comparative research, comparative analysis among three different regions or countries, actually, they need to research and analyze beyond Hongkong and mainland China's cultural context, cultural challenges, cultural paradigms, cultural diagrams, according to social, technology, economic, environmental, political these five factors, undergraduate students could exploit a platform that appropriate to global audiences and synthesize their local and multicultural issues in a global context (Beagan, 2015).

Knowledge, universities in Hongkong, they have obligation to teach cultural knowledge to undergraduate students, the knowledge including first, cultural self-awareness, a framework of knowing how culture shape identity and world viewpoint, second, culture-specific knowledge, analytical and explanation to other cultures, third, socio-linguistic awareness, qualified basic local language, communication with verbal or non-verbal in different cultures, adapt speech to accommodate other cultures, final, grasp of global issues and trends, explanation to globalization and frame local issues in globe perspectives and global forces (Altbach & Knight, 2007).

Skills, universities in Hongkong should be as a platform that stimulates students to risk-taking, practices in culture and adapts their bridging strategies to bilateral and global connecting issues, they should extend key skills to undergraduate students, the skills including first, listening, observing, evaluating using patience and perseverance, to identify ethnocentrism, find cultural clues and solutions, second, viewing the world from others' perspective, here including analytical thinking with culture diversity as analyzing, interpreting and relating, these skills exploit in comparative analysis of intercultural, to identify linkage, cause, and effect, relationship from other culture and critical thinking Chirkov & Safdar & Playford, 2008).

Attitudes, students in Higher Education Institutions, they need to acquire attitudes toward bilateral and global culture, because attitudes will impact on behaviors, since that, key attitudes including first, respect (valuing other cultures), students want to find other cultural attributes in the global environment, see culture diversity to be valued, when they meet cultural differences, they can think it without prejudices, second, open (withholding judgement), open undergraduate students' mindset, pause their critique to other cultures, comparatively analyze and find culture differences, curiosity, viewing difference as a learning opportunity, to identify ignorance between intercultural interactions, discovery, tolerance

for ambiguity, students need for positive initiatives to move beyond comfort zone for culture differences (Hanson, 2010).

Effective Intercultural Competencies Engagement for Undergraduate Students in Hong Kong

Intercultural competencies engagement, as involved activities to practice intercultural competencies in special context or general context, it is a way to practice, examine, analyze, feedback to explore and develop a proposed framework of intercultural competencies for undergraduate students (Robson, 2011), therefore, intercultural competencies engagement in Higher Education Institutions by student organizations, student development programs, student leadership development programs, exclusive intercultural competencies courses (general education).

Workshop, it is one of student intercultural community in universities, encourage undergraduate students come to workshop for intercultural internship, facilitating students to understand cultural diversity and culture differences, after that, they will group discussion and presentation what they find, in the process, focus on students collaboration approach in culture diversity, help them to respect and value cultural diversity, increase their intercultural communication skills. (Robson, 2011).

Experiential Learning, universities will align qualified advisor to guide students by independent study about intercultural competencies engagement, when students finish finding a platform to practice their intercultural competencies, advisor should tell their advisories what objectives they need reach, how to self-reflection in practice processes, after that, submit reporting to intercultural competencies advisory center, the purpose is to facilitate students to realize what types of and range of their involvement in intercultural competencies engagement. (Yashima, 2010).

Community Practice, this is not required part, but encourage student go to engage outside of campus, meantime, if students go to join community practice, universities should afford professional advisor to guide

students in their practice process, like universities students go to Hongkong airport to be volunteer, advisor facilitate them finish their intercultural competencies engagement missions in Hongkong international airport Herbers & Mullins & Nelson, 2009).

Conclusions

According to internationalization and globalization trends, as well as for the 21st century key learning skills as collaboration, communication, creativity, critical thinking, universities want to afford resources and opportunities to students intercultural competencies, let students welcome living in global context, meantime, expand international universities resources and opportunities on international and global society.

Hongkong's HEIs depends on its special social needs, research indicated they can develop indicators as global synergy, emotional intelligence, cultural intelligence, social intelligence, global intelligence, knowledge, skills, attitudes to be a framework to influence students intercultural competencies, evaluate students intercultural competencies engagement according to universities standards, social needs in Hongkong.

In the future, these indicators will be developed by future researchers, universities stakeholders, social change in Hongkong and around the World, but in research field, also lack of meta-analysis to intercultural competencies for undergraduate students now, it is possible that increasing meta-analysis in this research fields to make the research to be most accurate and objective.

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An Investigation of Factors Influencing Repurchase Intention Towards A Smartphone Brand in Bangkok, Thailand

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Abstract

The purpose of this research is to investigate the factors influencing repurchase intention of a smartphone brand in Bangkok, Thailand. The variables applied in this study namely perceived value, perceived quality, trust, customer satisfaction, brand attitude, E-WOM, and repurchase intention. A total of 300 questionnaires was collected from the customers who have experience in using the popular smartphone brand in Bangkok, Thailand. The researchers applied judgment, quota, and convenience to select locations and target population. Single Liner Regression (SLM) and Multiple Liner Regression (MLR) were applied for analyzing the data. The researchers found that perceived value has significant influence on trust. Moreover, perceived value and perceived quality have significant influence on customer satisfaction. In addition, perceived quality has significant influence on E-WOM. Furthermore, trust, customer satisfaction, brand attitude, and E-WOM showed a significant positive impact on the smartphone repurchase intention.

Keywords: Repurchase intention, trust, customer satisfaction, brand attitude, E-WOM

Introduction

In recent years, the engagement of technologically advanced mobile devices, including smartphones, represents an essential part of daily life. The smartphone global market is growing rapidly. According to a report by Newzoo (2018), the number of smartphone users globally reached 3 billion for the last year, in which Asia-Pacific making up more than half of this number. As for the number of active smartphones across the world, there will be 3.3 billion by the end of 2019, and the number of users is expected to hit 3.8 billion by 2021. The increasing trend in smartphone users is the main reason that has amplified the researchers' interest to study this topic by focusing on repurchase intention of the smartphone users toward a smartphone brand in Bangkok.

Thailand is one of the countries that has highest smartphone users around the world. Samsung smartphone brand is claimed to have highest market share in Thailand market which confirmed by bworldonline.com. When think about a smartphone brand, Samsung frequently come up in Thai people's mind. Thus, the success of Samsung smartphones inspired the researchers to investigate repurchase intention of this smartphones brand.

Balabanis et al. (2006) and Dixon et al. (2005) mentioned that increasing the customer repurchase intention is believed to positively influence the performance of firms and lead to achieve the competitive advantage. Hence, the conceptual framework was developed from the previous studies including the variables such as perceived value, perceived quality,

trust, customer satisfaction, brand attitude, E-WOM, and repurchase intention.

In this research, the researchers intend to investigate how perceived value, perceived quality,

trust, customer satisfaction, brand attitude, and E-WOM impact on repurchase intention of customers towards Samsung smartphones. The target population of this research is the customers who have experience using Samsung smartphone brand. The outcome of the research can provide Samsung smartphones to maintain as a market leader of smartphone market in Thailand by understanding the key factors influencing repurchase intention towards Samsung smartphone in Bangkok, Thailand.

Research Objectives

The objective of this research is to study the factors affecting repurchase intention of Samsung smartphone buyers. Therefore, the researchers aimed to investigate and find out the influence of 6 variables including perceived value, perceived quality, trust, customer satisfaction, brand attitude, and E-WOM on repurchase intention towards Samsung smartphone in Bangkok, Thailand. Consequently, the specific objectives of this research are as follows;

To investigate the influence of perceived value on trust of customers towards Samsung smartphone brand.

To investigate the influence of perceived value and perceived quality on customer satisfaction towards Samsung smartphone brand.

To investigate the influence of perceived quality on E-WOM of customers towards Samsung smartphone brand.

To investigate the influence of trust, customer satisfaction, brand attitude, and E-WOM on repurchase intention of customers towards Samsung smartphone brand.

Literature Review

Perceived value

Cronin et al. (2000) described that perceived value as trade-offs between what customers receive, such as quality, benefits, and utilities, and what they sacrifice, such as price, opportunity cost, time, and efforts. Bolton and Drew (1991) described perceived value is an overall assessment of consumers towards their perception or judgment of a product's advantages, which are based on the individual or society (Kahle, 1983 and Schwartz, 1999). Perception of consumer to product value can enhance by providing benefit, and uniqueness of the product (Steenkamp and Geysken, 2006).

Perceived quality

Tsiotsou(2006) interpreted perceived quality as the quality of the product that perceived by the consumers who already had experience with the product. Perceived product quality has the relationship between attitudes of consumers and experience towards the brand that they applied as the factors to judge the product's performance (Zeithaml, 1988). However, the firm can intensify its level of product quality, in order to gain more competitive advantages (Parasuraman et al., 1988).

Trust

Chaudhuri and Holbrook (2002) identified that brand trust is referred to its ability to create high valued relationships. McKnight et al. (2002) indicated trust is the belief of an individual in the trustworthiness of others which can be determined by their perceived integrity, benevolence, and competence. A more general definition of trust is that a party has confidence in the "reliability" and "honesty" of his partner (Morgan and Hunt, 1994).

Customer Satisfaction

Kotler and Keller (2006) defined satisfaction as "person's feeling of pleasure or disappointment which resulted from comparing a product's perceived performance or outcome against his or her expectations". Customer satisfaction is defined by Hellier et al. (2003) as overall level of customer pleasure and contentment resulting from the experience with the product or service as how much customers are satisfied, and how well their expectations are met. Oh (2000) interpreted the meaning of customer satisfaction is that comparisons between customers' expectations and what customers received from using a product or service.

Brand Attitude

Chen and Chai (2010) stated that attitude towards a product is the experience of consumers towards the product, which refers to customers' desires, expectations, and customer needs in a favorable or unfavorable aspect

Perceived value, perceived quality and customer satisfaction

influencing the level of consumers' satisfaction. Thus, attitude can be defined as mental condition of willingness to do something, which is related to personal's reaction (Allport, 1935). In addition, attitude towards a product is a personal evaluation of a product's performance perceived by the users that influences repurchase intention (Mackenzie and Spreng, 1992; Teng, 2009).

E-WOM

One of the most comprehensive conceptions of eWOM was proposed by Hennig et al. (2004), who described eWOM as an informal communication via the internet about goods or services or the sellers. The buyer shared their opinions and reviews with other users by using online platforms. Hennig et al., (2004) mentioned E-WOM as positive or negative statement or conversations made by buyers regarding products, brands or company. Consumers search for information posted by former customers in order to make themselves comfortable before purchasing the products or services (Pitta and Fowler, 2005). The Internet provides several appropriate platforms for eWOM such as blogs, consumer review websites, discussion forums, shopping websites and recently social media websites (Cheung and Thadani, 2012).

Repurchase intention

Chen and Chang, (2012) defined that purchase intention is the state of customers who purchased product/service/brand a least once, desired to purchase the product , service or brand again. Ibizan and Balarabe (2016) stated that repurchase can be described as a real action of customers in buying or using the product again. George (2004) also mentioned repurchase intention as the individual's judgment of purchasing once more for the same product or same brand or company. William and Kent (1985) explained repurchase intention is a behavior tendency of a customer who is intended to purchase a product.

Related Literature Review

Perceived value and trust

Mohammad (2012) developed the study about an application of the American Customer Satisfaction Index (ACSI) in the Jordanian mobile phone sector, discovered the relationship between perceived value, perceived quality and customer satisfaction. The outcome of the research showed that perceived value and perceived quality are mainly functions and have directly influences on customer satisfaction. Similarly, Cronin et al. (2000) found that there is a significant association between perceived value and customer satisfaction. The value of product judged by the customer would be high if the customer gets more satisfaction from the specific brand or product.

O'Cass and Carlson (2012) who investigated a study of an e-retailing assessment of perceived website-service innovativeness discovered that

perceived quality is one of the key factors of eWOM. Alessandro (2017) found that e-service quality has directly a strong positive effect to eWOM, Mutaz (2015) found about the correlation between perceived quality and E-WOM after examined the research of the effects among trust, perceived quality, perceive benefit and consumer attitudes towards online shopping MarkaVIP. The result of this research presented there is a moderate the relationship between perceived quality and E-WOM towards online shopping MarkaVIP.

Trust and repurchase intention

Trust has been linked to a variety of outcomes. Thorsten and Alexander (1997) theorized the factors influencing customer satisfaction and relationship quality on customer retention and found that trust played significant role in repurchasing decision. This is supported by the empirical findings of Bart et al. (2005) who noticed a strong relationship between trust and behavioral intention to purchase. Behavioral intention to repurchase may include trust based on the company's guidelines to suggest the new option for new technologies based on new version of product, such as revisiting the same company, engaging in interactivity with the same company, and purchasing or repurchasing from the same company (Bart et al. 2005).

Customer satisfaction and repurchase intention

Recently, Simon et al. (2018) examined repurchase intention among smartphones users in Nigeria by using SEM approach. The result showed that users' satisfaction has dramatically impacted customers repurchase intention of smartphones users. Moreover, Chinho (2014) researched the factors affecting online repurchase intention. And the result showed that customer satisfaction is an essential factor for online repurchase intention, thus, the satisfaction of the clients has a strong positive effect on intention to repurchase.

Brand attitude and repurchase intention

Spears and Singh, (2004) who studied measuring attitude toward the brand and repurchase intentions found

the significant influence of brand attitude on repurchase intention. Moreover, James and Clay, (2006) who studied the impact of brand trust and satisfaction on retailer repurchase intentions also found the significant relationship between brand attitude and repurchase intention.

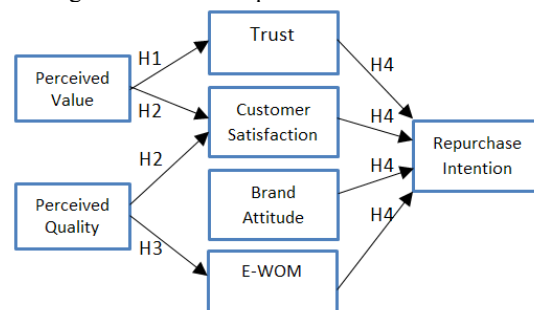
E-WOM and repurchase intention

Chetna and Amresh (2017) have studied about Social E-WOM affecting the brand attitude and purchase intention of brands. The result found that there is significant influence of E-WOM on repurchase intention. Themba et al. (2013) examined the motivation of E-WOM among university students and observed that students search for E-WOM to get engaged in seeking some opinion which ultimately and positively influence their purchase decisions. Jalilvand and Samiei (2012) who studied the effect of online reviews in tourism business found that online reviews significantly impact on travelers' final decision to repurchase.

Conceptual Framework

The researchers developed the conceptual framework to find the factors, which have influence on repurchase intention towards Samsung smartphone in Bangkok, Thailand.

Figure 1: The Conceptual framework



researchers used the questionnaire method to collect the data from the respondents. Also, Comfrey and Lee (1992) suggested that collecting the data from 300 respondents is a proper sample size to apply for a good research. Thus, for this study the researchers collected the data from 300 customers who have experience in using Samsung smartphone.

In this research, non-probability sampling was applied as sampling method by using judgment, quota, and convenience technique to collect the data. For the judgment sampling method, the researchers selected the locations to collect the data by using own judgment. The researchers designed to collect the data at crowded area in Bangkok which are Siam, Chidlom and Sukhumvit. Moreover, the researchers applied quota sampling method to collect the data at three locations that have Samsung shop in Siam, Chidlom and Sukhumvit areas.

Hypotheses

H1o: Perceived value has no influence on trust toward Samsung smartphone

H2o: Perceived value and perceived quality have no influence on customer satisfaction toward Samsung smartphones

H3o: Perceived quality has no influence on E-WOM toward Samsung smartphone

H4o: Trust, customer satisfaction, brand attitude, and E-WOM trust have no influence on repurchase intention toward Samsung smartphones.

Materials and Methods

The researchers applied descriptive research to describe and develop this study. The descriptive research is designed to describe the data and characteristics of the population in details (Patricia, 2013). Thus, the



And the researchers collected the data from customers who are convenience to answer the questionnaire.

Furthermore, the researchers applied statistical research project (Hasan, 2016). However, in this study treatment to analyze the data by MRL and SLR. In addition, the researchers applied survey technique by the researchers performed the hypotheses testing by using distributing the questionnaires to the customers who are convenience to answer. The researchers distributed questionnaire on weekend started on 2nd Feb 2019 at 1.00pm to 4.00pm till 17th Feb 2019. Furthermore, the researchers distributed 100 questionnaires in each Samsung shop located at Siam Paragon, Central World, and EmQuartier.

Data Collection

The researchers collected the data from 300 respondents to obtain a primary source of data. Primary data is an original and unique data, which is directly collected by the researchers from an original source such as observations, surveys, questionnaires, case studies and interviews according to his particular

of 2 screening questions. The second section consisted of 20 questions for the variables including 4 for perceived value, 3 for perceived quality, 3 for trust, 3 for customer satisfaction, 4 for brand attitude, 3 for E-WOM and 3 for repurchase intention. Furthermore, the researchers used five point Likert scale to measure the questions of each variable. The last part is demographics which consisted gender, age, education level, occupation, and income level. In addition, the Cronbach Alpha test to check the reliability of research instruments was applied as pretest. The results of alpha test of all variables are above 0.60 which means that all questions are consistent and reliable to apply as the research instrument.

Results and Discussion

The majority of the respondents in this study are female accounting for 57.7% of total population and aged between 21-30 years old accounting for 35%. The majority have bachelor degree occupying 49.7%. Moreover, most of them are employee accounting for 43% and have monthly income more than 30,001 baht showing 57%.

Table 1: Summary of Descriptive Analysis Result

Demograph-ics Factors	Character-istics	Frequency (f)	Percent-age (%)
Gender	Female	173	57.7%
Age	21-30 years old	105	35%
Education level	Bachelor degree	149	49.7%
Occupation	Employee	129	43%

Table 2: The Summary of Hypothesis Testing

Hypothesis	Standardized Coefficient	Significant Level	Results
H1o: Perceived value has no influence on trust toward Samsung smartphone	0.687	0.000	Reject H1o

Income level	$\geq 30,001$	171	57%
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Hypothesis testing analysis

For the hypothesis testing, the researchers applied SLR and MLR to investigate the hypotheses. Hypothesis one (H1) investigates the influence of perceived value on trust. The hypothesis two (H2) investigates the influence of perceived value and perceived quality on customer satisfaction. The hypothesis three (H3) investigates the influence of perceived quality on E-WOM. And the last hypothesis (H4) investigates the influence of trust, customer satisfaction, brand attitude, and E-WOM on repurchase intention towards Samsung smartphones. The result showed that all hypotheses are significant. Therefore, all null hypotheses are rejected.

For H1, perceived value has significant influence on trust ($\beta=0.687$, sig.< 0.05). For H2, perceived value ($\beta=0.370$) and perceived quality ($\beta=0.594$) have significant influence on customer satisfaction (sig.< 0.05). In addition, H3 showed that perceived quality has significant influence on E-WOM ($\beta=0.246$, sig.< 0.05). Furthermore, H4o showed that trust ($\beta=0.189$), customer satisfaction ($\beta=0.303$), brand attitude ($\beta=0.258$), and E-WOM ($\beta=0.115$) have a significant positive influence on smartphone repurchase intention. By considering the beta coefficient, customer satisfaction has the highest beta value which is equal to 0.303 thus, customer satisfaction influences repurchase intention the most. For the summary of hypothesis testing are as follows:

H2o: Perceived value and perceived quality have no influence on customer satisfaction toward Samsung smartphones				Reject H2o
- Perceived value	0.370	0.000		
- Perceived quality	0.594	0.000		
H3o: Perceived quality has no influence on E-WOM toward Samsung smartphone	0.246	0.000		Reject H3o
H4o: Trust, customer satisfaction, brand attitude, and E-WOM have no influence on repurchase intention toward Samsung smartphones				Reject H4o
- Trust	0.189	0.014		
- Customer satisfaction	0.303	0.000		
- Brand attitude	0.258	0.000		
- E-WOM	0.115	0.006		

Conclusions and Recommendations

The result of hypothesis 1 showed a significant influence of perceived value on trust which means that increasing perceived value will lead to higher trust. This result is supported by Adelia et. al., (2016) who studied the influence of perceived value and service quality on trust and found that perceived value has a significant positive impact on trust.

Moreover, the testing of hypothesis 2 showed a significant influence of perceived value and perceived quality on customer satisfaction which means that increase in perceived value and perceived quality will lead to higher customer satisfaction. Sufrin et. al., (2014) who investigated the impact of perceived quality, perceived value, and customer expectation on customer satisfaction also detected that customer satisfaction is influenced by perceived quality and perceived value. Thus, this finding supported the result of hypothesis 2.

In addition, the finding of hypothesis 3 presented that perceived quality has a significant influence on E-WOM. This means that E-WOM is the antecedents of perceived quality. O'Cass and Carlson (2012) found that there is an effect of perceived quality on E-WOM. The results supported the outcome of hypothesis 3.

Furthermore, the results of hypothesis 4 showed that trust, customer satisfaction, brand attitude, and e-WOM have a significant influence on trust. In addition, customer satisfaction has the highest influence on repurchase intention. Chinho (2014) studied the factors affecting online repurchase intention and found that

customer satisfaction is an essential factor of repurchase intention which is similar to the result of hypothesis 4.

The results clearly showed the importance of customer satisfactions towards repurchase intention which is directly related to the perceived value and perceived quality of smartphones offered by Samsung. This study showed that perceived value and perceived quality towards the brand can help smartphone providers to increase customer's satisfaction. Samsung can increase customer's satisfaction towards their smartphones by focusing on product standardization, design development, and implementing new technologies and functions to satisfy customer needs and expectations. Also, they should set up the reasonable price for each smartphone version. Then, higher customer satisfaction will lead to higher repurchase intention.

Moreover, smartphone producers should not ignore to improve their brand attitude. From the result of the research, a good brand attitude can generate repurchase intention. Therefore, to build good brand attitude perceived quality is the one of major factors they should focus. And to build brand attitude they might launch roadshow events to promote the brand and build a good reputation. Also, Samsung should increase trust of the customers by keeping what they promised according to the advertising and improving product value such as adding new functions, creating new designs and selling the products with the reasonable price.

Furthermore, Samsung might develop the strategies to increase positive electronic word of mouth which is by far the cheapest way of advertising. E-WOM is also the most efficient way of advertising as customers give more importance to peer customer reviews, posts, and comments than commercial advertisements. Therefore, increasing of positive E-WOM will lead to repurchase intention.

These suggestions will help the smartphone producers to generate better promotion mix, product strategies and marketing strategies which will result in raising sales and achieving more market share in the highly competitive industry.

Further Study

Since the smartphones market is changing rapidly, there can be some opportunities for extending this study in the future. For further research, the researchers would like to recommend to include the other smartphone brands such as iPhone, Huawei, Xiaomi and Oppo by using the research framework in order to know more about the effect of the factors on repurchase intention towards smartphones. Moreover, The researchers recommend to conduct the research in different



areas and demographic such as different locations in Thailand to develop suitable marketing strategies and product strategies for each area. Furthermore, the researchers suggested to investigate the influence of possible variables on repurchase intention towards smartphones.

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Factors affecting purchase intention of Apple Watch - the case of Bangkokians

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Abstract

Wearable devices have been increasingly popular in the recent years. The objective of this research is to explore the factors influencing purchase intention of Apple Watch amongst the people living in Bangkok as a response to the rapid growth of wearable technologies around the world. A conceptual model is developed along with hypotheses based on the Technology Acceptance Model, along with independent variables such as Price, Design, Feature, Brand, Social value. The researcher developed an online questionnaire using Google Forms and distributed them on popular social media platforms to collect data. Out of 530 filled questionnaires, 500 were usable. These qualified respondents know what Apple Watch is, and are living in Bangkok.

The eight hypotheses were validated by using different techniques. Among the independent variables in the study, the researcher found the Attitude Towards Using Apple Watch to be the most influential factor, followed by Brand and Social value. However, the result also shows that Design and Feature did not affect Purchase Intention of Apple Watch, but instead affects the Attitude Towards Using Apple Watch which, in contrast, has the strongest relationship with Purchase Intention of Apple Watch. Nonetheless, the factors that had no direct effect on purchase intention are design and social value. The proposed model would offer knowledge and insights to Apple Watch distributors in Bangkok to design marketing strategies and advertise Apple Watch's prominent points in order to show the people that Apple Watch has what they are looking for in a smartwatch.

Keywords: Apple Watch, Factors, Purchase intention, Bangkokian

Introduction

Over the past few years, smartwatches have become one of the most popular technology devices. Apple, who three years ago did not yet have this business, saw 60 per cent revenue growth in its wearables business, Apple Watch in the June quarter (Mayo, 2018). That said, the total sales over the last four quarters exceeded \$10bn. Moreover, according to Mass (2016), after the smartphone growth somehow has reached the maturity stage at around Bn1.4 units per year, wearable devices appear to be the growth area where every tech company put more effort on. With respect to its multi-functional features, it somehow has disrupted the traditional analog watch industry. While according to the current facts, apple watch has conquered over 17% of smartwatch market share around the globe. It sold over 4.7 apple watches in Q2 2018 alone (Mass, 2018). Basic features of smartwatches are connecting with smartphones and receiving important information, such as calls, time,

Top 5 Wearable Companies by Shipment Volume, Market Share, and Year-Over-Year Growth, Q2 2018
(Shipments in millions)

Company	2Q18 Shipments	2Q18 Share	2Q17 Shipments	2Q17 Share	Year-over-Year Growth
1. Apple	4.7	17.0%	3.4	13.0%	38.4%
2. Xiaomi	4.2	15.1%	3.5	13.3%	19.8%
3. Fitbit	2.7	9.5%	3.4	12.8%	-21.7%
4. Huawei	1.8	6.5%	0.8	3.1%	118.1%
5. Garmin	1.5	5.3%	1.4	5.4%	4.1%
Others	13.0	46.6%	13.8	52.4%	-6.2%
Total	27.9	100.0%	26.4	100.0%	5.5%

Source: IDC Worldwide Quarterly Wearables Tracker, September 4, 2018

texts, reminders, appointments etc.

Literature review

Apple Watch

Apple Watch is a wearable device first introduced by Apple in 2015. Being Apple Watch's first ever smartwatch, Apple Watch is capable of running many types of everyday tasks such as fitness tracking, answering phone calls, sending and receiving text messages, remote controls and many more, which make people's everyday-living more convenient. In addition, having a touchscreen and wireless technology namely Wi-Fi, GPS, Bluetooth, Apple Watch is capable of running mobile applications, such as calendars, navigation maps, music players and instant messaging etc. Apple Watch, equipped with its own operating system (OS), is one of the fastest growing wearable devices with 2018's last quarter new sales record with over 50% growth. Hence, it is interesting to

many people to study the reasons of Apple Watch purchases (Clover, 2018). Many theories have been chosen by researchers to find out what are the most influencing factors of smartwatch purchase intention, including Apple Watch. For instance, Chuah et al. (2016) adapted Technology Acceptance Model, which is widely adopted among researchers, to explore the

Top Five Wearable Device Vendors, Unit Shipments, Market Share, and Year-Over-Year Growth, Q2 2016 (Units in Millions)

Vendor	2Q16 Unit Shipments	2Q16 Market Share	2Q15 Unit Shipments	2Q15 Market Share	2Q16/2Q15 Growth
1. Fitbit	5.7	25.4%	4.4	24.9%	28.7%
2. Xiaomi	3.1	14.0%	3.1	17.2%	2.5%
3. Apple	1.6	7.0%	3.6	20.3%	-56.7%
4. Garmin	1.6	6.9%	0.8	4.2%	106.7%
5. Lifesense	1.0	4.6%	0.0	0.0%	N/A
Others	9.5	42.1%	5.9	33.3%	59.3%
Total	22.5	100.0%	17.8	100.0%	26.1%

Source: IDC Worldwide Quarterly Wearable Device Tracker, September 6, 2016

factors and found that attitude toward using can strongly affect the purchase intention of smartwatch.

Attitude

One of the most influencing factor on purchase intention of technology is Attitude (Lin, 2007). According to Choi and Kim (2016), from this research, attitude toward using is referred as the degree of a person's perspective and valuation regarding the use of a smartwatch. Having reviewed historical studies, the results have clearly shown a positive connection between attitude and purchase intention. This is in line with the study of Choi and Kim (2016) which revealed that attitude towards using technology is, to a large extent, influencing the intention to purchase a smartwatch.

Price

Price is the amount of money being received or given in exchange for another product (Commons,

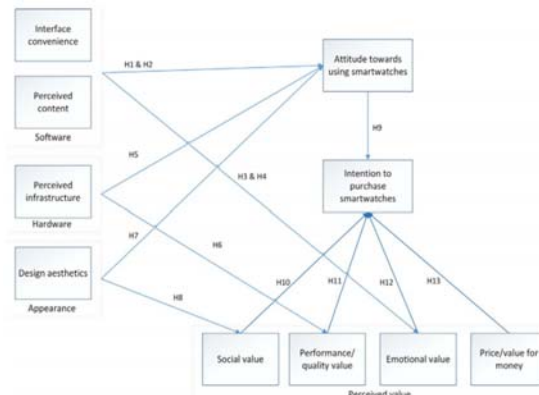
1929). Several researchers, Lien, Wen, Huang and Wu (2015) mentioned that the product price is one of the major factor that consumers take into consideration before making a purchase. Moreover, price, being used as a marketing tool to deliver a message about the status of a product and brand perception, also has impact on consumers' purchase decision. In addition, a study by Chew et al. (2012) demonstrates a positive relationship between price and purchase intention of smartphone among young adults.

Design

Hardt (2016) defined Design as "A plan or drawing produced to show the look and function or workings of a building, garment, or other objects before it is built or made." A study by Hsiao & Chen (2018) stated that because smartwatches are trendy fashion accessories and that the design of smartwatch is one of the key factors of usage and purchase intention, watch companies have been continuously developing, upgrading the looks and user interface of their watch products so as to keep up in the competitive smartwatch markets.

Feature

Features are frequently used to define the functional and non-functional characteristics of a system as well as to differentiate the individual



products within a product line. (Berger et al., 2015). According to Park et al. (2011), users' attitude towards using the wearable technologies especially smartwatches could easily be influenced by a device's feature and specifications. Consequently, similar to product designs, this encourages designers of smartwatches to improve the product efficiency by installing a more advanced features and hardware infrastructure, which they hope to lure more buyers as performance of the watch improves. Moreover, a study by Chuah et al. (2016) also proves that perceived-product-feature strongly impacts an

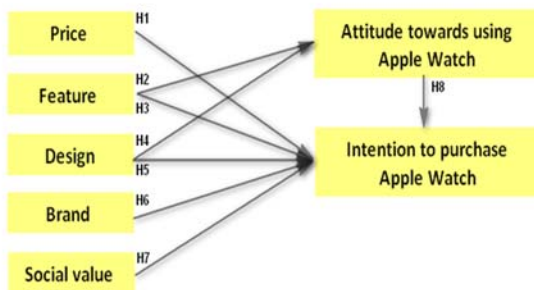
individual's attitude towards using wearable smartwatches.

Brand

According to Wang & Yang (2010), brand plays a rather important role as it enables consumers to identify products/services of a company and can differentiate them from those of competitors. It is useful especially in the markets where consumers are facing an increasingly varied range of products, especially in the smartwatch market. This corresponds with Kelly's definition of brand, which is "brand can take on significant meaning that affects how consumers think, feel and act" (Keller, 2014). Hence, it can be drawn that consumers consider brand of the product when they are to make a decision of purchase.

Perceived Social value

A study by Edwin (2015) shows that perceived social value positively affects customers' purchase intention and that whenever a product is offer a sense of place or identity, social inclusion etc., people's willingness to purchase increase. Moreover, Jeong et al. (2017) also conducted a study about social value and the results indicated that social image (social value) of the product will have a positive impact on purchase



intention. Hence it would be interesting to learn if perceived social value would have a similar impact on Apple Watch purchase intention.

Smartwatch Purchase Intention Framework by positively affect consumers' intention to purchase Apple Watch.

H7: Social value will positively affect consumers' intention to purchase Apple Watch.

H8: Users' attitude toward using smartwatches will positively affect their intention to purchase

Research Methodology

This research was carried out by conducting a quantitative analysis for the Purchase Intention of Apple Watch for people living in Bangkok through a survey method. A sample size of 30 respondents were used for pilot test and 500 for actual study. The survey was conducted in form of online questionnaire (Google and know or have heard of Apple Watch. once.

Chen and Hsiao (2018)

Conceptual Framework

Having studied the framework developed by Chen and Hsiao (2018), which is related to this research, five independent variables, namely Price, Design, Features, Brand and Social value are chosen for this conceptual framework. As Apple Watches have the smaller screen compared to those of smartphones, the watches' interface, designs and features have been differently designed. Hence, features and user interface are likely to play more important roles. Moreover, in today's materialistic world, people wear watches as an ornament, so a smartwatch with attractive designs and is of a well-known brand will likely draw more consumer attention (Yang et al., 2016). With no surprise, design and perceived social value will be taken into consideration. Perceived social value has been commonly used in the conceptual frameworks to describe buying behavior of users (Hsiao, 2013). People often consider the expense of purchasing and usage as they evaluate the value of a product or service. According to Sweeney and Soutar (2001), perceived value is divided into four types; emotional value, social value, performance/quality value, and price/value for money. However, this model focuses on perceived social value only. This model aims to examine the influence of each variable on the intention to purchase Apple Watch. Eight hypotheses are proposed in details as shown below.

Research Hypothesis

H1 : Price will positively affect consumers' intention to purchase Apple Watch.

H2 : Feature will positively affect consumers' attitude towards using Apple Watch.

H3 : Feature will positively affect consumers' intention to purchase Apple Watch.

H4 : Design will positively affect consumers' attitude towards using Apple Watch.

H5 : Design will positively affect consumers' intention to purchase Apple Watch.

H6 : Brand will

Forms) to collect necessary data. Sampling method for data collection used are the convenience and snowball sampling techniques. The survey was mainly distributed on social media platforms such as Line, Facebook and Instagram.

Measurement of variables

A five-point Likert scale ranking from strongly disagree (1) to strongly agree (5) was applied to test all the hypotheses in this study.

Population and sample

This study targets people who live in Bangkok



The researcher selected this target group because Bangkok is the most populated city in Thailand, with roughly 9.6 million people. In addition, this city also boasts the highest average income in Thailand. The total number of survey respondents was 530 from various demographic profiles. According to Krejcie & Morgan (1970), a minimum of 384 respondents are required to represent 67 million people of Thai population size, at 95% confidence level. Having validated the samples using the screening question, the study can be continued as the result shows 500 respondents were qualified.

Reliability Test

In this research, before distributing the online survey, pilot test size of 30 population was conducted. Cronbach's alpha theory was also used to test the reliability of the questions from each variable. In Cronbach's alpha table, if the alpha is higher than 0.7, it is acceptable and can be used. But if the alpha is less than 0.7, the question may need adjustments in order to be more clear/reliable because the score indicates low reliability (Cronbach, 1951). In the case when the alpha is less than 0.7 and the question remains to be used in the survey, the result may be unreliable or inaccurate. After running Cronbach's Alpha, the alpha of all variables are higher than 0.7 and there is one variable, Feature, that have alpha higher than 0.9. The result implies that the questions used in the survey are clear and reliable.

Table 1

<u>Variable</u>	<u>No. of items</u>	<u>Cronbach's Alpha</u>
Price	2	0.872
Design	5	0.894
Feature	6	0.949
Brand	7	0.892
Social value	4	0.868
Attitude	3	0.730
Purchase Intention	3	0.769

Table 2

Demographic	Characteristics (N = 500)	Frequency	%
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Demographic Profile Summary

This part describes demographic of the samples from the data collected from 500 respondents who live in Bangkok and know the knowledge of Apple Watch. The demographic profile is outlined and shown in Table 3. Female accounts for 55% of the total sample size which is the majority of respondents, whereas male is slightly lower, 45% of the population. Participants who completed the survey are between 18-25 years old (32%), 26-49 years old (58%), 50-64 years old (9%) and 65 years old or older (1%). As the survey was distributed among non-Thais as well, there are 12% foreign respondents who are living and working in Bangkok, while the rest are Thai nationals. They are all living in Bangkok. Majority of respondents holds Bachelor's Degree (70%) followed by Master Degree (26%), High school or equivalent (3%), and the rest are Certificate, Phd, other accounting for a smaller proportion.

Over 70% of respondents are corporate employees (70%), followed by business owners (7%), freelancer, management executives, government officer and other (5% each) and the rest from college students. The majority monthly income ranges of the respondents are 35,000-54,999 THB (35%), followed by 15,000-34,999 THB (34%) and 16% for 95,000 and above THB. The rest are 8%, 4% and 3% for ranges of 75,000-94,999 THB, 55,000-74,999 THB and less than

<u>Cronbach's alpha</u>	<u>Internal consistency</u>
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

15,000 THB, respectively.



Gender	Male	225	45%
	Female	275	55%
Age	18-25 years	160	32%
	26-49 years	291	58%
	50-64 years	45	9%
	65 and older	4	1%
Nationality	Thai	439	88%
	Non-Thai	61	12%
Education level	High school or equivalent	14	3%
	Certificate or training program	2	0%
	Bachelors	350	70%
	Masters	131	26%
	Phd	2	0%
	Other	1	0%
Occupation	Office workers/corporate employees	348	70%
	Management and Executive levels	26	5%
	Business owners	37	7%
	Government officer	25	5%
	Freelancer	26	5%



	Student	13	3%
	Other	25	5%
Income	Less than ฿15,000	14	3%
	฿15,000-฿34,999	168	34%
	฿35,000-฿54,999	177	35%
	฿55,000-฿74,999	21	4%
	฿75,000-฿94,999	38	8%
	฿95,000 and above	82	16%

Descriptive Analysis - Pearson's Correlation

Table 3: Correlation Matrix (H1, H3, H5, H6, H7)

<u>Variable</u>	<u>Mean</u>	<u>SD</u>	<u>Purchase Intention</u>
Price	3.239	0.85372	.521**
Design	3.9076	0.61513	.402**
Feature	3.8643	0.6523	.446**
Brand	4.2131	0.6442	.617**
Social	3.6085	0.85561	.594**

Note: ** means correlation is significant at the 0.01 level (2-tailed).

From the Pearson's Correlation Matrix for H1, H3, H5, H6, H7 shown in the above table, all variables have positive correlations among each other with P-value less than 0.05. According to the strength of correlations defined by the Political Science Department at Quinnipiac University (2018), the

overall relationship between independent variables and dependent variable is a strong positive relationship in the range 0.402-0.617. The variable having the strongest relationship with Purchase Intention is Brand, at 0.617 correlation.

Table 4: Correlation Matrix (H2, H4)



<u>Variable</u>	<u>Mean</u>	<u>SD</u>	<u>R Square</u>	<u>Attitude</u>
Design	3.9076	0.61513	Adjusted R Square .473**	0.539
Feature	3.8643	0.6523	Adjusted R Square .506**	0.534

Note: ** means correlation is significant at the 0.01 level (2-tailed).

According to the Correlation Matrix for H2 and H4 shown in Table 5, the variables have P-values of less than 0.05. The table also indicates a positive strong relationship of both variables and Attitude towards using Apple Watch.

Table 5: Correlation Matrix (H8)

<u>Variable</u>	<u>Mean</u>	<u>SD</u>	<u>Purchase Intention</u>
Attitude	4.0193	0.68109	0.582**

Note: ** means correlation is significant at the 0.01 level (2-tailed).

Similar to other variables, Attitude also shows a positive relationship with Purchase Intention. As the correlation is over 0.5, this relationship is considered a strong relationship.

Table 6: Multiple Linear Regression Result (H1, H3, H5, H6, H7), Dependent Variable: Purchase Intention

<u>Hypothesis</u>	<u>Standardized Coefficient (β)</u>	<u>H4</u>	<u>VIF</u>	<u>Result</u>
H1	0.267*	R Square	1.479	0.277 Supported
H3	0.001	Adjusted R Square	2.148	0.275 Not Supported
H5	0.034	Note: * represents standardized coefficient (β) with P-value ≤ 0.05.	2.517	Not Supported
H6	0.324*	The result exhibited in the Table 7 shows R Square value at 0.277 which indicates that 27.7% of both independent variables supported group, namely Design and Feature could explain the dependent variable, Attitude towards using Apple Watch, at 0.05 significant level. The P-value of all independent variables are less than 0.05 which guarantees that H2	1.987	Supported
H7	0.31*		1.115	Supported

Table 7: Multiple Linear Regression Result (H2, H4), Dependent Variable: Attitude

<u>Hypothesis</u>	<u>Standardized Coefficient (β)</u>	<u>VIF</u>
H2	0.237*	2.047
H4	0.331*	2.047



and H4 hypotheses are both supported. This result also implies that Design and Feature have statistically significant influences on Attitude towards using Apple Watch. From these two variables, Feature has the highest positive influence on Attitude towards using Apple Watch with Standardized Coefficient of 0.331, followed by Design at 0.237. Similar to the previous group, all VIFs are lower than 5.00 which means there are no issues or multicollinearity problem with this study.

Table 8: Multiple Linear Regression Result (H8),
Dependent Variable: Purchase Intention

Hypothesis	Standardized Coefficient (β)	VIF	Result
H8	0.582*		Supported
R Square	0.339		

Adjusted R Square

0.338

Note: * represents standardized coefficient (β) with P-value ≤ 0.05.

As displayed in the Table 8, the value of R Square is at 0.339, meaning that 33.9% of the independent variable, Attitude Towards Using Apple Watch, could explain the dependent variable, Purchase Intention of Apple Watch, at 0.05 significant level. The P-values of the independent variable is below 0.05 which confirms that the hypothesis H8 is supported. Moreover, this indicates that Attitude Towards Using Apple Watch has statistically significant influences on Purchase Intention of Apple Watch. The Standardized Coefficients presented in the Table 8 shows that Attitude Towards Using Apple Watch (0.582) has a positive influence on Purchase Intention of Apple Watch. The VIFs result of below 5.00 confirms no issues exist in this study.

Discussion and Conclusion

From several analysis, it comes to a conclusion that six of our hypotheses are supported by our findings, while two hypotheses aren't. Among the variables studied in this research, the Attitude Towards Using Apple Watch is the most influential factor on Purchase Intention of Apple Watch. This result is indeed in line with the study by K.-L. Hsiao, C.-C. Chen, The variable having the strongest effect on smartwatch adoption is attitude towards using smartwatches. Among the factors of the attitude, Feature was found to have the strongest effect on the attitude. Several past studies have proven that feature of an electronic device could well explain the purchase intention. According to Park et al. (2011), users' feelings about the wearable technology especially smartwatches can be influenced by a device's feature, design and specifications. In addition, Chuah et al. (2016) also discovered that perceived-product-feature has a strong, significant effect on attitude towards using smartwatches. It comes as no surprise that manufacturers has continuously been trying to improve the performance of the smartwatch by providing more advanced features and hardware specification to upgrade the product efficiency.

Besides Feature, Design of Apple Watch is consumers' second concern when making a purchase decision of Apple Watch. This in fact matches with a past research by Hsiao & Chen (2018) who mentioned that manufacturers of electronic devices have been continuously working to enhance the design, hardware, software, and user interface of their products in order to satisfy users' needs because the design of smartwatch one of the major factors of usage and

purchase intention - considering smartwatches are famous fashion accessories. At the same time, Brand and Social value also come into play in purchase intention. From a research by Wang & Yang (2010), brand plays a rather important role as it enables consumers to identify products/services of a company and can differentiate them from those of competitors. It is especially useful in the markets where consumers are facing an increasingly varied range of products, especially in the smartwatch market. Moreover, a past research by Edwin (2015) also indicated that perceived social value positively affects customers' purchase intention and that whenever a product is offer a sense of place or identity, social inclusion etc., people's willingness to purchase increase.

Recommendations and Further study

From the result of this study, Apple Watch marketers in Thailand may consider paying more attention to the attributes of the Apple Watch, design and features, that can really attract buyers. For example, repeatedly highlighting on popular online social media channels Apple Watch's cutting edge design and its wristband that can be removed or changed, as well as communicating the unique features, functionalities and stability of Apple Watch would actively keep people aware of what Apple Watch has to offer and gradually persuade them to make the purchase. In addition, marketers may try to tackle the market of corporate employees by having collaborations with large corporates in Bangkok to offer employee discounts for Apple Watch purchase. This campaign would easily bring in more volumes as word of mouth spreads very quickly among friends and colleagues. For further research, as this study primarily focused on the people



living in the capital city of Thailand, Bangkok, therefore it can't entirely represent the population living in other cities. This study could assuredly be made stronger, by expanding the scope to other parts of

the country, especially large and densely-populated areas such as Pattaya, Chiang Mai, Phuket and Hatyai etc

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The effects of Beauty Blogger recommendations on customers' online shopping intentions in Thailand.

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Abstract

The numbers of people who shop via online channels in Thailand are increasing and also the numbers of Beauty Blogger in Thailand are increasing. The Beauty Blogger has become part of the customers' online shopping intention. However, to understand the effects of Beauty Blogger recommendations on customers' online shopping intentions in Thailand is quite complicated. For the purpose of this study is to examine the effects of Beauty Blogger recommendations on customers' online shopping intentions in Thailand and analyze the mean of people from the different group of age. To conduct this research, the quantitative analysis approach with non-probability sampling method; convenience sampling technique, snowball sampling technique, and quota sampling technique was used through a survey method in the form of an online questionnaire. In analyzing data, Simple Linear Regression and Multiple Linear Regression were employed to investigate the effect, relationship and different between all factors includes Trust, Perceive Usefulness of Blogger Recommendations, Attitude towards online shopping and Intention to shop online. In addition, One-Way ANOVA was used to distinguish the mean difference between people from each group of age towards intention to shop online. The 400 respondents who are live in Thailand and have experience in online shopping were implied to investigate the effects of Beauty Blogger recommendations on customers' online shopping intentions in this research. The results have been interpreted that Attitude towards online shopping has the most influence on customers' Intention to shop online, however Perceived usefulness of Beauty Blogger's recommendation has no influence on customers' Intention to shop online.

Keywords: Online shopping, Online shopping intentions, Beauty Blogger, Blogs, Blog Reader, Blogger Recommendations, Attitude, Perceived usefulness, Trust

Introduction

At present blogging or social media channels have become one of the most popular channels for recording, reviewing and discussing personal feelings, ideas and opinions related to specific events or specific products or services that they had experienced with. Researcher has pointed out that 81 percent of consumers search for advices from social media before purchasing and 74 percent of the people who received advices found them to be influential in their purchasing decision (Wegert, 2010).

In addition, an increasing number of smartphones can make the internet easier to be accessed and much more significant. This can lead to the growth of online shopping. Since online businesses are not face to face communicate, consumers need reliable and useful information to understand more about the products and support their purchasing decisions. (Hsu, Lin, & Chiang, 2013). Therefore, the review or recommendation from the beauty blogger has obviously become a significant factor before purchase decision making.

In Southeast Asia, Thailand is the second largest of economy. The e-commerce market in Thailand has already developed very well. By the 70 millions of Thailand's population, almost large majority are already online and have knowledgeable of using digital technologies, mobile and e-commerce. The growing of e-commerce in Thailand make Thailand has good environment for e-commerce business. As the number of people in Thailand who using social network is quite large, Blogger Beauty bloggers can easily share the opinion towards the products and services that they experienced via various online channels and this can make people easily to access their recommendation. Therefore, this can make Beauty Bloggers get more interest from people in Thailand.

This research aims to analyze the effect of beauty blogger recommendations on customers' online shopping intentions in Thailand and to examine the correlations between the trust in bloggers, the perceived usefulness of a beauty blogger's recommendation, and attitudes towards shopping via online channels and intentions in an online shopping in

Thailand. In addition, the demographic group of age is also considered to test the effect of the difference age on Intention to shop online. Finally, the result from this research may provide guideline to the marketer in selecting an

appropriate marketing strategy to promote products or services via online channels

Literature review

Perceived usefulness of beauty blogger recommendations

Perceived usefulness refers to consumers' perceptions regarding the outcome of the experience (Jahangir & Begum, 2008). Perceived usefulness is also defined as the extent to which a person believes that using a technological innovation will enhance his or her job performance (Davis, 1989).

Perceived usefulness of beauty blogger recommendations is a one of the type about Electronic word of mouth that people can reachable to find more information about the related products or services. The large variety of products and services can make people easily to get lost about information. Recommendation engines helping in narrow down the large variety by presenting possible options. (Hopmans, 2015).

Trust

Trust is a person's willingness to be dependent on another party in the belief that the party will not intentionally disappoint them. (Deutsch, 1958). Trust can be defined as the perceived credibility and benevolence of a target of trust. (Gefen, 2002). In the term of trust in this research is relevant in an online content from blogger recommendation or the trust of characteristic of each blogger. Trust is an important factor for successful online business (Salo & Karjaluoto, 2007) and also Trust is the key factor for attracting customers, retaining them and acquiring competitive advantage on the internet (McKnight & Chervany, 2002).

Trust comes from an expectation of customer to the blogger that they received the message. If one has expectation that something will occur and the product that one's recommendation is positive and reliable as recommended, customer will feel confident to believe the information or the message that they received and then buy the products or services via online channels as blogger recommended.

Attitude

Attitude is considered as one of the most important predictors of behavior and also it is a central of behavioral theory and decision-making research (Bagozzi, 1992). In this study, attitude is referred to the attitude towards online shopping that relates to their psychological state in terms of making purchases over the Internet. Online buying behavior process refers to the products purchased online. (Sultan & Uddin, 2011). Attitude is defined as the measure of blog reader's positive feelings about buying products via online channels.

The researchers pointed out that the attitude positively influences an individual's behavioral intention. Attitude of customer towards online shopping is one of the relative factors which is about decision-making to buy the products. The positive influence of attitude on online purchase intention was found in the content that customer received from technology and the variety of innovations via online channels (Alsaleh, 2017; Hsu & Lu, 2007).

Intention to shop online

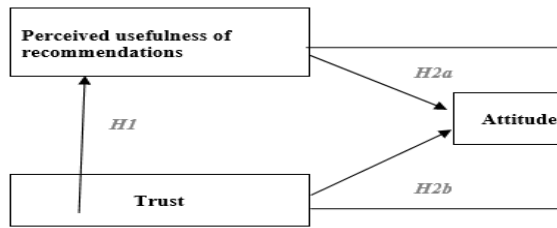
In terms of research, intention to shop online is about consumer attitude towards online shopping that were essential in expecting purchase intentions via online channels (Shim, Eastlick, Lotz, & Warrington, 2001). Moreover, ecommerce has been contributed that the customer's attitude towards online shopping is a predictor of each people behavioral intention (Huang, Wu, Wang, & Boulanger, 2011; Hung, Ku, & Chang, 2003). Researchers have pointed out that Online shopping Trend is growing rapidly nowadays. The convenience of online shopping rendering it an emerging trend among consumers and effect to intention to shop online (Gan & Wang, 2017) and also this can be affected to intention to shop online are from the blogger recommendations influences (Hsu, Lin, & Chiang, 2013).

Research Framework and Methodology

Conceptual Framework

The conceptual framework of this study is applied from the theoretical framework from the research of Hsu, Lin, and Chiang (2013). The results of applied research indicated that Perceived usefulness of recommendations, Trust, and Attitude are significant positively influence customers' intentions to shop via online channels. Therefore, this conceptual framework is developed to study and examine factors affecting people in Thailand on their intention to intentions to shop via online channels as shown in figure 1.

Figure 1: Conceptual Framework



Hypotheses

Table1: Defined Hypotheses

No.	H	Hypotheses
1	H1	Trust will positively affect to Perceived usefulness of Beauty Blogger's recommendation.
2	H2	Perceived usefulness of Beauty Blogger's recommendation (<i>H2a</i>) and Trust (<i>H2b</i>) will positively affect to blog readers' attitudes towards shopping via online channels.
3	H3	Perceived usefulness of Beauty Blogger's recommendation (<i>H3a</i>), blog readers' attitudes towards shopping via online channels (<i>H3b</i>) and Trust (<i>H3c</i>) will positively affect to Intention to shop online.
4	H4	People who have different ages will have a different intention to shop online channel

Research Methodology

To conduct this research, the quantitative analysis approach with non-probability sampling method; convenience sampling technique, snowball sampling technique, and quota sampling technique was used through a survey method in the form of an online questionnaire. There are three parts in questionnaire which are screening question, Likert scale, and demographic profile. To measure the hypotheses, Five-Point Likert scale is applied with the range stated that 5 as "Strongly Agree" and 1 as "Strongly Disagree."

Measurement variables

This research paper aims to study on the target respondents who live in Thailand and have experience in online shopping.

Population and samples

The research aims to collect the data by distributing the questionnaires to 400 target respondents who live in Thailand and have experience in online shopping. Online survey questionnaire was distributed based on non-probability sampling method. The respondents are selected by using total of three techniques including convenience sampling technique, snowball sampling technique, and quota sampling technique. First, in convenience sampling technique, the questionnaires were distributed to the people basically through online channel to the people in Thailand by the convenient accessibility and proximity of researcher. Second, snowball sampling technique was done by distributed the online questionnaires to the target respondents and ask them to forward the questionnaires to the people who they know and also required characteristics to be target respondents. Moreover, this research also applied the quota sampling technique by equally distributed to target respondents in different age ranges of total four groups to research about the effects of Beauty Blogger recommendations on customers' online shopping intentions in Thailand from age ranges.

Reliability Test

To test the Reliability and Validity of the questionnaire, the pilot survey has been conducted using total of 30 different responses from the sample to see the result of Cronbach's Alpha value is greater than 0.6 that was the coefficient alpha developed by Cronbach (1951) to measure the reliability of each variable in the questionnaire. The result in Table 2 showed that the Cronbach's Alpha Coefficient is in a range between 0.786 to 0.936. This indicated that the questionnaire of this study is passed the standard required for reliability test.



Table 2: Reliability Statistics

	Cronbach's Alpha	No. of Items
Perceived usefulness of recommendations (PU)	0.899	3
Trust (TR)	0.858	3
Attitude (AT)	0.793	2
Intention to shop online (IN)	0.936	2

From the result as shown in the table 2 indicated that Cronbach's Alpha of all variables are greater than 0.6, which is passed the standard required for reliability test. This demonstrated that the questionnaire has achieved the standard of the reliability requirement and can be acceptable.

Result and Discussion

Demographic Profile Summary

The screening questions were used to make sure that all 400 respondents were part of the research population who lived in Thailand and had ever shop via online channels are shown in the Table 3 as below. The Majority of the respondents are female 66.8% and male 33.3%. There are similar numbers of each age range respondents at 25% according to the quota sampling technique of data collection. The major monthly income ranges are 15,001 - 30,000 Baht 30.8% followed by 30,001 - 50,000 Baht 23.5%, Lower than 15,000 Baht 22.3%, 50,001 - 70,000 Baht 12.8% and Higher than 70,001 Baht 10.8%. The main majority of respondents were graduated with Bachelor's degree with 44.8% followed by 27.8% of Less than Bachelor's degree, 23.8% of Master's Degree and 0.8% of Doctorate Degree. In addition, the major of respondents are Employee with 36.0% followed by Student 28.0%, Business Owner 16.0%, Government Officer / State Enterpriser 13.8%, Unemployed 3.3% and Self-Employed 3.0%.

With reference to the most experience in searching recommendations from Beauty blogger for online shopping per one time from the respondents is 1-2 times at 38.8%, 3-4 times at 30.0%, followed by more than 4 times at 19.5% and less than 1 time at 11.0%. For the most experience in online shopping per one year from the respondents is more than 4 times at 66.5% followed by 3 - 4 times at 18.3%, less than 1 time at 8.3% and 1-2 times at 7.0%. The main majority of respondents for the average of expenditure for online shopping per one year are more than 5,501 Baht and 1,000 - 2,500 Baht at similar number of respondents at 26.5% followed by Less than 1,000 Baht at 20.5%, 2,501 - 4,000 Baht at 20.3% and 4,001 - 5,501 Baht at 6.3%.

Table 3: Demographic Profile, (N=400)

Measure	Items	Frequency	Percent (%)
Gender	Male	133	33.3
	Female	267	66.8
Age	Lower than 18 years old	100	25.0
	18 - 30 years old	100	25.0
	31 - 45 years old	100	25.0
	Higher than 45 years old	100	25.0
Income	Lower than 15,000 Baht	123	30.8
	15,001 - 30,000 Baht	89	22.3
	30,001 - 50,000 Baht	94	23.5
	50,001 - 70,000 Baht	51	12.8
	Higher than 70,001 Baht	43	10.8
Education	Less than Bachelor's degree	111	27.8
	Bachelor's Degree	191	47.8
	Master's Degree	95	23.8
	Doctorate Degree	3	0.8
Occupation	Employee	144	36.0
	Government Officer / State Enterpriser	55	13.8
	Business Owner	64	16.0
	Self-Employed	12	3.0
	Unemployed	13	3.3
	Student	112	28.0
Experience in searching recommendations from Beauty blogger for online shopping per one time.	Less than 1 time	44	11.0
	1-2 time	155	38.8
	3-4 times	123	30.0
	More than 4 times	78	19.5
Experience in online shopping per one year.	Less than 1 time	33	8.3
	1-2 time	28	7.0
	3-4 times	73	18.3
	More than 4 times	266	66.5
Average of expenditure for online shopping per one year.	Less than 1,000 Baht	82	20.5
	1,000 - 2,500 Baht	106	26.5
	2,501 - 4,000 Baht	81	20.3
	4,001 - 5,500 Baht	25	6.3
	More than 5,501 Baht	106	26.5

Descriptive Analysis

Pearson's Correlation

Regarding to the Pearson's Correlation Matrix for the hypotheses 1 (H1) to hypotheses 3 (H3) showed in the table 4 that all variables have positive correlations with P-Value less than 0.05. From the reference about the strength of correlations defined by Rumsey (2017),

the relationship between all variables have a strong positive relationship in the range of 0.7 - 0.5. For the result shows that there are two pairs in the Correlation Matrix showed the strong relationship, which is Attitude towards shopping via online channels (AT) and Intentions to shop online (IN) at 0.773 correlation and Trust (TR) and Perceived usefulness of Beauty Blogger's recommendation (PU) at 0.699 correlation.

Table 4: Pearson's Correlation Matrix

Variable	Mean	SD	IN	PU	TR	AT
IN	3.8813	.85490	1.000			
PU	3.8749	.78877	.430*	1.000		
TR	3.3666	.65753	.423*	.699*	1.000	
AT	3.8700	.79510	.773*	.423*	.392*	1.000

Note: * represents the correlation which is significant at 0.05 level (1-tailed).

Inferential Analysis and Multicollinearity Validation

H1 Trust will positively affect to Perceived usefulness of Beauty Blogger's recommendation.

Table 5: Simple Linear Regression Result (H1), Dependent Variable: PU

Variable	Beta Coefficients	P-value	VIF	Result
Trust	.699	0.000	1	Supported
R Square	.489			
Adjusted R Square	.488			

Note: * represents standardized coefficient (β) with P-value ≤ 0.05 .

The statistical data in the table 5 demonstrated about the simple linear regression analysis between Trust (TR) and Perceived usefulness of Beauty Blogger's recommendation (PU). R square is 0.489 which can be implied that Trust can explain the Perceived usefulness of Beauty Blogger's recommendation by 48.95%. As p-value is less than 0.05, this means Trust has significant influence to Perceived usefulness of Beauty Blogger's recommendation by 95% confident interval.

Therefore, H1 is supported. With the positive value of beta (β), it can be implied that Trust has significant influence to Perceived usefulness of Beauty Blogger's recommendation.

H2 Perceived usefulness of Beauty Blogger's recommendation (H2a) and Trust (H2b) will positively

affect to blog readers' attitudes towards shopping via online channels.

Table 6: Multiple Linear Regression Result (H2a-H2b), Dependent Variable: AT

Hypotheses	Variables	Standardized Coefficient (β)	VIF	Sig	Result
H2a	PU	.292	1.957	0.000	Supported
H2b	TR	.188	1.957	0.003	Supported
R Square		.197			
Adjusted R Square		.193			

Note: * represents standardized coefficient (β) with P-value ≤ 0.05 .

The statistical data in the table 6 shows that the Multiple Linear regression analysis between Perceived usefulness of Beauty Blogger's recommendation (PU), Trust (TU) and Attitude towards shopping via online channels (AT). R Square is 0.197 which can be implied that two independent variables, Perceived usefulness of Beauty Blogger's recommendation (PU) and Trust (TU), can explain the dependent variable, Attitude towards shopping via online channels (AT), by 19.7%. As p-value is less than 0.05, this means Beauty Blogger's recommendation and Trust have significant influence to Attitude towards shopping via online channels by 95% confident interval.

Therefore, both hypotheses, H2a and H2b, are supported. Due to the positive value of beta (β), it means that Perceived usefulness of Beauty Blogger's recommendation and Trust have significant influence to Attitude towards shopping via online channels. As a result, Perceived usefulness of Beauty Blogger's recommendation has significant influence to Intention to shop online more than Trust according to value of the Standardized Coefficient 0.292 and 0.188 respectively.

The variance inflation factors (VIFs) were verified to validate the multicollinearity problem. All VIFs were less than 5.00. This implies that no critical issues exist with this study.

H3 Perceived usefulness of Beauty Blogger's recommendation (H3a), blog readers' attitudes towards shopping via online channels (H3b) and Trust (H3c) will positively affect to Intention to shop online.

Table 7: Multiple Linear Regression Result (H3a-H3c), Dependent Variable: IN

Hypotheses	Variables	Standardized Coefficient (β)	VIF	Sig	Result
H3a	PU	.057	2.064	0.206	Not Supported



H3b	TR	.106	2.0 01	0.0 16	Support ed
H3c	AT	.707	1.2 45	0.0 00	Support ed
R Square		.616			
Adjusted R Square		.613			

Note: * represents standardized coefficient (β) with P-value ≤ 0.05 .

The statistical data in the table 7 shows that the Multiple Linear regression analysis between Perceived usefulness of Beauty Blogger's recommendation (PU), Trust (TU), Attitude towards shopping via online channels (AT) and Intention to shop online (IN). R Square is 0.616 can be implied that three independent variables, Perceived usefulness of Beauty Blogger's recommendation (PU), Trust (TR) and Attitude towards shopping via online channels (AT) can explain the dependent variable, to Intention to shop online (IN), by 61.6%. As P-value is less than 0.05, this means that Trust and Attitude towards shopping via online channels have significant influence to Intentions to shop online (IN) by 95% confident interval whereas Perceived usefulness of Beauty Blogger's recommendation has not influence to Intention to shop online because of the P-values which is greater than 0.05.

Therefore, all hypotheses, H3a, H3b and H3c, are partially supported, H3a and H3b are supported but H3a is not supported because P-value is 0.206. As a result, Attitude towards shopping via online channels has significant influence to Intention to shop online more than Trust according to value of the Standardized Coefficient 0.707 and 0.106 respectively.

The variance inflation factors (VIFs) were verified to validate the multicollinearity problem. All VIFs were less than 5.00. This implies that no critical issues exist with this study.

H4 People who have different ages will have a different intention to shop online channel.

Table 8: One-Way ANOVA (H4), Dependent Variable: IN

The statistical data in the table 8 shows about the impact of mean difference of Age on Intentions to shop online (IN) is significant, $F(3, 396) = 3.48, p = 0.016$. Therefore, H4 is supported because P-value is less than 0.05.

Table 9: Scheffe's Post hoc Test (Multiple Comparisons)

Age (I)	Age (J)	Mean Difference (I-J)
Lower than 18 years old	18 – 30 years old	.01500

18 – 30 years old	31 – 45 years old	.08000
	Higher than 45 years old	.34000*
	Lower than 18 years old	-.01500
31 – 45 years old	31 – 45 years old	.06500
	Higher than 45 years old	.32500
	Lower than 18 years old	-.08000
Higher than 45 years old	18 – 30 years old	-.06500
	Higher than 45 years old	.26000
	Lower than 18 years old	-.34000*
Higher than 45 years old	18 – 30 years old	-.32500
	31 – 45 years old	-.26000
	Lower than 18 years old	-.34000*

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

The statistical data in the table 9, the result of Scheffe's Post hoc Test indicates that there are statistical differences of mean scores of intentions to shop online (IN) between two groups of age, the age less than 18 years old and the age higher than 45 years old. The respondent who is lower than 18 years old and the respondent who is higher than 45 years old have different influences of Beauty Blogger recommendations on Intention to shop online while other group don't have the differences.

Conclusion

Discussion and Conclusion

The purpose of this research is to examine the effects of Beauty Blogger recommendations on customers' online shopping intentions in Thailand and investigate the mean of people from the different group of age. With 525 Respondents, 400 qualified respondents were screened to be the population samples applied in this study. The conceptual

ANOVA					
Dependent Variable		Sum of Squares	df	Mean Square	Sig.
I N	Between Groups	7.492	3	2.497	.016
	Within Groups	284.118	396	.717	
	Total	291.609	399		



framework was adapted from theoretical framework of the previous study (Hsu et al., 2013) to propose the effects of Beauty Blogger recommendations on customers' online shopping intentions in Thailand and investigate the mean of people from the different group of age by testing 4 hypotheses. The results from Pearson's Correlation, Simple Linear Regression, Multiple Linear Regression, and One-Way ANOVA lead to analyze the conclusion of this study.

The First Hypothesis, H1, analyzed with Simple Linear Regression about the relationship between Trust (TU) and Perceived usefulness of Beauty Blogger's recommendation (PU) and can be summarized that Trust of Beauty Blogger's recommendation has significant influence to Perceived usefulness of Beauty Blogger's recommendation. The First Hypothesis was supported.

The Second Hypothesis, H2, are consists of two independent variables; Perceived usefulness of Beauty Blogger's recommendation (PU) and Trust (TR) of Beauty Blogger's recommendation have relationship with Dependent variable, Attitudes towards shopping via online channels (AT). Hypothesis 2 analyzed with Multiple Linear Regression can be summarized that both of independent variables have significant influence to Attitudes towards shopping via online channels. The Second Hypothesis was supported

The third Hypothesis, H3, are consists of three independent variables; Perceived usefulness of Beauty Blogger's recommendation (PU), Trust of Beauty Blogger's recommendation (TR) and Attitudes towards shopping via online channels (AT) have relationship with Dependent variable which is Intention to shop online (IN). Hypothesis 3 analyzed with Multiple Linear Regression can be summarized that most of independent variables that have significant influence to Intention to shop online (IN) except Perceived usefulness of Beauty Blogger's recommendation (PU). The third Hypothesis was partially supported.

The Fourth Hypothesis, H4, analyzed with One-Way ANOVA to find the different mean of intention to shop online among four groups of age, Lower than 18 years old, 18 – 30 years old,

31 – 45 years old and higher than 45 years old.

The result indicated that, with the mean, there are two groups of age which are lower than 18 years old and higher than 45 years old vice versa indicating that age was correlated with consumers' intention to shop online. The fourth Hypothesis was supported.

In conclusion, based on the discussion above, Attitude towards online shopping has the most significant influence on customers' Intention to shop online, however Perceived usefulness of Beauty Blogger's recommendation has no influence on customers' Intention to shop online.

Theoretical Contribution

This research is study about the effects of Beauty Blogger recommendations on customers' online shopping intentions. The finding indicated that the previous studies have focus the only the effect from Blogger recommendations on customers' online shopping intentions rather than specified to any types of blogger. In order to fulfilled this point, this research focus on the type of beauty blogger to study about the effects of Beauty Blogger recommendations on customers' online shopping intentions.

Furthermore, with the era of social media and the increasing number of online shopping in Thailand, this research elevated intentions to shop online by discussing the group of age of respondents. The result indicates that there is no significant mean among 4 groups of age except the group of lower than 18 years old and the group of higher than 45 years old.

The recommendations of beauty blogger may influence the several states of intention to shop online. In addition, the recommendations from beauty blogger may play important state about information finding from the customer and also the recommendations from beauty blogger have more influence on consumer consideration and customers' intention to shop online because the recommendations can help customer to make the decision before purchase.

This study could benefit to the marketers and the companies seeking to promote products or service. According to the results, the Attitude towards online shopping has the most significant influence on Intention to shop online, followed by the Trust of beauty blogger's recommendation. Therefore, beauty blogger recommendation is the one factor that should consider for marketing strategies to increasing sales via online channels. Marketers also need to be sure that the online channels are prompt to use and available to help consumers make purchase decisions. This can increase more positive attitude towards online shopping. Moreover, marketers should select the trustworthy beauty blogger that suitable for each product or service to promote or recommend because the findings indicated that blog readers tend to trust beauty bloggers' recommendations which in turn influence intention to shop online.

Lastly, there are mean differences between two groups of age that lower than 18 years old and the higher than 45 years old, implying that age was correlated with customers' intention to shop online. So, the marketers should create product enhancement or promotional campaigns for the 2 group of age that is attractive to the market as well as to increase awareness and persuade customers to shop via online channels.

Limitations and Future research directions

This research focuses on the respondents who live in Thailand and had ever shop online before but there are some limitations of this research. The respondents of this study mostly live in Bangkok because of



convenience sampling technique and snowball sampling technique by the convenient accessibility and proximity of researcher and ask the target to forward the questionnaires to the people who they know and also required characteristics to be target respondents. So, the respondents of this study could not represent to the people in Thailand. Furthermore, the different culture and the lifestyle of the respondents cannot represent to another region.

The present study focuses on the type of Beauty Blogger to study about the effects of Beauty Blogger recommendations on customers' online shopping intentions. To develop more precise marketing strategies, the future study can investigate into other types of blogger and other types of product or service that may cause different result depends on each type of blogger and product or service. Moreover, other factors that have influence on customers' online shopping intentions such as Behavioral Intentions and Customer Behavior should be added to investigate more about customer online shopping behaviors.

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Impact of behavioral factors on investors' financial decisions in Thailand Stock Market

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Abstract

Nowadays, most people are seeking ways to earn or increase more revenue. One of those is an investment. In term of investment, there are several kinds of investment. For example, stock market, mutual fund, private fund, provident fund, bonds and commercial paper. This depends on the risk acceptance on each investor and preference. According to the Association of Thai Securities companies (ASCO) Market Performance and Thai Securities industry statistic, they prove the amount of trading value of 2017 and 2018 of 24,455 and 28,260 billion baht respectively. Therefore, in this research, it illustrates the impact of behavioral factors on the investors' financial decision of the fundamental and technical analysis in Thailand stock market by employing the Multiple Linear Regression (MLR) and Independent Sample T-test techniques. The sample size in this study was collected from 400 people who had invested in Thai stock market. The survey of the research was distributed via online channels which are Line and Facebook by using convenience and snowball sampling method. The questionnaire consists of three parts which are screening question, variables measurement and demographic. Five-point Likert scale was used for measurement in the questionnaire. The conclusion of this study found that the behavioral factors have significant impact on investors' financial decision, especially, the "over and under reaction" which has the most impact on the investment decision. However, there is no significant mean difference between employment and unemployment on investment decision. The recommendation for the result in this study are investors should concern and collect more data through the investment decision, fundamental analysis should be conduct before investing and investors should concentrate on the market sentiment or concern on volatility.

Keywords: investment decision, behavioral factors, investor sentiment, overconfident, over and under reaction, heard behavior, stock market, employment, stock market trends.

Introduction

In a decent year, people in Thailand are finding the opportunity to generate more income or money to him or herself so money market was one of the way that Thais was selected to be a channel to earn and invest. According to the financial performance report of Thailand Securities Industry by ASCO reported the net profit on September 2018 of THB 7.13 billion which increased by 20%. An average commission rate for September 2018 was fell by 0.1%. At the end of year 2018 they shows that net profit was fell by 0.9% which has THB 8.58 billion but, an average commission was the still same number which is 0.1% dropped from 0.11%. (ASCO, 2018).

According to Bank of Thailand (BOT) Survey of Labor Force at the end of December 31, 2018 Unemployed rate and employment rate are report at 0.91% and 0.92% respectively (BOT, 2019). Therefore, people nowadays have more opportunities to earn money not only employees. For example, freelance, business

owner or trader etc. This group of people have more time in a day to spend time with their own preferences. This mean that people with unemployed can earn money like a full time job. However, unemployed people have more time to spend on their own preference than people who had a full-time job.

In this research objective is to study behavioral factors which have four factors are consist of investor sentiment, over and under reaction, investor overconfidence and heard behavior to determine the impact on investors' investment decision on fundamental and technical analysis in Thailand stock market. Also, to study the demographic factor which was employment that consist of employed and unemployed on individual investors throughout the investment decision.

Literature Review

Investor Sentiment (Market Sentiment)

Investor sentiment is widely define as a belief

about future cash flows (FCF) and investment risks that are not validate on the information they had. Investor Sentiment is the attitude of investors' toward clarify over-react or underreact to past return which called "bottom up". In contrast, Top down approach is focus on the entire sentiment and its effect to market return and individual stocks (Wurgler & Baker, 2007). The Investor Sentiment will progress anytime that depends on the information of fundamental and technical factors from investors, the example for investor sentiment could be Bullish market and Bearish market where drives the price up and down respectively (Market Sentiment (Investor Sentiment), 2019)

Another example could be "noise trader" theory of (Black, 1986) and (De Long, Shleifer, Summers, & Waldmann, 1990) mention that investors who trade on noise signal which is trading regardless fundamental support can deviate or discrepancy from its intrinsic value.

Overreaction and Underreaction

Disproportionate reaction to news, both good and bad has been often seem in the financial market. They tend to become more optimistic when the market goes up and more pessimistic when the market goes down (Daniel, Hirsh eleifer, & Subramanyam, 1998). Irrational optimism and unjustified pessimism are shown in over and under-reaction of investors. Overreaction was an emotional reflect about new securities information, which lead either by greed or fear. Investors, overreacting to news, cause the security to become overbought or oversold, until it returns to its intrinsic value (Financial Analysis: Overreaction, 2019).

On the study claim that investor sentiment is play a major role in international market volatility and gives the foreseeable return from consistency with correction of overreactions (Baker, Wurgler, & Yuan, 2012). Investors overreact to unpredictable or unexpected news events this may lead to market efficiency which have three stages weak, semi-strong and strong (De BOND & THALER, 1985). Barberis, Shleifer, & Vishny, (1998), performed a random walk on the earning of asset which has two stages. The first stage, earning was mean reverting in other words, stock price was underreacts to an earning reversion. Second, trend. When a positive earnings surprise rise the investors also raise the likelihood that trending regime, whereas positive surprise follow by negative surprise the investors extrapolate on false trend and the stock price overreacts.

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Overconfidence means the potential of overestimate or exaggerate the real ability to achieve or perform on given tasks. So, overconfidence in investing term means that investors invest or pick stocks with harmful

the financial market or individual securities such as overconfidence, representativeness or conservatism to

(Behavioral Finance: Key Concepts - Overconfidence, 2019). Overconfidence bias means that the individual is totally confident of their own decisions and their own overestimates or exaggerates ability to perform a task. The theory was based on investor overconfidence, and variations in confidence that derive from biased of self-attribution. The assumption of investor overconfidence was derived from cognitive psychological experiments and surveys which occurs when an investors receive any essential of existing information or data that others abandoned, then those investors become overconfident with their own abilities. So the overconfidence investors can be describe as anyone who overestimate the accuracy of his or her private information (inside information). Self-attribution was the confidence of those investors who found the public information which agreed with the information they had. (Daniel et al. 1998).

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Herd behavior is a likelihood of behavior that some small investors or individual copies or imitated the action from larger group. For example, decision making and actions from expert when buying stocks, those small group tend to buy the stocks follow the expertise (Behavioral Finance: Key Concepts - Herd Behavior, 2019).

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Investment decision

Decisions that relevant on assets of a firm's balance sheet, which had value for exchange in marketplace such as stocks, bonds, and commodities (Investing: investing tools, 2019).

In financial market human awareness has an effect on investment decision. Awareness can imply as feeling of investors that end up with biased regardless to rationale thinking to invest in financial market (Saxena & Ahuja, 2018).

Research Framework and Methodology



Figure 1: Research framework of Impact of behavioral factors on investors' financial decisions of Thailand Stock Market

Research Hypothesis

H	Hypothesis
H1	Behavioral Factors have a significant effect on Investment decision (Fundamental Analysis)
H2	Behavioral Factors have a significant effect on Investment decision (Technical Analysis)
H3	There is a significant mean difference between employment toward Investment decision (Fundamental Analysis)
H4	There is a significant mean difference between employment toward Investment decision (Technical Analysis)

Research Methodology

This research is decided to use quantitative analyses as a research method. The questionnaire was created on an online form to collect data from respondents through Facebook, Instant Message application (Line) and share through the given channels. The questionnaire was distributed by convenience and snowball sampling method to the respondents who live in Bangkok. The questionnaire consists of three

(3) parts which are screening question, variables measurement and demographic. Five-point Likert scale was used for measurement in the questionnaire (5= Strongly Agree and 1= Strongly Disagree). The dependent variable is investment decision which is represented by purchase and sale decisions made by the investors. The investment decision was measured by the investors' response to buy or sell securities relying on fundamental analysis, technical analysis and other sources of information such as newspaper, articles, journal, publication and internet.

Population and Sample

This research has been distributed with Non-probability method by using Convenience sampling method and Snowball method for collecting data. Due to the time limitation, the researchers select online channel to distribute questionnaires. The respondents of this research are Thai people who lived and working in Bangkok which has around 10.35 million

Yamane formula substitution could be explained by people was substituted in formula by using the 95% confident level (Bangkok Population 2019, 2019).

N

$n =$

$1 + N(e)^2$

Where;

n = sample size required

N = number of people in this population

e = allowable error (%)

The sample size by substituting the numbers into the Yamane formula was resulted 399.97. Therefore, in this study 400 respondents were used as a sample size. (Yamane, 1967).

Reliability test

Reliability test was performed by using Cronbach's Alpha Coefficient with 30 sets of pilot questionnaires which had been distributed to target respondents ($N=30$). All the test results of independent variable met the requirement benchmark with Cronbach's Alpha Coefficient more than 0.6 (Cronbach, 1951). The result is shown in table below.

Variables	Cronbach's Alpha	No. of Items
Investors' sentiment	0.606	6
Overconfidence	0.771	8
Over and Under-reaction	0.798	5
Heard behavior	0.762	4

With the reference in table above, the Cronbach's Alpha Coefficient falls in a range between 0.606 to 0.762 which is higher than 0.6. This indicates that high internal consistency is met for all research constructs. Therefore, it implies that the questionnaire developed for this study is fully achieved the standard required for reliability test, and is acceptable to move research forward.

Result and discussion Demographic Profile

Summary

The demographic data was collected from 400 respondents whoever has an experience in stock market in Thailand which most experienced in the market between 1 to 10 years or around 61.3% of respondents. The respondents in this research are male and female were 45.8% and 54.3% respectively. The age of respondents is between 26 to 40 years old at 50.3% and followed by people aged between 41 to 55 years old are 28%. The majority of respondent has employed with income above 55,000 baht at 36.5% and has education background on Bachelor's Degree at 57.5%.

Demographic		Frequency	Percent
Gender	Male	183	45.8
	Female	217	54.2
Age	18 – 25 years old	69	17.2
	26 – 40 years old	201	50.3
	41 – 55 years old	112	28
	56 – 65 years old	18	4.5
Income	Less than 15,000 Baht	76	19
	15,001 – 25,000 Baht	60	15
	25,001 – 35,000 Baht	18	4.5
	35,001 – 45,000 Baht	31	7.8
	45,001 – 55,000 Baht	69	17.2
	Above 55,001 Baht	146	36.5
Education	Below Bachelor's Degree	24	6
	Bachelor's Degree	230	57.5
	Master's Degree	146	36.5
Employment	Employed	200	50
	Unemployed	200	50
Experience in stock market	Less than 1 year	105	26.1
	1 to 10 years	245	61.3
	10 to 25 years	25	6.3
	More than 25 years	25	6.3

Figure 2: Demographic data of 400 respondents (N=400)

Pearson Correlation Matrix

According to the Pearson's Correlation Matrix from the table below (figure 3). All variables have positive correlations among each other with P-value less than 0.05. The relationship between variables have positive relationship in the range of 0.233 to 0.677. With reference to the strength of correlations defined by (Rumsey, 2011) that interpreted value of correlation in Statistics for Dummies book (2nd edition), the value of correlations in the range of 0.5 - 0.7 can be implied as moderate to strong relationship between the variables

Correlations								
Variable	Mean	SD	Fundamental	Technical	Investor Sentiment	Overconfidence	Over and Under reaction	Heard Behavior
Fundamental	3.901	0.730	1					
Technical	3.805	0.553	0.612*	1				
Investor Sentiment	3.371	0.711	0.233*	0.574*	1			
Overconfidence	3.659	0.615	0.398*	0.428*	0.364*	1		
Over and Under reaction	3.740	0.643	0.677*	0.665*	0.365*	0.424*	1	
Heard Behavior	3.139	0.860	0.323*	0.619*	0.517*	0.43*	0.522*	1

Multiple Linear Regression (MLR)

Hypothesis 2: Behavioral Factors have a significant effect on Investment decision (Technical Analysis)

Variable	Standardized Coefficients Beta (β)	Sig. (P-value)	VIF
Investor Sentiment	-0.027	0.535	1.423
Overconfidence	0.161	0.000	1.348
Over and Under reaction	0.658	0.000	1.484
Heard Behavior	-0.076	0.113	1.715
R Square	0		
Adjusted R Square	0		

Figure 4: Multiple Linear Regression (H1), dependent variable Investment decision (Fundamental Analysis) From the figure 4 show the value of R square is 0.479 and adjusted R square 0.474. This mean that the dependent variable, investment decision (fundamental analysis), can be explained by four independent variables by 47.79% which are investor sentiment, overconfidence and over and under reaction and heard behavior at significant level of 0.05 or 95% level of confidence. The P-value of overconfidence and over and under reaction are less than 0.05, so the independent variables are significant influences on the dependent variable. Therefore, H1 is supported

Multiple Linear Regression (MLR)

Hypothesis 2: Behavioral Factors have a significant effect on Investment decision (Technical Analysis)

Variable	Standardized Coefficients Beta (B)	Sig. (P-value)	VI F
Investor Sentiment	0.284	0.0023	1.4
Overconfidence	0.046	0.248	1.3
Over and Under reaction	0.42	0.0084	1.4
Heard Behavior	0.233	0.015	1.7
R Square	0.607		
Adjusted R Square	0.603		

Figure 5: Multiple Linear Regression (H2), dependent variable Investment decision (Technical Analysis)

From the figure 5 show the value of R square is 0.607 and adjusted R square 0.603. This mean that the dependent variable, investment decision (technical analysis), can be explained by four independent variables by 60.7% which are investor sentiment, overconfidence and over and under reaction and heard behavior at significant level of 0.05 or 95% level of confidence. The P-value of investor sentiment and over and under reaction and heard behavior are less than 0.05, so the independent variables are significant influences on the dependent variable. Therefore, H2 is supported.

Independent Sample T-Test

Hypothesis 3: There is a significant mean difference between employments toward Fundamental Analysis (Investment decision)

From the figure 4 show the value of R square is 0.479 and adjusted R square 0.474. This mean that the dependent variable, investment decision (fundamental analysis), can be explained by four independent variables by 47.79% which are investor sentiment, overconfidence and over and under reaction and heard behavior at significant level of 0.05 or

95% level of confidence. The P-value of overconfidence and over and under reaction are less than 0.05, so the independent variables are significant influences on the dependent variable. Therefore, H1 is supported.

Hypothesis 2: Behavioral Factors have a significant effect on Investment decision (Technical Analysis)

Independent Samples Test							
Fundamental analysis	Levene's Test		t-test for Equality of Means				
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Equal variances	4.45	0.036	0.784	398.00	0.433	0.057	0.073
Equal variances not			0.784	386.7320	0.433	0.057	0.073

Figure 7: Independent sample T-Test (H3), Dependent Variable: Investment decision (Fundamental analysis)

From figure 7 above shows the result shows that the Mean of employment people is 4.0099 and unemployed people is 3.9527 also, standard deviation (SD) of employment and unemployed people were 0.6648 and 0.7899 respectively. The condition of t (386.7320) is 0.7840 where p-value is 0.4330. Therefore, there is no mean difference between investment decision (fundamental analysis) and employment.

Hypothesis 4: There is a significant mean difference between employments toward Technical Analysis (Investment decision)

Figure 5: Multiple Linear Regression (H2), dependent variable Investment decision (Technical Analysis)

From the figure 5 show the value of R square is 0.607 and adjusted R square 0.603. This mean that the dependent variable, investment decision (technical analysis), can be explained by four independent variables by 60.7% which are investor sentiment, overconfidence and over and under reaction and heard behavior at significant level of 0.05 or 95% level of confidence. The P-value of investor sentiment and over

Figure 8: Group Statistic for H4, Dependent Variable: Investment decision (Technical analysis)

Figure 9: Independent sample T-Test (H4), Dependent Variable: Investment decision (Technical analysis)

From figure 9 above shows that, there is no mean difference between investment decision (technical analysis) and employment. The result shows that the Mea

n of employment people is 3.8347 and unemployed people is 3.7762 also, standard deviation (SD) of employment and unemployed people were 0.6060 and 0.4949 respectively. The condition of $t(398.0000)$ is

Conclusion

This research was conducted an empirical study to examine an Impact of behavioral factors on investors' financial decisions of Thailand Stock Market. This study was illustrated the mean difference on occupation which were employed and unemployed based on 400 respondents. The data was collect from people who had invested in stocks in Thailand. The questionnaire was consist of four independent variables which were investor sentiment, overconfidence, over and under reaction and heard behavior and have investment decision as dependent variable which can be classified into two dependent variables as fundamental analysis and technical analysis.

The result shows that investor overconfident and over and under reaction have significant effect on fundamental concentrate on the market sentiment or a group of investors to buying or selling stock from the volatility of stock market regarding to herd behavior factors. Because every investors are seeks the maximum return and lowest loss. Lastly, investors must weigh the consequences of being wrong, in terms of his personal finances, life goals and professional goals.

Limitation and Future Research Directions

There are some limitations engage with the researcher from the survey questionnaire. First, the questionnaires were post in Facebook, so the algorithm of Facebook itself may consider the post are not good enough to public on others in Facebook. Second, the respondents in this questionnaire most are people in Bangkok, so this group cannot be represent the whole group of investors. Furthermore, people who living in other areas in Thailand may have a difference perspective. Therefore, the future research is recommended to study more groups of people in other provinces of Thailand for further comparison. In addition, this study focuses on the behavioral factors that impact on investors' decision in Thailand stock market which have four variables, investor sentiment, overconfidence, over and under reaction and heard behavior. In which the definition and attitude towards these variables can be changed over time in regards to the aggregation of information obtained. Therefore, in further study researchers need to do researches also review any possible updated definitions and concepts of the behavioral factors. Moreover, the researcher propose to illustrate the demographic from the employment. In fact, there might be other factors that could affecting the investors' decision in stock market. For example, income level, education level, investment experience, age or gender etc.

1.0580 where p-value is 0.2910.

CONCLUSION, RECOMMENDATION AND LIMITATION

analysis of investors' decision (H1). While, another of investors' investor sentiment, over and under reaction and heard behavior have significant effect on technical analysis of investors' decision (H2).

First, Investor over and under reaction have most effect to investors' investment decision (fundamental analysis) which has beta at 16.1%. Therefore, investors will react through the information on the historical data analysis, such as news, annual reports or researches they had in order to consider the investment on fundamental analysis. This can imply that investors take the behavioral finance outcomes for their decision making.

Second, Investor overconfident has effect on investors' investment decision both fundamental and technical

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Investigating the Determinants of Customer Loyalty towards a Commercial Bank in Myanmar: The Role of Service Quality and CRM Dimensions

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Abstract

Nowadays, customer loyalty plays an important role in banking industries and the purpose of this study is to determine the factors influencing on customer loyalty towards a commercial bank in Mandalay, Myanmar. 400 respondents were applied in order to investigate the statistical treatment of the data. Data were collected by using survey questionnaires and multiple regression analysis. The results indicate that there is a relationship between each variable on customer loyalty. Among them, corporate image has the positively strongest influence on customer loyalty and followed by CRM dimensions in term of complaint resolution, service quality dimensions in terms of assurance and responsiveness. However, CRM dimensions in terms of customer orientation and customer knowledge negatively influenced on customer loyalty. The findings of this research will be gainful for not only AYA management teams but also for other banks. It can support data which may help the banking service industry to modify and improve more effective and proficient marketing tools and business model based on the knowledge of the influences of the factors in this research in order to create customer loyalty and accomplish the ultimate goals of the organization.

Keywords: corporate image, customer loyalty, customer relationship management (CRM), customer satisfaction, service quality.

Introduction

In a decent year, people in Thailand are finding the opportunity to generate more income or money to him or herself so money market was one of the way that Thais was selected to be a channel to earn and invest. According to the financial performance report of Thailand Securities Industry by ASCO reported the net profit on September 2018 of THB 7.13 billion which increased by 20%. An average commission rate for September 2018 was fell by 0.1%. At the end of year 2018 they shows that net profit was fell by 0.9% which has THB 8.58 billion but, an average commission was the still same number which is 0.1% dropped from 0.11%. (ASCO, 2018).

According to Bank of Thailand (BOT) Survey of Labor Force at the end of December 31, 2018 Unemployed rate and employment rate are report at 0.91% and 0.92% respectively (BOT, 2019). Therefore, people nowadays have more opportunities to earn money not only employees. For example, freelance, business owner or trader etc. This group of people have more time in a day to spend time with their own preferences. This mean that people with unemployed can earn money like a full time job. However, unemployed people have more time to spend on their own preference than people who had a full-time job.

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Research Hypothesis

people.

Yamane formula substitution could be explained by fellow. From the table the approximate 10.35 million people was substituted in formula by using the 95% confident level (Bangkok Population 2019, 2019).

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This research is decided to use quantitative analyses as a research method. The questionnaire was created on $n=10,350,204$

$$1 + 10,350,204 \times (0.05)^2$$

$$n = 399.98 \approx 400$$

this research are Thai people who lived and working in Bangkok which has around 10.35 million. The sample size by substituting the numbers into the Yamane formula was resulted 399.97. Therefore, in this study 400 respondents were used as a sample size. (Yamane, 1967).

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	45,001 – 55,000 Baht	69	17.2
	Above 55,001 Baht	146	36.5
Education	Below Bachelor's Degree	24	6
	Bachelor's Degree	230	57.5
	Master's Degree	146	36.5

Gender	Employed	200	50
	Unemployed	200	50
Experience in stock market	Less than 1 year	105	26.1
	1 to 10 years	245	61.3
	10 to 25 years	25	6.3
	More than 25 years	25	6.3

Figure 2: Demographic data of 400 respondents (N=400)

Pearson Correlation Matrix

According to the Pearson's Correlation Matrix from the table below (figure 3). All variables have positive correlations among each other with P-value less than 0.05. The relationship between variables have positive relationship in the range of 0.233 to 0.677. With reference to the strength of correlations defined by (Rumsey, 2011) that interpreted value of correlation in Statistics for Dummies book (2nd edition), the value of correlations in the range of 0.5 - 0.7 can be implied as moderate to strong relationship between the variables.

Correlations						Demographic			Frequency	Percentage
Variable	Mean	SD	Fundamental	Technical	Investor Sentiment	Gender	Overconfidence	Male	Over and Under reaction	Heard Behavior
Fundamental	3.981	0.730	1					18 – 25 years old	69	17.2
Technical	3.805	0.553	0.612*	1				26 – 40 years old	201	50.3
Investor Sentiment	3.371	0.711	0.233*	0.574*	1			41 – 55 years old	112	28
Overconfidence	3.659	0.615	0.398*	0.428*	0.364*	1		56 – 65 years old	18	4.5
Over and Under reaction	3.740	0.643	0.677*	0.665*	0.365*	Income	0.424*	Less than 15,000 Baht	76	19
Heard Behavior	3.139	0.860	0.323*	0.619*	0.517*		0.43*	15,001 – 25,000 Baht	60	15
								25,001 – 35,000 Baht	18	4.5

Figure 3: Pearson Correlation Matrix on Investment decision and behavioral factors. Note: * represent correlation is significant at 0.05 level

Multiple Linear Regression (MLR)

Hypothesis 1: Behavioral Factors have a significant effect on Investment decision (Fundamental Analysis)

Figure 6: Group Statistic for H3, Dependent Variable: Investment decision (Fundamental analysis)

Figure 4: Multiple Linear Regression (H1), dependent variable Investment decision (Fundamental Analysis)

From the figure 4 show the value of R square is 0.479 and adjusted R square 0.474. This mean that the dependent variable, investment decision (fundamental analysis), can be explained by four independent variables by 47.79% which are investor sentiment, overconfidence and over and under reaction and heard behavior at significant level of 0.05 or 95% level of confidence. The P-value of overconfidence and over and under reaction are less than 0.05, so the independent variables are significant influences on the dependent variable. Therefore, H1 is supported.

Hypothesis 2: Behavioral Factors have a significant effect on Investment decision (Technical Analysis)

Variable	Standardized Coefficients Beta (β)	Sig. (P-value)	VIF
Investor Sentiment	0.284	0.000	1.423
Overconfidence	0.046	0.211	1.348
Over and Under reaction	0.42	0.000	1.484
Heard Behavior	0.233	0.000	1.715

R Square 0.607
Adjusted R Square 0.603
Figure 5: Multiple Linear Regression (H2), dependent variable Investment decision (Technical Analysis)

From the figure 5 show the value of R square is 0.607 and adjusted R square 0.603. This mean that the dependent variable, investment decision (technical analysis), can be explained by four independent variables by 60.7% which are investor sentiment, overconfidence and over and under reaction and heard behavior at significant level of 0.05 or 95% level of confidence. The P-value of investor sentiment and over

and under reaction and heard behavior are less than 0.05, so the independent variables are significant influences on the dependent variable. Therefore, H2 is supported.

Independent Sample T-Test

Hypothesis 3: There is a significant mean difference between employments toward Fundamental Analysis (Investment decision)

Independent Samples Test							
	Levene's Test for Equality of Variances		t-test for Equality of Means				
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Equal variances	4.45	0.036	0.784	398.000	0.433	0.0573	0.073
Equal variances not			0.784	386.732	0.433	0.0573	0.073

Figure 7: Independent sample T-Test (H3), Dependent Variable: Investment decision (Fundamental analysis)

From figure 7 above shows the result shows that the Mean of employment people is 4.0099 and unemployed people is 3.9527 also, standard deviation (SD) of employment and unemployed people were 0.6648 and 0.7899 respectively. The condition of t (386.7320) is 0.7840 where p-value is 0.4330. Therefore, there is no mean difference between investment decision (fundamental analysis) and employment.

Hypothesis 4: There is a significant mean difference between employments toward Technical Analysis (Investment decision)

Group Statistics				
Employment	N	Mean	Std. Deviation	Std. Error Mean
Employed	200	3.8347	0.6060	0.0429
Technical Unemployed	200	3.7762	0.4949	0.0350

Figure 8: Group Statistic for H4, Dependent Variable: Investment decision (Technical analysis)

Independent Samples Test							
Technical	Levene's Test for Equality of Variances		t-test for Equality of Means				
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Equal variances assumed	12.965	0.000	1.058	398.000	0.291	0.0586	0.0553
Equal variances not assumed			1.058	382.719	0.291	0.0586	0.0553

Figure 9: Independent sample T-Test (H4), Dependent Variable: Investment decision (Technical analysis)

From figure 9 above shows that, there is no mean difference between investment decision (technical analysis) and employment. The result shows that the Mean of employment people is 3.8347 and unemployed people is 3.7762 also, standard deviation (SD) of employment and unemployed people were 0.6060 and 0.4949 respectively. The condition of t (398.0000) is 1.0580 where p-value is 0.2910.

CONCLUSION, RECOMMENDATION AND LIMITATION

Conclusion

This research was conducted an empirical study to examine an Impact of behavioral factors on investors' financial decisions of Thailand Stock Market. This study was illustrated the mean difference on occupation which were employed and unemployed based on 400 respondents. The data was collect from people who had invested in stocks in Thailand. The questionnaire was consist of four independent variables which were investor sentiment, overconfidence, over and under reaction and heard behavior and have investment decision as dependent variable which can be classified into two dependent variables as fundamental analysis and technical analysis.

The result shows that investor overconfident and over and under reaction have significant effect on fundamental analysis of investors' decision (H1). While, another of investors' investor sentiment, over and under reaction and heard behavior have significant effect on technical analysis of investors' decision (H2).

First, Investor over and under reaction have most effect to investors' investment decision (fundamental analysis) which has beta at 16.1%. Therefore, investors will react through the information on the historical data analysis, such as news, annual reports or researches they had in order to consider the investment on fundamental analysis. This can imply that investors take the behavioral finance outcomes for their decision making.

Second, Investor overconfident has effect on investors' investment decision both fundamental and technical

analysis which has 65.8% and 42% respectively, this mean investor has probability to overestimate or exaggerate one's knowledge or level of control over a particular situation on investment. The investors with overconfidence bias may override models and data because they convince themselves that they know better. In other words, investors tend to be more active trader because they overestimate their abilities to value companies, predict movements and growth and move in and out of positions quite rashly and very frequently.

Third, an investor sentiment has significant effect on investors' decision (technical analysis) which has beta at 23.3%. This can imply that investor sentiment was the attitude of investors' toward the financial market or individual securities such as overconfident, representativeness or conservatism to clarify over-react or underreact to past return. Investor sentiment will progress anytime that depends on the information of fundamental and technical factors from investors for example, Bullish market and Bearish market where drives the price up and down bull market and bear market. In the study claim that investors tend to buy or sell stock simultaneous with other group of investors (CHARLES M.C. & ALOK, 2006).

Forth, was heard behavior has an effect on investment decision (technical analysis) with 23.3%. This mean this group of people may imitated the action from larger group that might occurred from news, researches or group discussion. There for heard behavior can occurs in many circumstances of rationale effort.

Lastly, the independent sample t-test can explain that an employment has no different on investment decision both fundamental analysis and technical analysis. This means investing in stock market investors need to be concern on investor sentiment, overconfidence, over and under reaction and heard behavior.

Implication and Recommendation

According to the result of impact of behavioral factors on investors' financial decision result that show from above conclusion. The recommendation for investors' need to be concern on four aspect. First, investors should concern and collect more data through the investment decision both fundamental analysis and technical analysis such as annual reports, returns, researches or news, for example. In order to prevent from over and under reaction in investing in

stocks. Second, overconfidence may encourage investors to take excessive risks that may result in excessive market volatility. Therefore, in order to invest in stock market, fundamental analysis should be conducted before investing such as reading reports and calculation of returns also trade less and invest more. However, when the confidence exceeds

to the level of overconfidence, it becomes critical to overcome overconfidence bias, so do not perform the best at all times. However, it is very important to remain grounded and realistic. Third, technical analysis for investors' decision should



ANTECEDENTS OF CUSTOMER REPURCHASE INTENTION TOWARDS A DIETARY SUPPLEMENT PRODUCT IN BANGKOK, THAILAND

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Abstract

The purpose of this study is to find the factors influencing of customer repurchase intention towards dietary supplement brand in Bangkok, Thailand, which measured by health consciousness, perceived value, supplement safety concern, brand marketing and attitude toward dietary supplement. Moreover, the difference in repurchase intention when segmented by gender, age, income, education and occupation were investigated. The data was collected from 300 customers of a dietary supplement brand by distributing questionnaire at three department stores in Bangkok; namely Siam paragon, Central World and Siam center. In this study, the researchers applied non-probability sampling method including judgment sampling, quota sampling and convenience sampling techniques. The researchers also applied both descriptive and inferential statistics, Multiple Linear Regression, independent t-test and one-way ANOVA to analyze the hypotheses. The results showed that there is significant influence of perceived value, supplement safety concern, brand marketing and attitude toward intention to repurchase. There is significant difference in repurchase intention toward supplement products when segmented by age, income, education and occupation.

Keyword: Attitude, brand marketing, customer repurchase intention, health consciousness, supplement safety concern.

Introduction

Thailand is one of the largest and most developed healthcare markets in Southeast Asia. At this point, there is the opportunity for pharmaceutical companies to expand their markets. Thais becomes more health conscious and more willing to spend on healthcare dietary supplements not only to be healthy but also for aesthetic purpose. (www.boi.go.th).

Customer repurchase intention refers to the willingness to buy a particular products again in the future (Lin et al., 2011), which is the critical factor for the business to gain knowledge and to understand more about customers. There are many variables influencing customers' repurchase intention. Gould (1988) found that health consciousness is positively related to dietary patterns such as vitamin intake or calorie reduction. While, Sa'nchez et al., (2005) emphasized that perceived value is one of the reason to make decision for buying products. Hoover et al. (1978) suggested that the way to reduce pre-decision or concern is important for making a repurchase, which could be the marketing strategies. In addition, Hansen and Deutscher (1997) implied that positive customers attitude is the most important to convince customer to repurchase.

Mega Lifesciences is one of the global companies which start from Thailand to the world. Mega Lifesciences is engaged in manufacturing, marketing, selling and distributing quality pharmaceutical, nutraceutical products and Fast Moving Customer Goods (FMCG). Their business activities cover all major stages of pharmaceutical industry value chain which provide the opportunities to pursue growth. Currently, Mega Lifesciences is a leading distributor in developing countries with high growth trends such as Myanmar, Vietnam and Cambodia. Therefore, in this study, the researchers aim to study the factors influencing customer repurchase intention toward Mega Lifesciences supplement products.

Research Objective

The study aimed to find the factors influencing of customer repurchase intention towards Mega Lifesciences dietary supplement in Bangkok, Thailand. The specific objectives of this research are as follows:

1. To explore the influence of health consciousness, perceived value, supplement safety concern, Brand marketing and attitude on customer repurchase intention of customers toward Mega Lifesciences dietary supplements.



2. To investigate a difference in repurchase intention of customers toward Mega Lifesciences dietary supplements based on gender.

3. To analyze a difference in repurchase intention of customers toward Mega Lifesciences dietary supplements when segmented by age levels, income levels, education levels and occupation.

Literature Review

Health consciousness:

Plank and Gould (1990) mentioned health consciousness as a person who aware of well-being and motivate himself to stay healthy in order to prevent illness or improve quality of life through diet and exercise. Moreover, Gould (1988) defined that health consciousness plays an important role when customers realized the activities related to their healthiness.

Perceived value:

Zeithaml (1988) stated that customers will estimate what they give and what they get in their subjective perception when they buy a product/service. Lovelock (2000) contented that perceived value is an overall evaluation of customer to a product which is a tradeoff between perceived benefit and perceived costs. Also perceived value is a comprehensive reflection of perceived gain and costs when customer makes repurchase decision (Sa'nchez et al. 2007).

Supplementary safety concern:

Supplement safety concern refers to the degree of customers' worry regarding the quality of processed supplement, ingredients that could effect their physical health. Also, the research mentioned that customers are giving more consideration to wellbeing, quality, and the ingredients of what they take (Suh et al. 2012).

Brand marketing:

Kotler and Keller (2009) defined marketing as an organizational function and set of processes for creating, communicating, and delivering value to customers and manage relationship with customer in ways that advantage the organization and its stakeholders and also to understand customer behavior towards the particular product of the brand, Different product are required different marketing strategies. The American Marketing Association mentioned that marketing is the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large (www.ama.org)

Attitude:

Frank (2000) defined attitude as a person's enduring favorable or unfavorable evaluations, emotional feelings and action tendencies towards some object or idea. Xiao et al. (2011) contented the attitude of customers based on their belief and knowledge regarding to integration process which ultimately to pay a superior quality dietary (Baker, 1999; Grunert, 2005; Krystallis and Chryssohoidis, 2005). However, dietary safety concern is the most critical

influences individual's aim to behave in a certain manner. While, Udell (1965) cited that the attitude can be described to the way that stimulate people to react. Jung (1978) also defined attitude as a psychological state that shows the individual's willingness to act or react in certain way.

Customer repurchase intention:

Customer repurchase intention indicated the customer's willingness to repurchase the same product or brand again in the future (Lin and Liang, 2011). Chandon et al., (2005) also mentioned repurchase intention as a customer's future demand for a product, the potential of willingness to repurchase a particular item. Spears and Singh (2004) stated repurchase intentions as an individual's conscious for buying a brand.

Related Literature Review

Health consciousness and customer repurchase intentions

Hwang and Cranage (2010) found that customers are more conscious and concerned about their state of well-being and are motivated to maintain or improve quality of life through diet and exercise. Lockie et al. (2002) described that health conscious is the impact as well as the first motivation of willingness to buy the organic food. Also health consciousness is positively related to dietary patterns such as vitamin intake or calorie reduction (Gould, 1988).

Perceived value and customer repurchase intentions

Perceived value of the customer becomes one of the main strategies that the firm have to pay more attentions (www. richtopia.com). Dodds and Monroe (1985) mentioned that perceived value is an important factor in customers' purchasing decision process, and high perceived value will make customers to repurchase a product. Thaler (1985) considered that perceived value is an important antecedent to influence customer purchase intention because it is the composition of transaction utility and acquisition utility. Perceived value is one of the reasons for making a decision to repurchase a product with benefit (Sa'nchez et al. (2005). Followed by Zeithaml (1988) who suggested that the higher perceived value is, the higher repurchase intention.

Supplement safety concern and customer repurchase intentions

Dietary safety information is getting more and more attention to repurchase, which significantly related to quality dietary demand (Obayelu et al., 2014). Customers need more information about dietary quality and production methods (Urena et al., 2008). Hence, many studies have evaluated dietary safety and the influence on customers' willingness factor to expect one's readiness to repurchase organic food (Michaelidou and Hassan, 2008).

Brand marketing and customer repurchase intentions

Brands use different terms, symbols, signs, promotional activities to represents their uniqueness and persuaded the customers to repurchase their products and service. Marketing is a progressing correspondent trade with customers in a way that communicate, inform and builds a relationship over time. Individual consumes symbolic brand meaning through their use of preferred brands, based on marketing strategy in order to convince customer to repurchase (Dwivedi and McDonald, 2018). Chi et al. (2009) proposed that an advertising can attract perceived them to be better and effective for their health. Attitude has become major predictor of customer repurchase intention. Alam and Sayuti (2011) found that attitude has a strong impact on customer repurchase intention and when customer with

Conceptual Framework

The researchers developed the conceptual framework of antecedents of customer repurchase

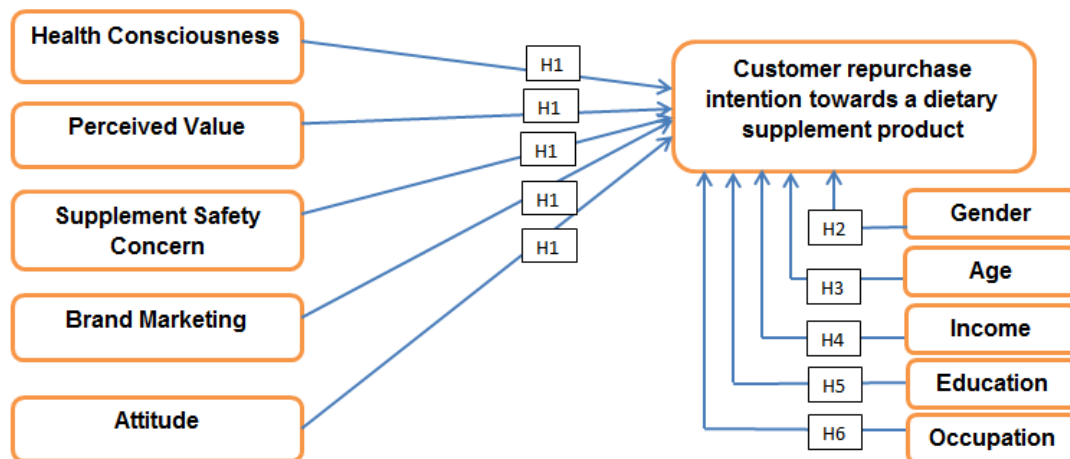
customers' eyesight in a period of time and increase repurchase intention. Laroche et al. (1996) also mentioned that brand marketing in term of promotion leads customer to pay more attention to repurchase the product and also exposure of advertising endorser lead to repurchase intention.

Attitude and customer repurchase intentions

Customer's attitude toward dietary supplement is the major reason why the customer repurchases dietary supplement (Durham and Andrade, 2005). Padel and Foster (2005) also supported that the customers buy dietary supplement because they

strong positive attitude seems to have a strong intention to purchase Halal food. Also, Chung et al. (2012) explained that attitude towards dietary supplement has a significant influence on the behavioral intention to repurchase dietary supplement.

intention towards a dietary supplement product in Bangkok, Thailand.



Research Hypothesis

H1₀: Health consciousness, perceived value, supplement safety concern, brand marketing and attitude are no influenced on customer repurchase intention of customers toward Mega Lifesciences dietary supplements.

H1_a: Health consciousness, perceived value, supplement safety concern, brand marketing and attitude are influenced on customer repurchase intention of customers toward Mega Lifesciences dietary supplements.

H2₀: There is no difference in repurchase intention of customers toward Mega Lifesciences dietary supplements based on gender.

H2_a: There is a difference in repurchase intention of customers toward Mega Lifesciences dietary supplements based on gender.

H3₀: There is no difference in repurchase intention of customers toward Mega Lifesciences dietary supplements when segmented by age levels.

H3_a: There is a difference in repurchase intention of customers toward Mega Lifesciences dietary supplements when segmented by age levels.

H4₀: There is no difference in repurchase intention of customers toward Mega Lifesciences dietary supplements when segmented by income levels.

H4_a: There is a difference in repurchase intention of customers toward Mega Lifesciences dietary supplements when segmented by income levels.



H5₀: There is no difference in repurchase intention of customers toward Mega Lifesciences dietary supplements when segmented by education levels.

H5_a: There is a difference in repurchase intention of customers toward Mega Lifesciences dietary supplements when segmented by education levels.

H6₀: There is no difference in repurchase intention of customers toward Mega Lifesciences dietary supplements when segmented by occupation.

H6_a: There is a difference in repurchase intention of customers toward Mega Lifesciences dietary supplements when segmented by occupation.

Methodology

The objective of this study is to find the influence of health consciousness, supplement safety concern, brand marketing and attitude on customer repurchase intention of Mega Lifesciences dietary supplements in Bangkok, Thailand. The researchers applied descriptive research and also survey research technique to collect the information. By using self-administered questionnaires in which customer have to answer the questions by themselves. Sekaran (2003) stated that the target sample is selected from the populations who have a similar interests or characteristics. The researchers decided to collect 300 respondents to get a good result (Comfrey and Lee, 1992).

In this study, the researchers applied non-probability sampling method with purposive, quota sampling and convenience technique. The purposive sampling is to collect the sample by own consideration of appropriate sample to fulfill the requirements of the information (Hair et al., 2017). The researchers collected data from 300 respondents, who have experience of purchasing Mega Lifesciences products, and chose 3 top destinations from the list of 5 best shopping malls in Bangkok including Siam Paragon, Central World and Siam Center. (www.travel141.com/thailand). Moreover, quota sampling method is one of the non-probability sampling method which provides actual characteristics of population into different groups (Bryman and Bell, 2015). Thus, the data was collected from $300/3 = 100$ customers at each Boots store which shown in the table

Boots pharmacy Quantity of questionnaire distributed

Siam Paragon	100
Central World	100
Siam Center	100
Total	300

Supported by convenient sampling, the researchers focused on the respondents who are convenient or available to complete the questionnaire (Zikmund, 2003).

The questionnaires consist of three sections including 27 questions, where the first section is a screening question and the second section is for variables. And the last section is demographic factors, which consists of gender, age levels, education levels, income levels and occupation. The researchers applied Five points Likert Scale for variables.

The questionnaires were distributed to 30 respondents as a pretest to make sure that all variable questions are reliable in order to get the accurate data. Then, the researchers collected the data from 300 respondents. All questions were evaluated by using Cronbach's Alpha test. For hypothesis one, the researchers used Multiple Linear Regression, followed by hypothesis two which was evaluated by Independent T-test and others were evaluated by ANOVA.

The result showed that all variables including health consciousness, perceived value, supplement safety concern, brand marketing, attitude and customer repurchase intention are reliable in which all reliabilities of each variable are greater than 0.6. Sekaran (1992) stated that if the reliability value is more than or equal to 0.60, it is considered to be acceptable.

Results

The result of the study indicated that the majority of respondents are female which equal, "68.7%" or "206 respondents", most respondents are between 25 – 30 years of age with "51%" or "153 respondents", the highest monthly income group is 60,001 THB or higher with "35.7%" or "107 respondents", and the highest educational level is bachelor degree or less with "69.3%" or "205 respondents". In addition, the highest occupation group is employed for wage with "66%" or "198 respondents".

Table 1: Summary of the majority of demographic factor

Demographic Factor	Characteristic	Frequency (f)	Percentage (%)
Gender	Female	206	68.7
Age levels	25 – 30 years old	153	51.0
Income levels	60,001 baht or more	107	35.7
Education levels	Bachelor degree or less	207	69.0
Occupation	Employed for wage	198	66.0

Table 2: Summary of hypothesis testing



Hypothesis	Statistical test	Standardized coefficient values	Significant value	Result
H1 ₀ : Health consciousness, perceived value, supplement safety concern, brand marketing, and attitude are not influenced on customer repurchase intention of Mega Lifesciences dietary supplements	Multiple Linear Regression			
Health consciousness				Failed to
Perceived value		-0.58	0.086	Reject H1 ₀
Supplement safety concern		0.121	0.018	Reject H1 ₀
Brand marketing		0.218	0.000	Reject H1 ₀
Attitude		0.531	0.000	Reject H1 ₀
		0.124	0.024	Reject H1 ₀
H2 ₀ : There is no difference in repurchase intention of Mega Lifesciences dietary supplements based on gender	Independent T-test		0.602	Failed to Reject H2 ₀
H3 ₀ : There is no difference in repurchase intention of Mega Lifesciences dietary supplements when segmented by age levels	ANOVA		0.027	Reject H3 ₀
H4 ₀ : There is no difference in repurchase intention of Mega Lifesciences dietary supplements when segmented by income levels	ANOVA		0.000	Reject H4 ₀
H5 ₀ : There is no difference in repurchase intention of Mega Lifesciences dietary supplements when segmented by education levels	ANOVA		0.043	Reject H5 ₀
H6 ₀ : There is no difference in repurchase intention of Mega Lifesciences dietary supplements when segmented by occupation	ANOVA		0.004	Reject H6 ₀

Discussion and Conclusion

Base on the result of hypothesis one, the researchers found that perceived value, supplement safety concern, brand marketing and attitude have influence on customer repurchase toward dietary supplement at significant level 0.018, 0.000, 0.000, 0.024, respectively and also the standardized beta coefficient value at 0.121, 0.218, 0.531, 0.124, respectively. This indicated that brand marketing variable has the highest positive impact on customer repurchase intention more than other variables. The result of the study also supported by several scholars: Awan et al. (2015) found that Halal marketing campaign could bring many acknowledged elements which associated with Halal purchase intention. Chung et al. (2012) also implied that attitude toward using soy based DS has significant influences on purchase intention. In addition, Shaharudin et al. (2010) found that perceived value and food safety concern has significant influence on purchase intention of organic food. However, health consciousness has no influence

on purchase intention. Similarly, Hoque et al. (2018) found that health consciousness does not influence purchase intention but has indirect effect on purchase intent through attitude.

Base on hypothesis two to hypothesis six, the researchers found that there was a different in customer repurchase intention towards dietary supplement when segmented by age, income, education and occupation but not gender. This is supported by Tuntipati (2011) who found that age, income levels, education and occupation have a significant different in repurchase intention toward dietary supplement except gender.

Recommendations

Base on the finding, brand marketing has the highest influence on customer repurchase intention. Therefore, the researchers would like to focus on these factors and provide some suggestions. In terms of brand marketing, the promotional campaign is one of the most effective marketing tools to convince customers. The researchers would like to recommend the promotional campaign lead to create higher profit



for the company. As MEGA marathon campaign for hospital can represent a well-known reputation. Moreover, the campaign can associate with Corporate Social Responsibility which can enhance the relationship with customer. In addition, Base on demographic factors, the researchers found that age, income levels, education levels and occupation have a significant difference on customer willing to pay for supplement products. Therefore, the marketing plan should focus on customer segmentation to plan a good marketing strategy.

Further Study

The research focuses on customer repurchase intention towards Mega Lifesciences supplement products in Bangkok, Thailand. There are a number of limitations in this study. Therefore, the researchers would recommend to further study. First of all, this study focuses customers who have ever purchased Mega Lifesciences dietary supplement. Thus, this study can not reflect perception of consumer willing to purchase Mega Lifesciences for first time. Thus, the future study can investigate more of customers who never purchase Mega Lifesciences products. Also the data in this research were collected from three selected department store in Bangkok which may not reflect perception of up-country person who may have difference lifestyles, belief, etc. Therefore, the future study can collect data not only in Bangkok but also in other cities of Thailand. Moreover, there are many additional independent factors that may influence on customer repurchase intention, such as normative influence, susceptibility, etc. that can be studied more by future studies. And finally, the researchers would like to recommend to investigate and explore other different dietary supplement brands.

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RELATIONSHIP AMONG PSYCHOLOGICAL BIASES, INVESTMENT EXPERIENCE AND INVESTORS' DECISION MAKING IN THE STOCK EXCHANGE OF THAILAND

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Abstract

This study aims to examine the relationship among psychological biases, investment experience and investors' decision making in the Stock Exchange of Thailand. In particular, the study investigated how the influence of representative bias, availability bias and internal locus of control relate to investors' decision making were examined. Furthermore, it asked whether investment experiences played a role in limiting such biases in investor's decision-making process. To address these research objectives, the survey questionnaires were administered during September to November 2018 among investors with a minimum of 6 months investment experience in the Stock Exchange of Thailand. Convenience sampling and snow-ball techniques were used. Based on the valid responses of 407 sets, data analysis was performed through single regression. Results showed that all three investment biases were present in investors' decision-making process. At the same time, investment experience played an important role in investment decision making process.

Keywords : *The Stock Exchange of Thailand, Investment Decision Making, Representative Bias, Availability Bias, Locus of control, Investment Experience*

Introduction

In psychology and behavioral science literature, it has been established that people tend to suffer from psychological biases (Kahneman and Tversky, 1979; Grether, 1980). From economics and finance perspectives, the recognition of Behavioral Finance as an emergent field of study has given an acknowledgement to the irrationality of investors in investment decision process. (Chen, Kim, Nofsinger and Rui, 2007). Over time, researchers found that psychological biases, socio-demographic factors, personality types among many other factors influenced investors' decision-making process (Barber and Ordean, 2001; Durand, Newby & Sanghani, 2008).

In Thailand, evidence of psychological biases was reflected in overreaction effects based on the framework of De Bondt and Thaler (1985). Specifically, relevant studies in this area indicated evidence of overreaction (Ruttanajongkol, 2010; Lerskullawat and Ungphakorn, 2018; Pokavattana, Sethjinda and Tangjitprom, 2019), underreaction (Panyakosa, 2004) and both effects (Saisingthong, 2003).

For research on investment behaviors, existing empirical evidence focused mainly on the relationship among demographic and external factors on investors' intention to invest (Jongwannasiri and Uon, 2016) and investment behaviors (Ngernsrisuk, 2018) in the Stock Exchange of Thailand. Specifically, researchers observed that demographic factors such as age, education, gender, profession, income level (Ngernsrisuk, 2018; Pomsuwan,

2018) and external factors such as company management strategies, performance expectation and corporate performance (Jongwannasiri and Uon, 2016) had an impact on investors' behavior and intention in the Stock Exchange of Thailand.

In terms of psychological biases, Tran (2017) conducted an in-depth interview among eight investors in the Stock Exchange of Thailand and observed four behavioral factors, namely Overconfidence, Excessive Optimism, Psychology of Risk and Herding Behavior.

Similar work was conducted by Pomsuwan (2018) to examine the demographic and the psychological investment factors affecting Thai investors' decision making in Thailand Money Expo. His study rendered support for psychological factors namely anchoring, overconfidence, disposition effect, mental accounting and representative biases.

In order to contribute to the empirical evidence in Thailand, this study proposes to examine the relationship among psychological biases namely representative bias, availability bias and internal locus of control on investment decision making process and the role of investment experience in limiting psychological biases.

Literature Review

Researchers in behavioral finance posit that investors' feeling and thought process have an impact on their behaviors when making investment decision (Blerina, 2018). To date, evidence of psychological biases in investment decision making has accumulated

in both developed markets and emerging markets. According to Chen, Kim, Nofsinger and Rui (2007), there were empirical evidence that US investors suffered from behavioral biases (Barber & Odean, 2000) as well as in several emerging markets such as China and Malaysia. For this research, the study explored the influence of representative bias, availability bias and internal locus of control towards investment decision making process.

Representative bias

According to Kahneman and Tversky (1972), representativeness is a form of heuristic bias, describing the stereotyped decision making as a representative of all member of the group. According to Chen, Kim, Nofsinger and Rui (2007), representativeness is one form of a mental shortcut, involving overreliance on shortcuts.

In the context of investment, investors may misattribute positive characteristics of a company such as quality products, capable managers, high expected growth as attributes of a good investment. Furthermore, investors may consider recent past returns to be representative of the future return they could obtain in the future (DeBondt, 1998). As a result of representative biases, investors might buy stocks that recently enjoyed abnormal return.

Evidence of representative biases were noted in the work of Chen, Kim, Nofsinger and Rui (2007) for investors in China. For Thailand, Pomsuwan (2018) noted the presence of representative biases among investors at Money Expo. Hence, it is hypothesized that representative biases influence investors' decision making.

Availability bias

According to Marx and Weber (2012), availability bias refers to the tendency that human may judge an event by the ease with which examples of the event could be retrieved from memory or come to mind. As a result, availability bias could lead to sub-optimal decision as individuals tend to overweight current information as opposed to considering all relevant information (Jain, Jain and Jain, 2015).

Relevant research suggested that the availability bias caused overreaction by the investors to development in the markets whether positive or negative (Jain, Jain and Jain, 2015). This bias had been one of the commonly found to influence investors' decision making. Therefore, it is hypothesized that availability bias has an impact on investor's decision making.

Locus of control

Based on the psychological concept, Locus of control refers to person's belief about the causes of good or bad results in ones' life (Rotter, 1966). The concept of Locus of Control could be separated into two types: internal and external locus of control. On the one hand, people with internal locus of control believe that they control their own destiny. They accept the occurrence in their life as the fruits of their own efforts, capability and action. Conversely,

people with external locus of control believe that experiences in their lives are driven by external events, chance, luck or fate (Kasilingam and Sudha, 2010).

Locus of control could have an impact on investors' behavior in several ways. Kasilingam and Sudha (2010) found that locus of control influenced saving behaviors among Indian investors, sources of information, used for investment decision making as well as the frequency in the review of monitoring investment portfolio. Specifically, the research found that people with high level of external locus of control saved more than people with internal locus of control.

People with high internal locus of control tended to rely more on expert opinion as information sources for investment decision making and review investment more frequently than those with high external locus of control. Accordingly, it is argued that locus of control has an influence on investors' investment decision making.

Investment decision making

Hayes (2010) defines investment decision as a seven step processes, as follows:

Clearly state financial goals

Identify and list alternative course of action'

Compare options

Select best alternative

Take action on choice

Periodically review/ rebalance

Make new decision based on current situation (p.59)

Conceptual Framework

To explore the hypothesized relationship, this study proposes that representative bias, availability bias and locus of control have an effect on investment decision making. Additionally, the relationship between investment experience towards investment decision making is further explored.

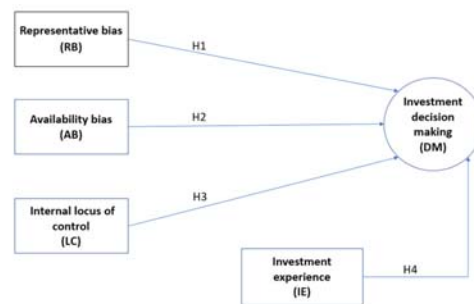


Figure 1 :Conceptual Framework

In accordance with the proposed conceptual framework, relevant hypotheses are proposed in Table 1 below.



No.	H	Hypotheses
1	H1	Representative bias has an effect on investment decision making.
2	H2	Availability bias has an effect on investment decision making.
3	H3	Internal locus of control has an effect on investment decision making..
4	H4	Investment experience has an effect on investment decision making.

Research Methodology

Measurement of conceptual Framework and Variables

The survey questionnaire based on uses Five-point Likert scale, ranging from strongly disagree =1 to strongly agree = 5.

Questionnaire consists of two parts. Part A comprised twenty questions relating to the independent and dependent variables. For Representative bias, there are six items to measure the significant of representative bias with investment decision making from the Sarwar et al) .2014(, Waweru et al) .2008(, and Phuoc Luong and Thi Thu Ha)2011.(Secondly, for Availability bias, there are five items to measure the significance of Availability bias with investment decision making from the Kudryavtsev et al .)2013(,Waweru et al) .2008(, and Phuoc Luong and Thi Thu Ha)2011.(

Thirdly, in terms of Locus of control, there are six items to measure the significant of locus of control with investment decision making from Furnham)1986(. Fourthly, for Investment Experience, there are two levels of experience separate by using time of invested which 0-5 years means low and 5 years above mean high. Part B consist of five questions relevant to demographic information

Population and Sample

The target respondents for this study focuses on investors in the Stock Exchange of Thailand with a minimum of 6 months investment experience.

Gender	Male	212	52
	Female	195	48
Status	Single	256	63
	Married	151	37
Age	18 – 25	64	16
	26 – 33	116	29
	34 – 41	88	22
	42 – 49	54	13
	Above 49	85	21
Investment Experience	0 – 5 yrs.	148	36
	6 – 10 yrs.	163	40
	11 – 15 yrs.	96	24
Salary	25,000 – 35,000	50	12
	35,001 – 50,000	191	47
	Above 50,001	166	41
Education	Bachelors' Degree	168	41
	Master's Degree	173	43

Table 1: Defined Hypotheses

Convenience sampling and snowball techniques were used. The online questionnaire was conducted during August – October 2018 by sending the questionnaires online randomly to researchers' contacts in brokerage and wealth management associates for further distribution to clients in their portfolio. Valid responses were received from 407 respondents.

Reliability Test

A pilot questionnaire was administered to 30 respondents. In examining the level of reliability in each group of items included in the questionnaire, Cronbach's Alpha Coefficient was used (Cronbach, 1951). Table 2 shows that Cronbach's Alpha for all items was above 0.6.

Variable	Cronbach's Alpha	Number of items
Representative bias	0.821	6
Availability bias	0.933	5
Internal locus of control	0.846	7
Investment Experience		2

Table 2: Reliability Test Results

Results & Discussion

Demographic Profile Summary

Table 3 summarizes the results of demographic profile for this study. Overall, there were 52.9 % male and 47.91 % female respondents. Over 62.9% of them were single, earning a monthly salary in the range of THB 35,000-50,000 (USD 1,000 – USD 1,500) (46.93%) and THB 50,000 & above (40.79%). The majority of the respondent were holding Bachelors' Degree and Master Degree. There investment experiences ranged from 0-5 years (40.54%), 6-10 years (47.42%) and 11-15 years (12.04%).

Demographics	N	%
Post Graduates	66	16

Table 3: Demographic Profile Summary

Pearson's Correlations

Table 4 reports Pearson's Correlation Analysis, showing that all four independent variables are positively correlated. Among all four variables, Locus of Control has the highest degree of correlation with Investment Decision Making of 0.724.

Variable	DM	LC	RB	AB
DM	1	0.724*	0.707*	0.644*
LC	0.724*	1	0.706*	0.691*
RB	0.707*	0.706*	1	0.628*



AB	0.644*	0.691*	0.628*	1
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Inferential Analysis

Multiple regression shows that the influence of psychological biases towards investment decision making are statistically significant. All hypotheses are supported. The issue of multicollinearity has been verified and confirmed that there is no issue, as VIFs for all variables are less than 5.0.

Among all three variables, the impact of Locus of Control is most prominent among the three variables with the standardized co-efficient of 0.724, followed by representative biases and availability biases, respectively.

Hypothesis	Standardized Co-efficient (β)	VIF	Result
H1 RB --> DM	0.707*	1.549	Supported
H2 AB --> DM	0.644*	1.628	Supported
H3 LC --> DM	0.724*	1.675	Supported
R Square	0.501		
Adjust R Square	0.499		
Note: * represents the correlation which is significant at 0.05 level (1-tailed)			

Table 5: Pearson's Correlation Analysis

Analysis of variance (ANOVA) (presented in the Table 8 above shown that the influence of mean difference of investment experience is significant as $F(2,420) = (22.100, p = 0.000$.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8.359	2	4.180	22.100	0.000
Within Groups	76.405	404	0.189		
Total	84.764	406			
Note: * represents the correlation which is significant at 0.05 level					

Table 6 :One-way ANOVA of Investment experience for H4

Results suggest that the responses provided by investors with different level of investment experience are different from one another. Further analysis is performed via Scheffe Post Hoc Tests to allow multiple comparison.

Table 7 shows that investors with investment experience of 11-15 years and above has a different approach to investment decision making, compared to the two groups of 0-5 and 6-10 years.

Table 7: Scheffe Post Hoc Tests

exposed to other biases such as overconfidence, mental accounting, loss aversion and herding behavior.

Table 4: Pearson's Correlation Analysis

Based on the preceding statistical results, this study suggested that locus of control is statistically significant in influencing investment decision making. This observation might result from the tendency of individual investors to make investment decision by themselves, rather than

Scheffe Post Hoc Tests (Multiple Comparison)

(I) InvestEx	(J) InvestEx	Mean Difference (I-J)
0-5 years	6-10 years	0.02547
	11-15 years	-.32320*
6-10 years	0-5 years	-0.02547
	11-15 years	-.34867*
11-15 years	0-5 years	.32320*
	6-10 years	.34867*
Note: * represents the correlation which is significant at 0.05 level		

relying on advices from other people (Ngernsrusuk, 2018). In terms of psychological biases, this study offered support for the existing empirical evidence in Thailand that investors' decision making is subject to psychological biases, particularly representativeness (Pomsuwan, 2018) and availability biases.

When taking investment experiences into consideration, results of analysis suggest there are difference among investors with investment experience more than 11 years, compared with investors who have been investing for the short-term. Investors with more investment experience tend to rely more on analysis rather than any guts feelings.

Conclusion

This study explores the relationship among psychological biases namely representativeness, availability, locus of control and investment experience towards investment decision making among 407 investors in Thailand. The study found that psychological biases were associated with investment decision making at 0.05 confidence level. The study further discovered that investment experience could help reduce the impact of psychological biases. The more experienced the investor, the less they would rely on feelings or hunches when making investment decision.

Limitations and Recommendations

This study is subject to the following limitations. Firstly, the study focused mainly on investors in Thailand. Deeper level of insights may be established with cross-cultural comparison to better understand the root cause of psychological biases. Secondly, this study has covered only two psychological biases. In fact, empirical evidence suggested that Thai investors may be

Deeper level of understanding on each type of biases should be further explored. In effect, future study should identify



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approaches that experienced investors use to limit the influence of psychological biases. Finally, deeper level of understanding on investment experience and psychological biases should be explored. More specifically, future study should identify the approach used to limit psychological biases along with effectiveness of each approach.

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making: a survey of institutional investors
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TEST OF MARKET EFFICIENCY ON STOCKS IN THAI PROPERTY DEVELOPMENT SECTOR UNDER CURRENT MILITARY REGIME

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Introduction

Fama (1970) described Efficient Market Hypothesis (EMH) that it is not possible for an investor to outperform the market. The research of market efficiency can seek more opportunities to get more profit from stocks that are market inefficient.

Normally, most of traded stocks in the big stock market are market efficient. However, the Royal Thai Armed Forces led by General Prayut Chan-o-cha, Commander of the Royal Thai Army (RTA), launched a coup d'état after six months of violence in Thai politics on May 22nd, 2014. He has been the prime minister on August 22nd, 2014 until now. During current military regime in Thailand, the researcher would like to know whether the special conditions, such as political factor, can affect the market efficiency hypothesis of the selected stocks in property development sector or not.

Therefore, this research examined weak-form of market efficiency.

Fama (1970) and Malafeyev, Awasthi, and Kambekar (2017) described weak-form market efficiency as current stock prices fully reflect all information of past prices. Therefore, investors cannot predict future prices to make excess return. Property development sector in The Stock Exchange of Thailand (SET) is selected to test in this research because it is one of the most important sector in SET. The important stocks in this sector are AMATA, CPN, LPN, SPALI and WHA.

This research is to test weak-form efficient market hypothesis of top 15 stocks listed in property development (PROP) sector of the Stock Exchange of Thailand during the period of current military regime and to test whether past information can be used to predict the current stock returns or not.

Related Previous Studies

Awad and Daraghma (2009) examined the weak-form efficiency of the Palestine Security Exchange (PSE) for 35 stocks in the market from January 1st, 1998 to October 31st, 2008. They applied runs test, Phillips-Peron (PP) test, serial correlation test, and Augmented Dickey-Fuller (ADF) test. Serial correlation test and runs test revealed that daily returns were inefficient at the weak-form. Augmented Dickey-Fuller (ADF) test and Phillips-Peron (PP) test also suggested the weak-form inefficiency in the return series.

Fattahi (2010) examined the weak-form efficiency of the DAX stock market. Daily market returns from January 2nd, 2004 to March 14th, 2005 were used. The researcher applied Auto-Correlation Test and Q-Statistic, Augmented Dickey-Fuller (ADF) Test, Auto-Regressive (AR) model, and Auto-Regressive Moving Average (ARMA) model. The result showed that the DAX stock market followed a random walk. On the other hand, Ahmad, Ashraf, and Ahmed (2006) and Mishra, Misra, and Rastogi (2012) examined weak form efficiency in Indian stock market. They applied runs test, autocorrelation test, and Ljung-Box (LB) statistics.

The result rejected weak form efficiency in Indian stock market.

Mollah (2012) tested weak-form market efficiency in Botswana Stock Exchange (BSE) for the period of 1989-2005. The researcher applied Kolmogorov-Smirnov test, Run test, Auto-correlation test, Auto-regressive model and ARIMA model. The results from all methods rejected the null hypothesis of random walk model. Moreover, Islam, Watanapalachaikul, and Clark (2005) also examined market efficiency of Thai stock market by using run test and autocorrelation function test (ACF). The results from both methods rejected the null hypothesis. Therefore, Thai stock market was not efficient.

Research Hypotheses

This research examines the validity of these hypotheses.

H₀: The selected stock is statistically weak-form market efficient.

H_a: The selected stock is statistically weak-form market inefficient.

Data Sources and Treatments

4.1 Data Sources

This research contains the 15 most active traded stocks according to the value in property development sector of The Stock Exchange of Thailand based on January 31st, 2019, excluding incomplete data stocks. The data were gathered from Settrade website (www.settrade.com). Daily closing stock prices of the 15 most active traded stocks in property development sector of The Stock Exchange of Thailand were collected from Reuters database. The sample of 1,088 observations were collected from August 22nd, 2014 to January 31st, 2019 during current military regime in Thailand. Stock returns were calculated from the daily closing prices of the selected stock by using ln-return method. The unit root test was used to test the stationary condition of the data. The Q-statistic, run test, and ARMA model were used for testing weak-form market efficient hypothesis of the stationary stock returns. These are 15 stocks used in this research.

Code	Company
AMATA	Amata Corporation Public Company Limited
ANAN	Ananda Development Public Company Limited
AP	AP (Thailand) Public Company Limited
CPN	Central Pattana Public Company Limited
LH	Land And Houses Public Company Limited
LPN	L.P.N. Development Public Company Limited
MBK	MBK Public Company Limited
NUSA	Nusasiri Public Company Limited
QH	Quality Houses Public Company Limited
RML	Raimon Land Public Company Limited
S	Singha Estate Public Company Limited
SC	SC Asset Corporation Public Company Limited
SIRI	Sansiri Public Company Limited
SPALI	Supalai Public Company Limited
WHA	WHA Corporation Public Company Limited

4.2 Statistical Treatments of Data

4.2.1 Unit Root Test

Daily returns were computed from ln-return method as $R_t = \ln \frac{P_t}{P_{t-1}} * 100$, where R_t represents return during day t, P_t represents the stock price at day t and P_{t-1} represents the stock price at one day before day t. After that, the researcher used daily returns and proceeded the unit root test to test stationary condition of data. It is used to check whether a series is stationary or not as a necessary condition for random walks. The researcher applied the Augmented Dickey-Fuller (ADF) test (Dickey and Fuller, 1979). It is the

most popular unit root test which controls correlation by adding lagged difference of dependent variable to the right-hand side of the regression.

If the probability of unit root test is zero, the null hypothesis is failed to reject. Therefore, the data were stationary. If the probability of unit root test is less than zero, the null hypothesis is rejected. Therefore, the data were not stationary.

4.2.2 The Q-statistic Test

The researcher applied the Q-statistic in this research. It is used to test whether a group of autocorrelations is significantly different from zero. The Q-statistic is the most obvious test for testing weak-form of random walk hypothesis which directly tests the null hypothesis. Autocorrelation Function (ACF) is used to determine the correlation

Stock	t-statistic	Prob.	Result
AMATA	-31.90042	0.0000	Stationary
ANAN	-33.80635	0.0000	Stationary
AP	-36.77131	0.0000	Stationary
CPN	-35.88406	0.0000	Stationary
LH	-36.13031	0.0000	Stationary
LPN	-32.13973	0.0000	Stationary
MBK	-25.99462	0.0000	Stationary
NUSA	-33.54173	0.0000	Stationary
QH	-35.52701	0.0000	Stationary
RML	-34.39885	0.0000	Stationary
S	-30.48038	0.0000	Stationary
SC	-34.52560	0.0000	Stationary
SIRI	-35.61862	0.0000	Stationary
SPALI	-33.63341	0.0000	Stationary
WHA	-34.85698	0.0000	Stationary

of series with itself and determine the independence of the stock price changes. It measures the correlation between the current and lagged observations of the time series of stock returns which means that current values of the series are related to various lags of the past data. The Q-statistic was developed by Box and Pierce (1970). The equation is as follow:

$$Q_k = T \sum_{i=1}^k \rho_i^2$$

where ρ_i represents the sample autocorrelation at lag i and k represents the number of lags. The null hypothesis will be rejected when the probability in Q-statistic is less than 0.1 or 10 percent level of significance.

4.2.3 Run Test

The researcher also used the run test to test weak-form market efficiency. It is a nonparametric statistical test to test and detect statistical dependencies (randomness) which may not be detected by the autocorrelation test. The researcher calculated mean, standard deviation and Z-statistics as follow:

$$\text{Mean: } E(R) = \frac{2N_1N_2}{N} + 1$$

$$\text{Standard Deviation: } SE(R) = \left(\frac{2N_1N_2(2N_1N_2 - N)}{(N)^2(N-1)} \right)^{1/2}$$

Z-statistics: $Z = [R - E(R) / SE(R)] \sim N(0,1)$

where N represents total number of observations, N_1 represents number of + symbols, N_2 represents number of - symbols and R represents number of runs. The null hypothesis is rejected when p-value of Z-statistics is less than 0.05 (Sharma and Kennedy 1997).

4.2.4 ARMA Model

The researcher used Auto-Regressive Moving Average (ARMA) model which is often used to test the informational efficiency assumption of the Efficient Market Hypothesis (EMH). It is used to examine whether the stock return series depends not only on its past values of the return series but also on past and current disturbance terms (Mollah, 2012). ARMA

	P-value (Average)	H ₀
AMATA	0.4228	Fail to reject
ANAN	0.5611	Fail to reject
AP	0.0004	Reject
CPN	0.0498	Reject
LH	0.0545	Fail to reject
LPN	0.8108	Fail to reject
MBK	0.0670	Fail to reject
NUSA	0.7125	Fail to reject
QH	0.0423	Reject
RML	0.5619	Fail to reject
S	0.0380	Reject
SC	0.1589	Fail to reject
SIRI	0.0192	Reject
SPALI	0.1425	Fail to reject
WHA	0.0162	Reject

model combines 2 types of processes which are Auto-regression (AR) and Moving average (MA). If ARMA model exists, the null hypothesis is rejected.

5. Research Result

5.1 Unit Root Test Result

Table 1: Result for unit root test (Augmented Dickey-Fuller test)

From the results of Table 1, the probability of ADF t-statistic on every stock return is zero and less than 0.05. Therefore, the researcher found that all data are stationary.

5.2 The Q-statistic Test Results

Table 2: Result for Q-statistic

Stock	Prob. (Lag 20)	H ₀
AMATA	0.956	Fail to reject
ANAN	0.751	Fail to reject
AP	0.026	Reject
CPN	0.032	Reject
LH	0.001	Reject
LPN	0.403	Fail to reject
MBK	0.000	Reject
NUSA	0.602	Fail to reject

QH	0.002	Reject
RML	0.960	Fail to reject
S	0.000	Reject
SC	0.375	Fail to reject
SIRI	0.031	Reject
SPALI	0.692	Fail to reject
WHA	0.087	Reject

From Table 2, the results showed that the null hypothesis was rejected when the probability in Q-statistic is less than 0.1 or 10 percent level of significance. There are 8 stocks that rejected the null hypothesis of randomness or market efficiency which are AP, CPN, LH, MBK, QH, S, SIRI, and WHA. Therefore, these 8 stocks are weak-form market inefficient. It means that there are autocorrelations that past information can be used to predict future prices.

5.3 Run Test Results

Table 3: Result for run test

From the results of Table 3, it showed that the null hypothesis was rejected when the P-value of run test is less than 0.05 or 5 percent level of significance. There are 6 stocks that rejected the null hypothesis of randomness or market efficiency which are AP, CPN, QH, S, SIRI, and WHA. Therefore, these 6 stocks are weak-form market inefficient. It means that past information can be used to predict future prices.

5.4 ARMA Model Results

Table 4: Result for ARMA model

Stock	ARMA	Model	H ₀
AMATA	No	-	Fail to reject
ANAN	Yes	ARMA(3,3)	Reject
AP	No	-	Fail to reject
CPN	Yes	ARMA(1,1)	Reject
LH	Yes	ARMA(3,2)	Reject
LPN	Yes	ARMA(2,2)	Reject
MBK	Yes	ARMA(2,2)	Reject
NUSA	Yes	ARMA(3,3)	Reject
QH	Yes	ARMA(2,3)	Reject
RML	Yes	ARMA(3,3)	Reject
S	Yes	ARMA(3,3)	Reject
SC	No	-	Fail to reject
SIRI	Yes	MA(1)	Reject
SPALI	Yes	ARMA(3,3)	Reject
WHA	No	-	Fail to reject

From the results of Table 4, there are 11 stocks that contained ARMA structure which means that it can be used stock returns in the past to predict future returns. These 11 stocks rejected the null hypothesis of randomness or market efficiency which are ANAN, CPN, LH, LPN, MBK, NUSA, QH, RML, S, SIRI, and SPALI. Therefore, these 11 stocks are weak-form market inefficient. The past prices have relationship with future prices.

5.5 Summary of Hypothesis Testing Results

Table 5: Result for run test, Q-statistic and ARMA model

Stock	Run test H_0	Q-stat H_0	ARMA model	Results
AMATA	Fail to reject	Fail to reject	Fail to reject	strongly efficient
ANAN	Fail to reject	Fail to reject	Fail to reject	efficient
AP	Reject	Reject	Fail to reject	inefficient
CPN	Reject	Reject	Fail to reject	strongly inefficient
LH	Reject	Fail to reject	Fail to reject	inefficient
LPN	Fail to reject	Fail to reject	Fail to reject	efficient
MBK	Reject	Fail to reject	Fail to reject	inefficient
NUSA	Fail to reject	Fail to reject	Fail to reject	efficient
QH	Reject	Reject	Fail to reject	strongly inefficient
RML	Fail to reject	Fail to reject	Fail to reject	efficient
S	Reject	Reject	Fail to reject	strongly inefficient
SC	Fail to reject	Fail to reject	Fail to reject	strongly efficient
SIRI	Reject	Reject	Fail to reject	strongly inefficient
SPALI	Fail to reject	Fail to reject	Fail to reject	efficient
WHA	Reject	Reject	Fail to reject	inefficient

From Table 5, the results from run test, Q-statistic and ARMA model showed that AMATA and SC fail to reject the null hypothesis which means that they are strongly efficient. Most results of ANAN, LPN, NUSA, RML, and SPALI fail to reject the null hypothesis which means that they are efficient. Most results of AP, LH, MBK and WHA reject the null hypothesis. Therefore, AP, WHA, LH, and MBK are inefficient. All methods showed that CPN, QH, S, and SIRI reject the null hypothesis which means that they are strongly inefficient.

6. Conclusion and Recommendation

6.1 Conclusion

Four different methods such as unit root test, Q-statistic, run test, and ARMA model are applied in this research. AMATA and SC are strongly efficient because many investors always buy and sell these stocks. CPN, QH, S and SIRI are strongly inefficient. They may relate to some conditions under political factors and those stocks may not be traded so often. ANAN, LPN, NUSA, RML, SPALI, AP, LH, MBK and WHA are difficult to conclude because the results from Run test, Q-statistic and ARMA model are not the same. Stock investors who are interested to invest in property development sector of Thai stock market can use information from this research to choose stock that they have ability to forecast and get more chance to get more profit such as CPN, QH, S, and SIRI which are market inefficient. Also, they can avoid stocks that are market efficient because they are unpredictable such as AMATA and SC.

6.2 Recommendation for Future Studies

For future study, other researchers may study further about market efficiency by using data from different countries, sectors, and subsectors such as developed markets, developing markets or emerging markets. The data can be tested market efficiency in different time period such as financial crisis or under

special condition in those countries. Moreover, other methods can be used to test weak-form market efficiency such as GARCH model, Auto-regressive model, Pearson correlation coefficient, Granger

causality test, ARMA model, and Smirnov-K-S test).

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Factors influencing customer satisfaction on using XYZ online banking application

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Abstract

This study aimed to determine factors influencing customer satisfaction on XYZ online banking. The study was a quantitative research with applying Cronbach's Alpha, Multiple Linear Regression and One-Way ANOVA to determine the reliability of questionnaire analyze demographics information and test hypotheses. There were 429 questionnaires distributed to samples from people who have ever used XYZ online banking for financial transactions at least once. Mobile banking transactions is increasing rapidly. All banks in Thailand already provided their own application for financial transactions and encouraged their customer to use them; the application will be convenient for customers. Moreover, all banks in Thailand already announced the no service policy through online banking services. Then, it will be a challenge for each bank to create their uniqueness for encouraging customers to use their services. In this study, the researcher aimed to understand what factors influence to the satisfaction of customer while using XYZ online banking, to identify factors that influenced customer satisfaction while using XYZ online banking and to understand impact of factors that influenced customer satisfaction on XYZ online banking. Moreover, in this research was extended finding on mean differences of customer satisfaction to use XYZ online banking based on the age group levels. The different group of age levels will be a part of one variable which can explain customer satisfaction of people. The results of this study showed that there were three variables that had a significant effect on customer satisfaction which were Perceived usefulness, Perceived ease of use and Structural assurance. The results also found that the most influential factor that influence to customer's satisfaction was Structural assurance. In contrast, Perceived creditability and Perceived risk have negative significant influenced on Customer satisfaction. Besides, there are statistical differences of mean scores of Customers satisfaction to use XYZ online banking between three age group levels. In conclude, this study could be benefit directly to XYZ bank, business developer, and marketers of XYZ Bank as they are providing the application for customers to use.

Keywords: Customer satisfaction, Perceived usefulness, Perceived ease of use, Perceived credibility, Perceived risk, Structural assurance, Online banking, Mobile banking

Introduction

Mobile banking application is a part of the system which allow depositors to use smartphone or other cellular device to perform online banking tasks for financial transactions process. (InvestingAnswers,2019) Based on, the research from Marketbuzz, a company that provides a solution for mobile marketing, media, mobile development and market research. Mobile banking service continues popular in Thailand. In 2017, Marketbuzz provided survey to find people using mobile banking application. The study found that 69 percentages out of 1000 respondents were using mobile banking application in financial transactions. Moreover, there are two main purpose of using the application consisting of transactions and information-based features with fund-transfer and checking account balances. The reasons that users using the application are because of convenience, security and personal control. (The Nation,2017)

Paying by cash is seeming outdated. Digital transactions have increasingly replaced cash payments

that causes people carrying less cash than ever before. It seems that right now we are in the middle of an evolution toward a "cashless society". Adoption of digital payment systems has progressed rapidly in many countries. Payment by debit or credit card substituted the use of cash. Moreover, new electronic payment platforms, such as e-wallets and other mobile applications, have become popular. A completely cashless society may come out in some countries in the near future. In Thailand, people here growingly use mobile phones and tablets for financial transactions. Popular applications include ones that handle online account management, online money transfers and the QR code "scan-and-pay" system. Nevertheless, cash payment is still required at some stores, and the fully cashless society has yet to arrive. The development of new and better digital technologies is driving adoption of cashless payment systems. It makes consumer behavior change in parallel with technology. Most of Thais have adopted the use of smartphones and tend to react more positively to new technology.



Besides, the government is also supporting change by promoting digital infrastructure development that will conform to its National e-Payment Master Plan. These are all factors that are stimulating progress toward a completely cashless society in Thailand, which will make transactions more convenient and less costly for the benefit of businesses and the public. Also, eliminating cash will save the government from spending budget on the printing and handling of banknotes. Even though the government and businesses are prioritizing development of the cashless society, it is still a challenge to get people to understand and trust the system. Many people worry about transaction security due to online connections, hackers and phishing through digital system. (Siam Commercial Bank Public Company Limited, 2018)

Nowadays, mobile banking transactions is increasing rapidly. According to the announcement from Bank of Thailand last year, which showing an increase in the use of mobile and internet banking in Thailand. Besides, the widespread use of digital banking channels will allow banks to increase revenue by expanding their product offerings via digital banking. (Rebaca Tan, 2018) All banks in Thailand already provided their own application for financial transactions and encouraged their customer to use them; the application will be convenient for customers.

Besides, the Global Digital Report 2019 published by We Are Social and Hootsuite, reported that Thailand is top in the world in access to mobile banking and 74 percent of Thailand's people have access to mobile banking services. (Zhang F., 2019) Last year, one of the biggest banks in Thailand announced the no service fee policy for all online banking services. Short time after that, other big banks in Thailand also followed that policy. Using the no service fee policy for all online banking services will have no difference between each bank. Then, it will be a challenge for each bank to create their uniqueness which will encourage customers to use their services. According to this research, the important factors, which influences customer satisfaction to use their services, are perceiving usefulness, perceiving ease of use, perceiving credibility, perceiving risk and structural assurance. In this study, the researcher aimed to understand what factors influence to the satisfaction of customer while using XYZ online banking, to identify factors that influenced customer satisfaction while using XYZ online banking. Moreover, in this research was extended finding on mean differences of customer satisfaction to use XYZ online banking based on different age group levels. The different group of age levels will be a part of one variable which can explain customer satisfaction of people.

Literature review

is related to judgment of user on the privacy and security issues of the mobile banking systems. Also, it is used as a new structure to reflect the security and

Customer satisfaction

Customer satisfaction is defined as an evaluation, judgement or decision of user who satisfied or dissatisfied with the product or service that he or she used or purchased (Rahki, 2014). Satisfaction was considered as one of the most important theoretical for the most marketers and customer researchers (Arturo Molina, David Martín-Consuegra, Águeda Esteban, 2007). In marketing, most of the firm used to evaluate their product or service based on the satisfaction of customer (Vinita, 2013). Satisfaction can be considered as a component of overall customer attitudes towards the product or service provider (Terrence L. & Gordon M., 1996). The concept of satisfaction is to presence the goal that consumer wants to achieve or expect. (Arturo et al., 2007). The marketing concept shows that when buyer is satisfied he or she will be more likely to repurchase product or service (Vinita, 2013).

Perceived usefulness

Perceived usefulness is defined as a key factor in mobile banking selection (Chris Hampshire, 2017). It is defined as the range which an individual believes that user will be benefited by using mobile banking services (Richa Priya, Aradhana Vikas Gandhi, Ateeque Shaikh, 2018). Besides, Perceived usefulness is an important determinant in information system use refer to whether users expect benefits while using an information technology system (Seonjeong (Ally) Lee, 2018). It was observed that perceived usefulness has a significant influence on customers' attitudes toward mobile banking (Ali, Yogesh, Nripendra and Antonis, 2016). The amount of a transfer payment guarantee significantly increases consumer trust in the organization which positively affects perceived usefulness (Ali et al., 2016).

Perceived ease of use

Perceived ease of use refers to the perception of users through the performance of a particular technical task which require users' mental effort. It has been identified as a main concept for examining and evaluating user acceptance of a particular technology (Ajzen and Fishbein, 1980; Rouibah et al., 2011). Besides, Davis (1989) defines perceived of use as "the degree to which a person believes that using a particular system would be free of effort". He also mentions that perceived ease of use refers to freedom from complexity while using mobile banking services. Perceived ease of use and perceived usefulness affect customers' intention and attitude (Montazemi and Saremi, 2013). Moreover, Revels, Tojib and Tsarenko, (2010), they explained that perceived ease of use is an important motivating factor for users' technology usage.

Perceived credibility

Ba and Pavlou (2002) stated that perceived credibility is usually relies on reputation, information and economic reasoning. Perceived credibility privacy concerns in the acceptance of Internet banking. The failure from financial transactions is one of the biggest concern of user while using mobile banking

(Luarn and Lin, 2005). The decision to acquire mobile banking services can involve a high level of risk in the users' mind. Also, Erdem and Swait (2004) stated that the level of trust in mobile banking depends on reputation, information and economic reasoning.

Perceived risk

Perceived risk can be referred to the degree of uncertainty outcome of mobile banking (Gerrard and Cunningham, 2003). It is an important factor for running business. Different in business will taking with different type of risks. In mobile banking business, customer will be aware on the service that the bank provides to the user while he or she using for the financial transactions for examples paying bills, transfer money or balance checking. In this business of mobile banking, perceived risk will depend on the security that the bank provides to customer or users (Stem et al., 1977; Stone and Gronhaug, 1993; Martin et al., 2014). Besides, perceived risk can be arising depend on the inconsistency between a requirement of users and the real outcome of the mobile banking technology (Koenig-Lewis, Palmer and Moll, 2010).

Structural assurance

Structural assurance means that there exist legal and technological structures to ensure payment security properly and also take into consideration of all the legal aspects (Zhou, 2011). As compared to online banking, mobile banking is more exposed to hacker attack and information outflow. It is based on mobile networks, which are in jeopardy to some trouble such as Viruses and Trojan horses (McKnight et al., 2002). Hence, structure assurance is necessary to build the initial trust and confidence of customers. Yousafzai, Pallister and Foxall, (2005) found that structural assurances which led to positive perceptions of online banking will including with security and privacy policies, regulatory compliance, and written guarantees.

Research Framework and Methodology Conceptual Framework

To develop the conceptual framework, the researchers used one main research models to design the conceptual framework. The conceptual framework of this study is adopted from the theoretical model of Richa Priya, Aradhana Vikas Gandhi, Ateeque Shaikh, (2018), who study about "Mobile banking adoption in an emerging economy: An empirical analysis of young Indian consumers", as shown in Figure 1., by selecting the variables that were important and had influenced on customer satisfaction. Researcher aimed to find the influencing of customer satisfaction. The conceptual framework consists of six dimensions (Perceived usefulness, Perceived ease of use, Perceived credibility, Perceived risk, Structural assurance and the group of age level) which form the independent variables. The dependent variable is Customer satisfaction.

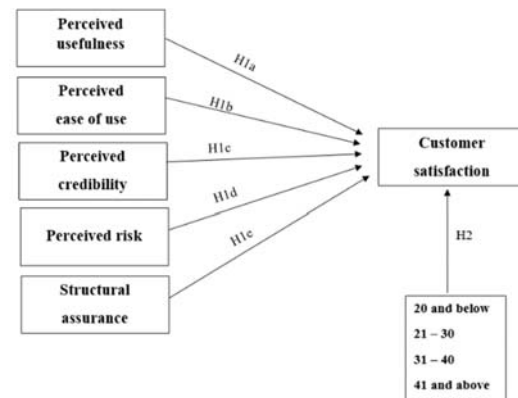


Figure 1: Conceptual framework of factors influencing customer satisfaction on using XYZ online banking application

Research Hypotheses

Table 1: Defined Hypotheses

No.	H	Hypotheses
1	H1	Perceived usefulness (H1a), Perceived ease of use (H1b), Perceived credibility (H1c), Perceived risk (H1d), Structural assurance (H1e) have significant influence toward Customer satisfaction.
2	H2	There is significant mean difference among group of ages toward Customer satisfaction.

Research Methodology

This research was conducted by using quantitative approach. The survey was achieved in a form of online questionnaires to collect all require data. The questionnaire was conducted with convenience and snowball. The survey consisted of three parts including with screening questions, a five- points Likert scale and demographic. The first part was screening questions were defined in order to categorize respondents who are the member of XYZ bank and ever used online banking application. The second part was to measure a different of five variables on a five- points Likert scale where 5 is Strongly Agree and 1 is Strongly Disagree. The third part was the demographic factors were assigned to gather respondent's personal information such as gender, age, income, occupation and etc.

Measurement of Conceptual Framework and Variables

The literature review was conducted to ensure the models were appropriate for developing the conceptual framework, and to understand all variables incorporated in this study. A Five-point Likert scale ranging from strongly disagree (1) to strongly agree (5), was applied to measure variables in each hypothesis related to this research topic (Barnette, 2000). Since this study is the quantitative research, there are several types of analysis which were appropriate with this study such as Cronbach's Alpha, Descriptive Research, Multiple Linear Regression. Firstly, for Cronbach's Alpha, it was

to applied to test the reliability of questionnaire by conducting the pilot test with 30 samples. Secondly, Descriptive method was used to collect and analyze the demographic information from the target respondents. Lastly, Multiple Linear Regression method was implemented to test the level of influence of independent variables on dependent variables.

Population and Sample

In this study, the target population was the people who have an account and ever used XYZ mobile banking for financial transactions at least once. The pilot test was 30 respondents. The researched used convenience sampling method. The research team distributes the survey form to 400 respondents through social media advertising. The minimum of 400 respondents are required at 95% confident level to represent the 67 million Thai population (Krejcie & Morgan, 1970). As a confirmation, this research also uses the formula of Cochran (1977) for estimate sample size.

Estimating sample size technique

$$n = \frac{z^2}{4e^2}$$

Which:

n is the sample size

e is the level of precision = 0.05

Z is the statistic for a level of confidence Z = 1.96

Hence:

$$n = \frac{(1.96)^2}{4(0.05)^2}$$

$$n = 384.16 \approx 400$$

Sampling Technique

The survey was achieved in a form of online questionnaires to collect all require data. The questionnaire was conducted with convenience and snowball sampling techniques by distributing the questionnaire through Facebook, Line contacts, and sharing among friends and groups which is non-probability sampling method. Meanwhile, the snowball sampling method was used by utilized researcher's friends, colleagues, co-workers and relatives used. They were cooperatively distributed the survey to other people to gain more samples. In addition, the quota sampling was intentionally selected to find out a difference based on age. The purpose of that is to discover whether each group of samples based on different age has different influenced of satisfaction while using XYZ online banking.

Reliability test

Reliability test was performed using Cronbach's Alpha Coefficient with 30 sets of the pilot questionnaires that had been distributed to target respondents. All the test results of independent variable met the requirement standard with Cronbach's Alpha Coefficient more than 0.6 (Cronbach, 1951). The result is shown in table 2.

Table 2: Consistency of the Scales Test (N=30)

Variables	Cronbach's Alpha	No. of items
Perceived usefulness (PU)	0.781	6
Perceived ease of use (PE)	0.635	3
Perceived credibility (PC)	0.752	3
Perceived risk (PR)	0.657	3
Structural assurance (SA)	0.764	4
Customer satisfaction (CS)	0.721	3

Result and Discussion

Demographic Profile Summary

The demographics and characteristics of 429 respondents who used XYZ online banking application are shown in Table 3. The respondents are 45% male and 55% female. The age of respondents as a quota sampling technique which intentionally applied to this study can be divided into four range; 20 and below years old at 25%, 21-30 years old at 26%, 31-40 years old at 25% and 41 and above years old at 24%. Majority of respondents are Student/College student at 35%, followed by business owner at 32% and employee at 22%. The major monthly income ranges are above 30,001 – 40,000 THB at 24%, followed by more than 50,000 at 21%, have monthly income between 10,000 – 20,000 THB and 20,001 – 30,000 THB are equal to 18% each, have monthly income less than 10,000 THB 13% and 6% have monthly income between 40,001 – 50,000 THB.

Table 3: Demographic Profile: (N=429)

Demographic	Characteristics	Frequency	Percentage
Gender	Male	191	45%
	Female	238	55%
Age	20 and below years' old	108	25%
	21 – 30 years' old	111	26%
	31 – 40 years' old	107	25%
	41 and above years' old	103	24%
Occupation	Student/College student	149	35%
	Government employee/State Enterprises	50	12%
	Business owner	137	32%

Income	Employee	87	20%
	Other	6	1%
	Less than 10,000 THB	56	13%
	10,000 – 20,000 THB	76	18%
	20,001 – 30,000 THB	78	18%
	30,001 – 40,000 THB	104	24%
	40,001 – 50,000 THB	26	6%
	More than 50,000 THB	89	21%

Descriptive Analysis

Pearson's Correlation

Table 4: Pearson's Correlation Matrix

Variable	Mean	SD	CS	PU	PE	PC	PR	SA
CS	3.8881	.57094	1					
PU	4.1309	.49911	.497*	1				
PE	3.9503	.58682	.388*	.596*	1			
PC	3.6239	.60415	.286*	.417*	.417*	1		
PR	3.4406	.66503	.616*	.463*	.237*	.303*	1	
SA	3.8561	.64294	.549*	.397*	.510*	.515*	.520*	1

Note: * represents the correlation which is significant at 0.05 level (1-tailed).

With reference to the Pearson's Correlation Matrix for H1a – H1e exhibits in Table 4, all variables have positive correlations among each other with P-value less than 0.05. According to the strength of correlations defined by the Political Science Department at Quinnipiac University (Statistic how to, n.d.), the overall relationship between variables has a strong positive relationship in the range 0.549-0.616 while three pairs in the matrix showing strong relationship. Those are Structural assurance (SA) and Customer satisfaction (CS) at 0.549 correlation, Perceived ease of use (PE) and Perceived usefulness (PU) at 0.596 correlation and Perceived risk (PR) and Customer satisfaction (CS) at 0.616.

Inferential Analysis and Multicollinearity

Validation

Table 5: Multiple Linear Regression Result (H1a – H1e), Dependent Variable: CS

Hypotheses	Variables	Standardized Coefficient (β)	VIF	Result
H1a	PU	0.202*	1.951	Supported

H1b	PE	0.071	1.928	Not supported
H1c	PC	-0.087*	1.481	Supported
H1d	PR	0.388*	1.635	Supported
H1e	SA	0.275*	1.996	Supported
R-square		0.493		
Adjusted R-square		0.487		

Note: * represents the correlation which is significant at 0.05 level (1-tailed).

The result from table 5 shown above represents R^2 at 0.493 which means that 49.3% of all five independent variables which are Perceived usefulness (PU), Perceived ease of use (PE), Perceived credibility (PC), Perceived risk (PR), Structural assurance (SA) could well explain the dependent variable, Customer satisfaction (CS) to use XYZ online banking, at 0.05 significant level or 95% of confident level. The P-values of the independent variables, PU, PC, PR and SA, are less than 0.05 indicate that H1a, H1c, H1d and H1e are supported whereas one hypothesis; H1b is not supported because of P-values greater than 0.05. As a result, PU, PC, PR and SA have statistically significant positive influences on CS to use XYZ online banking at the Standardized Coefficients (Beta) 0.202, -0.087, 0.388 and 0.275 respectively. PR has the most statistically significant positive influence on CS with Standardized Coefficient 0.388. The variance inflation factors (VIFs) were verified to validate the multicollinearity problem. All VIFs were less than 5.00. This implies that no critical issues exist with this study.

Table 6: One-Way ANOVA (H2), Dependent Variable: CS

ANOVA						
CS (Customer satisfaction)		Sum of Squares	df	Mean Square	F	Sign.
Between Groups		16.489	3	5.496	18.987	.000
Within Groups		123.029	425	.289		
Total		139.518	428			

An analysis of variance exhibited in the Table 6 shows that the influence of mean difference of age levels on Customer satisfaction (CS) of using XYZ online banking is significant, $F(3, 425) = 18.987$, $p = 0.000$.

Table 7: Scheffe's Post hoc Test (Multiple Comparisons)

AGE (I)	AGE (J)	Mean Difference (I-J)
20 and below	21-30	-.20537*
	31-40	.18732
	41 and above	.31278*
21-30	20 and below	.20537*
	31-40	.39269*
	41 and above	.51815*
31-40	20 and below	-.18732
	21-30	-.39269*
	41 and above	.12546
41 and above	20 and below	-.31278*
	21-30	-.51815*
	31-40	-.12546

Note: * represents the mean difference with P-value ≤ 0.05 .

The Scheffe's Post hoc Test result exhibited in the Table 7 indicates that there are statistical differences of mean scores of Customers satisfaction (CS) to use XYZ online banking between three age group levels. From the data, the first group is age at 21-30 years old which is different from the other groups. The second group is age at 20 and below which is different from age 21-30 and 41 and above. The third group is age at 41 and above which is different from the group of age at 20 and below and 21-30 years old vice versa at 95% confident level. Thus, H2 is supported.

Discussion and Conclusion

The research was conducted an empirical study to examine factors influencing Customer satisfaction to use XYZ online banking through online questionnaire based on data from 429 respondents who have ever used XYZ online banking. The study was also extended to investigate the mean differences of respondents based on age levels. The conceptual framework of this study was adopted from the theoretical model of Richa Priya, Aradhana Vikas Gandhi, Ateeque Shaikh, (2018), who study about "Mobile banking adoption in an emerging economy: An empirical analysis of young Indian consumers". The results obtained from Pearson's Correlation, Multiple Linear Regression, and One-Way ANOVA lead to a conclusion of this study.

As a result, Perceived usefulness (PU), Perceived credibility (PC), Perceived risk (PR) and Structural assurance (SA) have statistically significant positive influences on Customer satisfaction (CS) to use XYZ online banking at the Standardized Coefficients (Beta) 0.202, -0.087, 0.388 and 0.275 respectively. It means that H1a, H1c, H1d and H1e are supported. These can be explained that the factors which can be influenced customer satisfaction on XYZ online banking including with Perceived usefulness (PU), Perceived credibility (PC), Perceived risk (PR) and Structural assurance (SA). For Perceived usefulness (PU), it has statistically significant positive influences on Customer satisfaction (CS). According to the question of Perceived usefulness, it shown that respondents agreed that using

online banking is flexible, quick, convenient and cost effective. Also, it is easier for respondents to get information and eliminate time through online banking system. For Perceived credibility (PC), it has statistically significant positive influences on Customer satisfaction (CS). According to the question of Perceived credibility, it shown that respondents are agree that using online banking will decrease chances of error and they are believing that the system will keep their personal information well. At the same time, Perceived risk (PR) is the strongest factor which influencing on Customer satisfaction. It has positive significant influenced on Customer satisfaction. It can be concluded that most of respondents aren't facing with the problem to install the setup of mobile banking system. Also, the respondents are agreeing that XYZ bank needs to use the most up-to-date system version of mobile device, and regularly run updates.

Besides, Structural assurance (SA) has statistically significant positive influences on Customer satisfaction (CS). According to the question of Structural assurance, it shown that respondents or users will satisfy with XYZ online banking based on their trust of the connection system. Also, respondents feel confident on the legal and technology structure of XYZ's application. They feel that it is safe and can protect them from any issues on mobile internet while they do any transactions through online banking. Moreover, respondents pay attention on safe environment to use mobile banking as well. All of these explanations shown that's why Structural assurance (SA) is the strongest factor which influencing on Customer satisfaction.

In contrast, Perceived ease of use (PE) has negative significant influenced on Customer satisfaction. It means that H1b is not supported. According to the question about Perceived ease of use (PE), it can be explaining that respondents don't agree that mobile banking provides flexibility to search information for conducting transactions. As well as the instructions on mobile banking system which aren't clear and understandable for respondents to use it.

The analysis of mean differences of customer satisfaction to use XYZ online banking based on age group levels leads to a conclusion that there are three groups of age levels with mean differences. Those are the age group levels at 21-30 years old which is different from other groups, the age at 20 and below is different from age 21-30 and 41 and above and the last group is age at 41 and above which is different from the group of age at 20 and below and 21-30 years old vice versa. These can be explained that people who are different on age levels will have a different in term of satisfaction.

Implication and Recommendation

The results of this study could be benefit directly to XYZ bank, business developer, and marketers of XYZ Bank as they are providing the application for customers to use. Then, it is very important for the bank

to know more about their customers and know what is the factors that will make customers satisfy with their services. Banks should take an advantage of this finding and offer value-added services to promote, improve and develop their mobile banking application system. The result from this research already shown that customers will satisfy based on Perceived usefulness (PU), Perceived credibility (PC), Perceived risk (PR) and Structural assurance (SA). Also, the difference of age levels can be explained the different on customer satisfaction as well. In this study, Perceived risk (PR) is the strongest factor which influences on Customer satisfaction. XYZ bank should continue maintain and provide an efficient system of online banking to make customer satisfy with their services. At the same time, the group of XYZ customers have different satisfaction based on the group of age levels. Then, it will be important for the bank to learn and separate the group of their customer clearly to provide good services to them. Moreover, Perceived credibility is the weakness factor which influences on Customer satisfaction. It is important for XYZ bank to pay attention on these issues because their customers have several group of age levels. Then, some customer who have higher age may not comprehend on the use of online banking system and some are not skilled in technology. Moreover, XYZ bank should create good quality of the system to make customer trust in their service.

Limitations and Future research direction

This study has some limitations: This research was conducted in 2019 and focuses only on the respondents who ever used XYZ online banking for financial transactions. Also, the updated version of XYZ application now is version 3.18 for both IOS and Android devices. Thus, it can be possible that the respondents who answer these research may use the last updated version or the old version while answering the questionnaire. Then, the research could probably change in the future when XYZ bank launch a new version of online banking application.

The researcher would like to recommend other variables which should be the variable for the future study including with Gender, Promotion and Function. For future study, the researcher would like to suggest these three variables (Gender, Promotion and Function) it can help to identify how to create a strong structural system to match with each group of customer to make customer satisfy with the application. Firstly, "Gender" can use to explain customer satisfaction in term of different gender. Each group of gender may satisfy with different factors. Secondly, "Promotion", due to high competition of bank in Thailand which has several brands and all bank already provide their own application of online banking as well as providing the same no service fee policy. Promotion become a key for all bank to create a different and unique point to persuade and attract customers to use their services. Difference promotion can be used to compete with other competitors and it can be a part which create a good

satisfaction to customers. Lastly, "Function" should be the point to create good satisfaction to customer. For the bank, the process to create an efficient online banking system, a developer should know which function is need for customer to use and know which transaction is important for customer. The more that they know their customer it is the way to make them satisfy with the bank.

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Factors Influencing Women Perception of Cosmetic Surgery: A Comparative Study on Baby Boomer, X, and Y Generations

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Abstract

The popularity of cosmetic surgery is increasing dramatically, but only few researches have been conducted in Thailand. Therefore, the purpose of this research is to study about factors that influence women perception of cosmetic surgery and compare the perception towards cosmetic surgery among Thai women in Baby Boomer, the X and the Y Generations. A questionnaire-based survey was conducted with 300 women; 100 women from each generation, through online questionnaire by Google form and distributed through online channels such as Line, Facebook, and e-mail. The questionnaire collected demographic data and measured appearance interest, body image satisfaction, perceived media pressure and perception towards cosmetic surgery. SPSS program were used to analyze the outcomes that has been obtained from quantitative online questionnaires. The result shows that the most influential factor is perceived media pressure which is significant in all generations. And found that the perception towards cosmetic surgery in Generation Y is different from the X and Baby Boomer Generation. And the X and Baby Boomer have the same perception toward cosmetic surgery. The recommendation from this research will be useful for cosmetic surgery hospitals and beauty clinics in Thailand on how to divide their market group and how to design their marketing campaign and promotion for each generation.

Keywords: Cosmetic Surgery, Baby Boomer, Generation X, Generation Y

Introduction

“Fine feathers make fine birds” is the idiom that can apply to people of all generations. As the appearance act as a first impression and the first thing people judge others before any relationship. This makes appearance extremely important, and people tend to have a positive first impression with the one who has good appearance and tend to have negative bias with people that have unpleasant appearance. However, with the present cosmetic surgery technology, we can choose how we would like to be, double eyelids, V-shape face and etc. In addition, the cosmetic surgery is no longer a procedure for those who are rich, everyone can effort the surgery procedure regardless of age, sex, and social class (Slevec & Tiggerman, 2010).

Despite the tremendous growth in popularity of cosmetic surgery over the past several years, there are only few studies being conducted in the Western countries. Some studies mentioned that the growth in demand of cosmetic surgery was because people prefer themselves to look as young as they can and also the safety of the surgery has been increased (Rohrich, 2000). Some research has mentioned that the power of the media also influence towards the increase of the cosmetic surgery as well as the medical advancement (Sarwer, Grossbart, & Baker, 2009). According to

American Society of Plastic Surgeons, in 2012 around 14.6 million cosmetic procedures (Surgery

procedures performed by ASPS Member Surgeons) were performed in the US (American Society of Plastic Surgeons, 2013), however, in 2017 the cosmetic procedures have increased by 2.9 million people (American Society of Plastic Surgeons, 2018). Not only in the US, the growth in cosmetic surgery is also increasing in other countries in Asian region. According to International Society of Aesthetic Plastic Surgery, one of the largest markets for cosmetic surgery in Asia is South Korea. However, the number of total procedures conducted in South Korea seems to be way behind USA, but if compared to the population of South Korea population, out of every 1,000 people, 20 people have undergone cosmetic surgery, which makes South Korea the highest ratio of procedures per capita.

Moreover, the K-pop music and K-drama trend has concurred the world entertainment industry which has a large impact on people around the world. Because of the K-pop music & K-drama trend, South Korean culture has impacted the people around the world. And it has shaped South Korean culture in a way that dominates every day thought on the appearance. Pop idols with the perfect face and body; have identified a standard for South Korean beauty, which admirers attempt to replicate with cosmetic surgery (Fujio, 2018).

Apart from many Asian countries, Thailand is the only nation in Southeast Asia that is in the rank



of destinations for cosmetic surgery. Thailand has become the leading destination for cosmetic surgery in Southeast Asia (Jaisuekul & Teerasukittima, 2017). According to ISAPS 2017 Global statistic, Thailand ranked number 8 in total surgical procedures.

The growth has reflected that cosmetic surgery is accepted by Thai people in the society. In the past, cosmetic surgery was treated as an embarrassment. However, people tend to reveal more about their surgery. Because of this, cosmetic surgery business has become more popular and many cosmetic surgery clinics and hospitals are emerging in Thailand. This leads to higher competition in this industry. This research will focus on the perception towards cosmetic surgery of Thai Baby Boomer, X and Y Generations women in Thailand and factors that influence consideration of undergoing cosmetic surgery.

Statement of the Problem

Despite of the tremendous growth in cosmetics surgery business in Thailand, there are few published comparative researches on the perception towards cosmetic surgery among different generations in Thailand. Furthermore, even though cosmetic surgery is getting more popular and it is becoming a more common procedure, people nowadays still tend to avoid telling others about their cosmetic surgery, as some feel uncomfortable, some feel embarrassed. And some group of people tends to believe that cosmetic surgery is a bad thing and feel that it is some kind of procedure that harms society, this psychological bias may occur during the survey.

This research seeks to identify the factors that influence perception toward cosmetic surgery in Thai women in each generation and to identify if perceptions toward cosmetic surgery are different in Thai women in each generation. The cosmetic surgery in Thai market is highly competitive. Therefore, the result of the research could benefit cosmetic surgery industry. The research outcome will provide the direction to cosmetic surgery business such as hospital, beauty clinic in terms of marketing strategy to initiate or create a better promotion to fit each generation.

Research Questions

RQ1: What are the factors that influence perception towards cosmetic surgery in the baby boomer, the X and the Y generation?

RQ2: To what extent is the perception of cosmetic surgery different among generations?

measures emotion of physical attractiveness or unattractiveness, and satisfaction or dissatisfaction with the looks. While appearance orientation scale

Research Objectives

RO1: To identify the factors that influence perception towards cosmetic surgery among each generation.

RO2: To identify differences of perception of cosmetic surgery among generations.

Perception towards cosmetic surgery

Perception towards cosmetic surgery was affected by many factors with support evidence from previous research (Yun, et al., 2015). In the research the perception towards cosmetic surgery was measured by using actual consideration consisting of 3 statements which are “I would seriously consider having a cosmetic surgery in order to look more attractive”, “I would undergo cosmetic surgery to be in a good shape”, and “If I can gain confidence in my body through cosmetic surgery, I would like to try it”. These 3 statements were rated using 5-point Likert scale (Yun, et al., 2015). The result of the research stated that those who have higher appearance interest, body image satisfaction, and self-esteem have more consideration to undergo cosmetic surgery than those who don't. And average actual considerations about undergoing cosmetic surgery was higher in people in their 30s. And there were no significant differences in education level, marital status. Fogel and King (2014) found that as age increased, appearance became less attractive which led to increased interest of undergoing cosmetic surgery. However, the previous researches conducted in other countries may have different social culture and it was conducted many years ago, therefore the researcher wants to use this variable in the study to study the same thing but with Thai women.

Appearance Interest

According to the previous research, the appearance evaluation subscale of multidimensional body-self relations questionnaire (MBSRQ) was used to measure appearance interest (Yun, et al., 2015). The researcher has done a further research and found the research of Multidimensional Body-self relations questionnaire, mentioned that the full version of MBSRQ consists of 69 items comprising of seven factor subscales. The shorter version of MBSRQ is called MBSRQ-AS (MBSRQ - Appearance scale) consists of 34 items which includes 2 main factors subscales of the original version and additional 3 multi item subscales. This research, it includes those two main factors subscales from the original version of MBSRQ which are 7 items from appearance evaluation scale and 12 items from appearance orientation scale. The researcher has excluded the 3 multi item subscales as it is not directly related to the appearance interest but rather weight focused subscale which is not a focus of this research. Appearance evaluation scale measures the extent of investment in an individual's appearance (Argyrides & Kkeli, 2013).

Body Image Satisfaction

Body image is a multifaceted psychological experience of embodiment that encompasses evaluative thoughts, beliefs, feelings, and behaviors related to one's own physical appearance. The body image satisfaction is one of the independent variables in this research. According to Cash's previous research on body image (Cash, Morrow, Hrabosky, & Perry, 2004), 3 of 5 subscale from MESRQ-AS were used and one of three is Body areas satisfaction scale (BASS). The 9 items of BASS used to measure degree of satisfaction or dissatisfaction with individual body areas (Giovannelli, Cash, Henson, & Engle, 2008). The researcher wants to identify the degree to which the variable is significant and whether it has any influence on Thai women of specific generations towards cosmetic surgery. Other two subscales were excluded, as one is already included in the first variable (Appearance interest) and another one was removed because it is not relevant to the research context.

Perceived Media Pressure

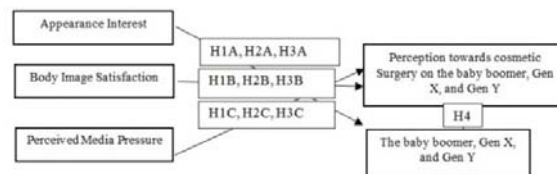
Perceived media pressure is when people consume media from television or advertisement and perceive or feel that they want to change or improve themselves to be as the person they see in the media such as celebrities (Sharp, Tiggermann, & Mattiske, 2014). According to Arunsri's research on "Factors affecting repurchase intention to engage in body or face modification of consumers in Bangkok", the result from the research shows that perceived media pressure is not influential or it does not affect repurchase intention of body or face modification of consumers in Bangkok (Arunsri, 2018). Even though it didn't influence the repurchase intension, researcher wants to test if this variable influences perception of Thai women of each generation towards cosmetic surgery or not.

Conceptual Framework

The conceptual framework is developed from two research models of Yun et al (2015) and Arunsri, (2018) with aim to identify if the three independent variables—Appearance Interest, Body Image Satisfaction and Perceived Media Pressure—have an influence on perception towards cosmetic surgery among Thai women or not. Also the research is used to compare the perception towards cosmetic surgery among three generation; the baby boomer generation, the generations X and Y.

Figure 1: Conceptual Framework of factors that influence Thai women's perception toward cosmetic surgery.

this technique as it is efficient, inexpensive, fast and convenient for the researcher to collect the data in a limited time.



Source: By the author.

Hypotheses:

H1₀: Appearance interest (H1A₀), Body image satisfaction (H1B₀) and Perceived media pressure (H1C₀) have no influence on Thai women's perception towards cosmetic surgery among Generation Y.

H1_a: Appearance interest (H1A_a), Body image satisfaction (H1B_a) and Perceived media pressure (H1C_a) have influence on Thai women's perception towards cosmetic surgery among Generation Y.

H2₀: Appearance interest (H2A₀), Body image satisfaction (H2B₀) and Perceived media pressure (H2C₀) have no influence on Thai women's perception towards cosmetic surgery among Generation X.

H2_a: Appearance interest (H2A_a), Body image satisfaction (H2B_a) and Perceived media pressure (H2C_a) have influence on Thai women's perception towards cosmetic surgery among Generation X.

H3₀: Appearance interest (H3A₀), Body image satisfaction (H3B₀) and Perceived media pressure (H3C₀) have no influence on Thai women's perception towards cosmetic surgery among baby boomer Generation.

H3_a: Appearance interest (H3A_a), Body image satisfaction (H3B_a) and Perceived media pressure (H3C_a) have influence on Thai women's perception towards cosmetic surgery among baby boomer Generation.

H4₀: Three generations—Baby Boomer, Generation X, and Generation Y—do not show different views on attributes about cosmetic surgery.

H4_a: Three generations—Baby Boomer, Generation X, and Generation Y—show different views on attributes about cosmetic surgery.

Materials and Methods

Research Design / Method used

The research design is a quantitative research. The research uses descriptive method to analyze demographic information about respondents. And Multiple Linear Regression to identify if independent variables have an influence on dependent variable or not. In addition, the researcher is ANOVA is used to identify perception towards cosmetic surgery among three generations. The research technique used in this research is a questionnaire or survey technique which was used to gather the data. This research has chosen

Target Population

The target population is focused on Thai women who have never undergone cosmetic surgery before.



The data was collected by launching Google Form online questionnaire. The questionnaires were distributed through social media applications such as Line, Facebook, and e-mail.

Sampling Method

Sampling is method of selecting the samples from a population to become the base in order to predict the outcome of the population. The sampling method that is used in this research is homogeneous sampling, which is a type of purposive sampling under non-probability sampling method, as well as the convenient method.

Purposive sampling or another word known as judgmental or selective sampling is a method that chooses the samples that tend or have potential to give an accurate result to the research. In this research, researcher has selected homogeneous sampling which is a type of purposive sampling. According to Homogeneous sampling, it is a technique that aims to achieve a homogeneous sample; in this research, researcher aims to collect the data from those Thai women from each group of people that share the same generation (Leard dissertation, n.d.).

Another sampling method that is used in this research is convenience sampling, as researcher also launched the questionnaires to the people who are available to answer the questions for researcher. The questionnaires were distributed to those who were considered most convenient to the researcher such as colleagues, family, friends etc.

Sample Size

The data were collected from 349 respondents in total and was screened out by screening questions. Based on previous researches; The Study of Consumer's Behavior and Perception toward Cosmetic Surgery in Thailand which collected 122 respondents, Attitudes toward Cosmetic Surgery in Middle-aged Women: Body Image, Aging Anxiety which used 108 respondents, and the Media and Media Exposure, Attitude, Self-esteem and Behavior Intention to do Facial Cosmetic Surgery of Female Teenagers which collected 400 respondents, the researcher has come up with the sampling size of 300 respondents; 100 respondents for each generation. As the research is a comparative research therefore, the researcher has collected data from each generation equally to be able to compare across generations. Moreover, due to the matter of time collection, it was very challenging for the researcher to collect the data within the fixed number of respondents from each generation.

Summary of Demographic data

The demographic data in this research includes age, education level, monthly income level, and marital status and other characteristics.

Table 1: Summary of Demographic data

	Nos.	%
Age		
25-39 years old (Gen Y)	100	33.3%
40-54 years old (Gen X)	100	33.3%
55+ years old (Baby boomer)	100	33.3%
Education Level		
Below Bachelor	20	6.7%
Bachelor	158	52.7%
Above Bachelor	122	40.7%
Monthly income Level		
Less than 25,000 Baht	49	16.3%
25,000 – 50,000 Baht	97	32.3%
50,001 – 90,000 Baht	84	28%
More than 90,000 Baht	70	23.3%
Marital status		
Married	173	57.7%
Single	127	42.3%
Using moisturizer in daily life		
Yes	279	93%
No	21	7%
Get a face massage services at cosmetic counter/service clinic		
Yes	103	34.3%
No	197	65.7%
Have ever got Botox or filler		
Yes	42	14%
No	258	86%
Place to consider undergone cosmetic surgery		
Hospital	232	77.3%
Clinic with branches	63	21%
Clinic without branches	5	1.7%
Frequency of going to fitness per month		
0-3 times	216	72%
4-12 times	48	16%
13-20 times	22	7.3%
More than 20 times	14	4.7%

According to the Table 1, there are 100 equal respondents for each generation which are 300 respondents in total. The majority of respondents' education level is bachelor at 52.7%. The monthly income level of majority of the respondent is 25,000 – 50,000 Baht per month at 32.3%. And 173 respondents or 57.7% are married. 279 respondents or 93% use moisturizer in daily life. 197 respondents or 65.75% do not get face massage service at the cosmetic counter/service clinic. Majority of the respondents, 258 or 86% have never got Botox or filler. And 232 respondents or 77.3% will choose a hospital if they were to undergone cosmetic surgery.



Lastly, majority or the respondents, 216 respondents or 72% go for fitness only 0-3 times per month.

Summary of variables

There are three independent variables and one dependent variable in this research which are appearance interest, body image satisfaction, perceived media pressure, and perception toward cosmetic surgery respectively.

Table 2: Summary of Appearance interest

Question	Mean			
	Generation			
	Y	X	BB	Total
Notice how I look	3.67	3.40	3.41	3.49
Buy clothes to look my best	3.61	3.52	3.53	3.55
Have a body that is sexually appealing	2.62	2.82	2.61	2.68
Like my look	3.28	3.42	3.70	3.47
Check appearance	3.99	3.66	3.65	3.77
Spending time getting ready	3.68	3.33	3.62	3.54
Be considered good-looking	4.08	3.90	3.88	3.95
Important always to look good	4.02	3.74	3.92	3.89
Use of grooming products	4.34	3.88	4.14	4.12
Way one looks without clothes	3.52	3.37	3.63	3.51
Be self-conscious of my grooming	3.62	3.13	3.40	3.38
Wear whatever is handy	3.79	3.70	3.80	3.76
Way clothes fit the person	4.01	3.91	4.06	3.99
Don't care about what people think	2.90	3.26	3.31	3.16
Take special care with hair grooming	3.52	3.53	3.87	3.64
Dislike my physique	3.21	2.83	2.75	2.93
Feel physically unattractive	2.91	2.59	2.87	2.79
Never think about appearance	2.09	2.34	2.34	2.26
Try to improve physical appearance	4.00	3.55	3.70	3.75

According to Table 2, for appearance interest, the highest mean in generation Y and Baby boomer generation is for "Use of grooming products" which is equal to 4.34 and 4.14 respectively. And the highest mean in generation X is for "Way clothes fit the person" which is equal to 3.91.

Table 3: Summary of Body Image Satisfaction

Question	Mean			
	Generation			

	Y	X	BB	Total
Face (features and complexions)	3.54	3.73	3.78	3.68
Hairs quality	3.33	3.31	3.54	3.39
Lower torso (buttocks, hips, thighs, legs)	2.76	2.91	3.03	2.90
Mid torso (waist, stomach)	2.87	2.92	2.97	2.92
Upper torso (chest or breasts, shoulders, arms)	3.04	3.31	3.31	3.22
Muscle tone	2.49	2.65	3.03	2.72
Weight	2.49	2.62	2.80	2.64
Height	3.37	3.26	3.05	3.23
9. Overall appearance	3.44	3.68	3.57	3.56

According to Table 3, for body image interest, the highest mean in Y, X, and Baby boomer generation is for "Face satisfaction" which is equal to 3.54, 3.73, and 3.78 respectively.

Table 4: Summary of Perceived media pressure

Question	Mean			
	Generation			
	Y	X	BB	Total
I think that media pressure influence me to improve my external personality.	3.39	3.25	2.91	3.18
I think cosmetic surgical information from media influence me to do cosmetic surgery more.	2.65	2.18	1.84	2.22
I think the image of cosmetic surgery from media influence me to take care of myself more.	3.15	2.77	2.37	2.76
I think the media has motivated me to do cosmetic surgery.	3.02	2.33	2.03	2.46

According to Table 4, for perceived media pressure, the highest mean in all generations; generation Y, generation X, and Baby boomer generation is for "I think that media pressure influences me to improve my external personality." which is equal to 3.39, 3.25, and 2.91 respectively.

Table 5: Perception toward cosmetic surgery

Question	Mean			
	Generation			



	Y	X	BB	Total
I would consider having cosmetic surgery in order to look more attractive.	3.07	2.21	1.94	2.41
I would like to undergo cosmetic surgery if I can gain confidence on my body.	3.17	2.35	2.10	2.54
I would undergo cosmetic surgery to be in good shape	2.88	2.32	1.94	2.38

According to Table 5, for perception towards cosmetic surgery, the highest mean in all generations; generation Y, generation X, and Baby boomer generation is for “I would like to undergo cosmetic surgery if I can gain confidence on my body.” Which is equal to 3.17, 2.32, and 1.94 respectively.

Table 6: Summary of the hypotheses testing

Null Hypotheses	Result
H1 ₀ : Appearance interest (H1A ₀ , $\beta = .284^*$, P-Value= .001), Body image satisfaction (H1B ₀ , $\beta = -.254^*$, P-Value= .001) and Perceived media pressure (H1C ₀ , $\beta = -.521^*$, P-Value= .001) have no influence on Thai women’s perception towards cosmetic surgery among Generation Y.	Rejected H1 ₀
H2 ₀ : Appearance interest (H2A ₀ , $\beta = -.203^*$, P-Value= .008), Body image satisfaction (H2B ₀ , $\beta = -.048$, P-Value= .501) and Perceived media pressure (H2C ₀ , $\beta = .828^*$, P-Value= .000) have no influence on Thai women’s perception towards cosmetic surgery among Generation X.	Partially Rejected H2 ₀
H3 ₀ : Appearance interest (H3A ₀ , $\beta = -.110$, P-Value= .171), Body image satisfaction (H3B ₀ , $\beta = .131$, P-Value= .075) and Perceived media pressure (H3C ₀ , $\beta = .751^*$, P-Value= .000) have no influence on Thai women’s perception towards cosmetic surgery among baby boomer Generation.	Partially Rejected H3 ₀
H4 ₀ : Three generations—Baby them to consider undergoing cosmetic surgery. This result fits with the studies by Furnham and	Rejected

Boomer, Generation X, and Generation Y—do not show different views on attributes about cosmetic surgery.

According to the research findings, two null hypotheses are rejected which are H1₀ and H4₀. In H1₀, it can be analyzed that all independent variables are the factors that influence perception towards cosmetic surgery in generation Y. And H4₀ shows that Three generations—Baby Boomer, Generation X, and Generation Y—show different views on attributes about cosmetic surgery. Furthermore, the rest of the two null hypotheses H2₀ and H3₀ are partially rejected as some independent variables are factors that influence perception towards cosmetic surgery and some are not in generation X and baby boomer generation.

Results and Discussion

Based on the results from the summary of testing, the first three hypotheses were analyzed using Multiple Linear Regression, to identify the influence of appearance interest, body image satisfaction and perceived media pressure on the perception towards cosmetic surgery. One-way ANOVA was used to analyze if there are different views on attributes about cosmetic surgery amongst the three generations. The result of all four hypotheses are as follow;

Hypothesis one (H1):

The result explained that Appearance interest, Body image satisfaction and Perceived media pressure are the factors that influence the perception toward cosmetic surgery in Thai women of generation Y. Based on the previous study (Yun, et al., 2015), appearance interest and body image satisfaction are factors that influence the consideration to undergo cosmetic surgery. According to Table 6, the factor that the influences perception towards cosmetic surgery the most is perceived media pressure. The result was contrasted with the study of Arunsri (Arunsri, 2018), where it was mentioned that perceived media pressure has no influence on repurchase intention of cosmetic surgery. However, according to the research from Crockett et al. media plays a significant role in influencing people about cosmetic surgery (Crockett, Pruzinsky, & Persing, 2007). And referring to the result, it is the most influential factor on perception towards cosmetic surgery of Thai women in generation Y. The second influential factor is appearance interest, according to the previous study (Yun, et al., 2015). The least influential factor is body image satisfaction. According to the negative Beta result, it can be explained that if respondents have low body image satisfaction then there will be a higher chance for

Levitas (Furnham & Levitas, 2012) and Chen (Chen, Karri, & Yu, 2010) that mentioned the same.



Hypothesis two (H2):

The result explained that only appearance interest and perceived media pressure are the factors that influence the perception towards cosmetic surgery in Thai women of generation X. Among these two factors, perceived media pressure mostly influenced the perception towards cosmetic surgery in generation X. The result was contrasted with the study of Arunsri (Arunsri, 2018), as it mentioned that perceived media pressure has no influence on repurchase intention of cosmetic surgery. However, as this is research is not on repurchase intention, therefore the result may be different. Another factor that influences perception towards cosmetic surgery in X generation is appearance interest which aligns with the study from Yun (Yun, et al., 2015). According to the result in Table 6, if appearance interest is higher, generation X respondents tend to have lower perception towards cosmetic surgery.

Hypothesis three (H3):

The result explained that perceived media pressure is the only factor that influences perception towards cosmetic surgery of Thai women in baby boomer generation. According to the result from Table 6, Standard coefficient (β) of perceived media pressure is very high. This implies that it has a very strong influence on perception towards cosmetic surgery in Baby boomer. The result can be supported by the studies from Crockett which mentioned that the exposure to media has a significant role in perception towards people on cosmetic surgery (Crockett, Pruzinsky, & Persing, 2007). However the result in this research is contrasted with the study of Arunsri. It was mentioned that perceived media pressure has no influence on the repurchase intention of cosmetic surgery (Arunsri, 2018). As repurchase intention is not included in this research, therefore the result may be different. On the other hand, the research shows that the appearance interest and the body image satisfaction are not the factors that influence the perception in the baby boomer generation. It is contrasted with the study from Yun. The reason is that in the previous study from Yun, the respondents' age level was lower than 50 years old, however, in this study the baby boomer refers to respondent aged from 55 and more (Yun, et al., 2015).

Hypothesis four (H4):

According to the results shown in Table 6, the P-Value of generation Y and generation X is significant which means that there are differences in perceptions of these two generations. The same result was shown between generation Y and the baby boomer generation as well, it can be explained that generation Y's perception towards cosmetic surgery is different from both generation X and baby boomer generation.

30s, other than using the media to communicate with this generation, the hospitals and clinics may need

However, the P- value of generation X and baby boomer was not significant, therefore it can be explained that there are no differences in perception towards cosmetic surgery between generation X and baby boomer generation. Generation Y has a stronger perception towards cosmetic surgery than generation X and Baby boomer. This may be because the younger generation may perceived that cosmetic surgery has no harm as many celebrities have undergone the surgery. On the other hand, the generation X and baby boomer may perceive that any surgery is a high risk procedure and it may not be worth to undergo the operation. This may contrast with the research from Fogel and King (Fogel & King, 2014) which mentioned that as the individual age increases, appearance become less attractive which leads to more interest in cosmetic surgery. And also contrasts with Frederick's reported which mentioned that the older women's may experience added pressure to undergo surgery because they feel they are competing with younger women appearance (Frederick, Lever, & Peplau, 2007). The contrast may occur because of some factors limitations such as different population size, different culture and different sex as the research is focused only on women.

Conclusions

The finding of the research can provide several recommendations to cosmetic surgery hospitals and beauty clinics' marketing departments on how to conduct the marketing promotion for each specific generation. Based on the result from the four hypotheses, the factor that mostly influences the respondents in all generations to consider undergoing cosmetic surgery is perceived media pressure. Examples from questionnaire are "I think the media has motivated me to undergo cosmetic surgery." and "I think cosmetic surgical information from media influences me to do cosmetic surgery more." Therefore, I would like to recommend hospitals and beauty clinics to do more marketing on media and may use good-looking celebrity as their presenter. They should also give more information of the surgery online and upload the reviews of those who have successfully undergone the cosmetic surgery in those places as people tend to believe and have more positive reaction on the real consumer's feedback. In addition, regarding to the result of hypothesis four, the customers can be divided into two groups only, those who are aged 25-39 years old and those who are 40 years old and above. For those customers who are in their 40s and above and may not have much appearance interest that can influence them to undergo cosmetic surgery, the clinics and hospitals may need to use the benefits of media to promote and communicate among this group of customers. In addition, for customer in their 20s –

trigger more on the part that this age level gives more importance to and may give the aggressive promotion



on the specific part as they will consider cosmetic surgery by their appearance interest and their Body dissatisfaction.

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A Dynamic Process Model of Service Quality, Customer Satisfaction Commitment and Trust on Word of Mouth towards Popular Coffee Shop in Bangkok, Thailand.

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Abstract

While there are several studies on WOM in regards to the hospitality industry, the researchers have seen little research on WOM intentions towards the niche branded coffee shops in Thailand. The objective of this study is to test the influence of service quality, customer satisfaction, commitment, trust on word of mouth. The researchers collected the data by way of survey with 400 questionnaires being distributed to customers at a popular coffee shop in Bangkok, Thailand. For data collection judgment, quota and convenience sampling procedures were adapted. The researchers used Simple Linear Regression analysis and Multiple Linear Regression analysis to test the influence of the independent variables on dependent variables. The researchers found that service quality in terms of food quality, physical environment quality, personal interaction quality, and perceived value all have an influence on customer satisfaction. In addition, customer satisfaction also leads to WOM intentions.

Key words: Service Quality, Perceived value, Customer satisfaction, Word of Mouth.

Introduction

Word of mouth (WOM) refers to verbal communications between the real and potential consumers towards product or service provider, including independent experts, family and friends (Helm and Schlei, 1998). These interactions may be “positive” or “negative”. In general term, WOM can be defined as a voluntary type of advancement which fulfilled clients to tell other individuals how much they like a business, item or service. Informal exchange or WOM is activated when a client encounters something favoring their desires.

Baloglu and McCleary (1999), stated that WOM has the highest constructive impact on customer's perceived image when compared to professional advice, advertisements, or book/movies/news. It is estimated that there are 3.4 billion WOM discussions each day (Balter, 2008).

WOM marketing is significant for all business, as every satisfied customer can bring in dozens of new customers to the company. In addition, it is considered to be one of the most reliable forms of advertising because an individual puts their reputation on the line every time they make an endorsement or recommendation. In a study done in 2015 by Word of Mouth Marketing Association (WOMMA) and American Marketing Association (AMA), 64% of

marketing executives pointed out that they considered WOM to be the most effective form of marketing.

As indicated by Nielsen, 92% of worldwide buyers stated that they trust suggestions and data from family and companions over some other types of promotion. This signals the importance of WOM and its ability to drive higher sales than any other advertising platform or media.

WOM is essential for the promoting of restaurants, this is on the grounds that restaurants are experiential in nature and hard to survey before the actual purchase has been undertaken (Wirtz and Chew, 2002).

While there are several studies on WOM in regards to the hospitality industry, the researchers have seen little research on WOM intentions towards the niche branded coffee shops in Thailand. The researchers noticed that in recent years there has been an increase in popularity of coffee shops due to a rise of millennia who are self-employed and prefer to work in coffee shops rather than dedicated offices. Too fast To sleep (TFTS) has distinguished itself as one of the most popular coffee shop that offers co-working space serving customer needs to work, study, do assignments, as well as providing delicious food and beverages.

Research objective

The objective of this study is to test the influence of service quality, customer satisfaction, commitment, and trust on word of mouth. A set of research objective are proposed as follows:

1. To test the influence of service quality in terms of food quality, physical environment, personal interaction quality, perceived value on customer satisfaction
2. To test the influence of customer satisfaction on commitment.
3. To test the influence of customer satisfaction on trust.
4. To test the influence of commitment, customer satisfaction, trust on word of mouth.

Literature Review

Word of Mouth

Word of mouth (WOM) initially is casual communication between people who have consumed goods with their own perceived evaluation, and people who are interested to experience those good and services (Hawkin et al. 2004). WOM suggests the verbal communications between the real or likely buyers with other individuals, for example, product or service providers, specialists, family and companions (Helm and Schlei, 1998). These interchanges might be either "positive" or "negative". Researchers contend about the significance of WOM with regards to the setting of obtaining conduct (Bansal and Voyer, 2000) and the development of buyers' mentalities (Bone, 1995). Ennew et al. (2000), recommended that the importance or value of WOM cannot be identical across various products, markets and organizations. For instance, items that have an impressive pool of involvement and confidence characteristics as well as for items which is incredibly connected with seen hazard, the impact of WOM will be more significant.

Customer Satisfaction

Kotler and Keller (2006) defined satisfaction as "person's feeling of pleasure or disappointment which resulted from comparing a product's perceived performance or outcome against his/ her expectations. Kondou (1999) defined customer satisfaction as an individual's personal assessment of his or her condition towards a positive emotional response. Whenever execution or performance misses the person's desires or expectations, at that point the purchaser is disappointed. Researchers concurred that satisfaction and perceived quality are profoundly interrelated and believed that perceived quality is one of the key determinants of comprehensive satisfaction (Bitner and Hubbert, 1994).

Physical environment quality (PEQ)

Trust

(Morgan and Hunt, 1994) Trust can be expressed as one person believing that the other person, company, organization, will satisfy his or her needs. In terms of services, trust is the believe that is held by a customer that the provider of services will deliver the service which meets his or her needs. Generally, trust can be defined as confidence in the "reliability" and "honesty" of the provider with its products or services. Millera and Lauren (2007), stated that, consumers may trust one specific sales representative at one level while at another level, the consumers may rather trust the institution rather than the sales.

Commitment

Dwyer et al., (1987) described that responsibility is an unequivocal or certain or vow to social progression between two trading accomplices ((Dwyer et al., 1987). Also, responsibility is a psychological sentiment of the mind through which an attitude shapes in regards to tirelessness of an association with a colleague. Commitment can be characterized as a mental or passionate connection to a brand or association (Beatty et al., 1996).

Service quality

Service quality is the dimensions of services between customer expectations and customer perceptions (Munusamy, et al, 2010). Iacobucci et al. (1995) defined service quality as the qualities related to deliver of the service which will echo the customer's experiences. Quality is one aspect on which satisfaction is based. Jalilvand, et al (2017) studied service quality and, the researchers divided service quality into four sub dimensions which are food quality, personal interaction quality (PIQ), physical environment quality and perceived value.

Food quality (FQ)

Various researches uncovered that the general definition of food quality focuses on taste, demonstration, freshness, and temperature. Liu and Jang (2009) recommended that food quality, tidiness, and service reliability are three basic perspectives to Chinese restaurants prosperity. Being more specific, food quality is essential when clients picked a Chinese eatery. Ha and Jang (2010) demonstrated that administration and nourishment quality have positive and critical impacts on consumer loyalty and reliability. As indicated by Peri (2006), nourishment quality is a fundamental condition to fulfill the desires and needs of clients.

PEQ refers for making and keeping up a prominent atmosphere so as to fulfill and draw in clients (Ha and Jang, 2012; Han and Ryu, 2009).

Bitner (1992) characterized PEQ as where the delivery of service happens and PEQ has an impact on clients' general impression of the service quality. Various examinations have discovered that client reflection to PEQ is critical (Ryu et al., 2007; Wakefield and Blodgett, 1996). Stevens et al. (1995) exhibited the significance of physical facilities on the apparent dimension of service quality given by restaurants.

Personal interaction quality (PIQ)

PIQ is defined as the interpersonal relationship between customers and the restaurant employees. Research showed that in the hospitality industry, travelers relish conversation, and interaction, with familiar servers (Scanlan and McPhail, 2000). This interaction, has a constructive consequence on building a positive relationship with the customer which in turn building loyalty. Service providers that provide outstanding relationship benefits are favorably valued, and hence customers tend to oblige themselves for creating, preserving, and developing long-term relationships with these providers. The ability of service provider to communicate with a customer enhances cooperation and trust during the relationship-building process (Parsons, 2002).

Perceived value (PV)

Perceived value is defined as a customer's interchange between the values of the benefits they received from the product or service in relation to the price or expense or sacrifice they believed to be made for the product (Ryu et al., 2007). Perceived value epitomizes the customer's valuation of the merits or values of a product or service based on the customer's perception of what the customer got in return for what the customer paid or gave (Zeithaml et al., 1996). Price is the most common proxy used in terms of valuing tourism destination. Higher prices tend to increase perception of value. Hence, perceived value should be viewed as a rational estimate of the time and/or money spent in a restaurant in relation to the customer experiences that were obtained. (Baker and Crompton, 2000)

Service quality in term of FQ and customer satisfaction.

Teng and Chang (2013) observed the significance of food quality that influence buyer's satisfaction in the dining establishments. Yuksel and Yuksel (2002) found that restaurant qualities like food quality and themes are crucial in gaining customer satisfaction. Ha and Jang (2010) showed that service and food quality have encouraging influences on customer satisfaction and loyalty.

Service quality in term of Physical environment quality and customer satisfaction.

Previous studies have revealed that the physical atmosphere inside the business location can stimulate customer satisfaction (Garbarino and Johnson, 1999). Yuksel and Yuksel (2002) stated that customers are expected to spend resources and time in an establishment where the service environment encourages a feeling of gratification.

Service quality in term of personal interaction quality and customer satisfaction.

Jayachandran et al. (2005) noted that allowing interpersonal interaction between the company and its customers regularly enhances customer satisfaction. Claycomb and Martin (2002) asserted that businesses should refrain from long periods of time in which its customers are not contacted by the company. Long term customers are better maintained if the organization maintains a steady flow of communication with its customers.

Service quality in term of perceived value and customer satisfaction.

Customer regularly estimates a company's perceived value to the contributions by comparing it with the offering of the competitors. Perceived value has been found to be a key predictor of customers' satisfaction and behavioral intentions (Cronin et al., 2000). Customer perceived value is incremental factor influencing customer satisfaction (Bolton & Drew, 1991); (Parasuraman, et al., 1988)

Customer satisfaction and commitment.

Pai. (2010) studied the relationship between customer satisfaction and commitment. A review of literature suggests that involvement, perceived value, trust and affective commitment can be the intermediaries between the relationship of customer satisfaction and commitment towards the store. Positive relationship was found in customer satisfaction and commitment as satisfied customers show consistency and commitment towards a brand or product or service while dissatisfied customers move on to another brands or products or service (Kuuish, 2007).

Customer satisfaction and trust.

Trust tends to be a key factor at the heart of consumer behavior after and before buying a product or a service (Singh and Sirdeshmukh, 2000). Cronin et al. (2000) studied the direct effect on trust from variables such as service quality, customer satisfaction, and perceived value. The researchers noted that trust can also be indirectly influenced by customer satisfaction.

Customer satisfaction and word of mouth.

Chen and Xing. (2011) found that customer satisfaction has a significant effect on positive WOM intention. There are confirmations from past studies of relationship between satisfaction and WOM (e.g. Parasuraman et al., 1988; File et al., 1994; Shemwell, 1998; So ¨derlund, 1998; Sivadas and Baker-Prewitt, 2000; Hennig-Thurau et al., 2002). Ennew et al. (2000) stated that consideration of consumers' purposes for engaging in WOM tends to focus on the importance of customer satisfaction as a key element of positive WOM. In addition, dissatisfaction is related to the intention of customers to use negative WOM. Walker (1995) highlighted that at the minimum 90% of dissatisfied customers from a company tend to express their dissatisfaction to at least nine other persons.

Commitment and word of mouth.

Khaldoon. (2007) studied that commitment is a key precursor to WOM intention. Of the two forms of commitment, affective commitment had a stronger positive impact on WOM. In addition, results have shown that satisfaction leads to higher

affective commitment, which in turn has a strong influence on positive WOM. Baloglu (2002) noted that loyal customers have strong association and commitment. They tend to create constructive WOM and usually are less sensitive to price changes. Fullerton (2003) recommended that possible consequences of commitment could include WOM, which is a key feature of attitudinal loyalty.

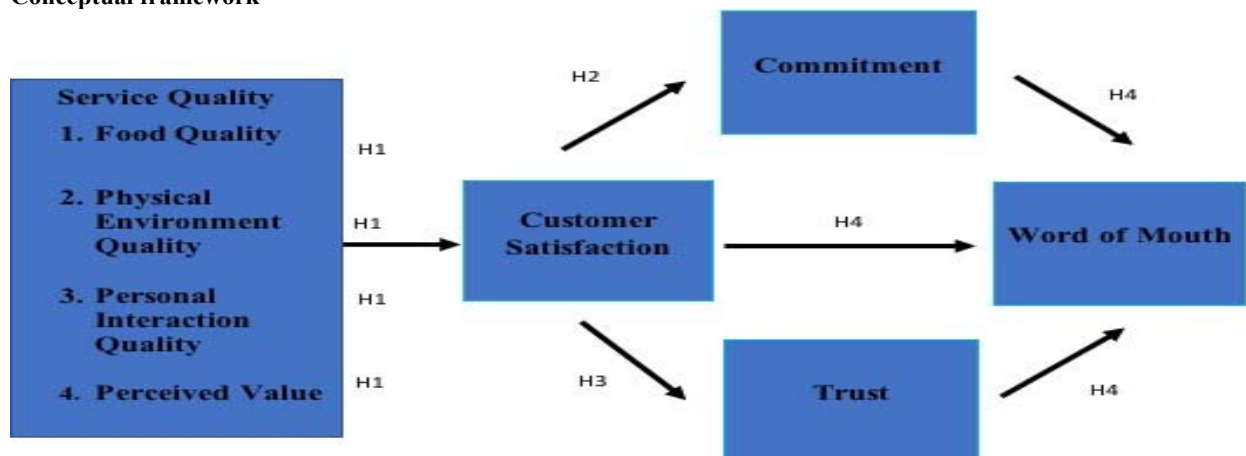
Trust and word of mouth.

Lin. (2010) the recipient's cognitive trust plays a complete intermediary role and WOM intention. Filieri et al. (2015) believed that perceived source credibility, information quality, and perceived website quality are the main factors of customers' trust toward a certain hospitality website, recommendations adoption, and WOM dissemination.

Research Framework

In order to develop the conceptual framework for this research, the researcher applied previous research models to come up with a conceptual framework.

Conceptual framework



Research hypothesis

H1_o: Service quality in terms of food quality, physical environment quality, personal interaction quality, and perceived value has no influence on customer satisfaction.

H1_a: Service quality in terms of food quality, physical environment quality, personal interaction quality, and perceived value has an influence on customer satisfaction.

H2_o: Customer satisfaction has no influence on commitment

H2_a: Customer satisfaction has an influence on commitment.

H3_o: Customer satisfaction has no influence on trust.

H3_a: Customer satisfaction has an influence on trust.

H4_o: Commitment, customer satisfaction and trust are not influenced to word of mouth.

H4_a: Commitment, customer satisfaction and trust have influence on word of mouth.

RESEARCH METHODOLOGY

This study used descriptive research. The descriptive research designed to describe the data and characteristics of the population of the studies in details (Shields 2013). In addition, descriptive studies can also be characterized as an attempt to determine, describe or identify what is, while analytical research attempts to establish why it is that way or how it came to be (Ethridge, 2004).

For research technique, the researchers applied survey technique to collect the data from the respondents by distributing the questionnaires at “To Fast Too Sleep” (TFTS) customers who were available to answer the questionnaires.

The sampling unit of this research is people who live in Bangkok and have visited TFTS. As the number of customers who have visited TFTS is unknown, the researchers decided to survey the sample size by using the population proportion method.

The researchers used the formula of Zikmund (2003) to define the sample size for this research which is calculated from, $n = \frac{Z^2 \cdot p \cdot q}{E^2}$ where n = the minimum sample size, Z -score = square of the confidence level in the standard error units. (1.96 for confidence level 95%), p = the estimated proportion of the success. For maximize sample; $p = 0.5$ (Bartlett et al., 2001), $q = (1-p)$ or estimated proportion of failures and which is 0.5, E^2 = the square of maximum allowance of error between the true proportion and the sample proportion.

Therefore, the minimum sample size for this study is 384 samples. According to Zikmund (2003), sampling unit, single or element groups are subjected to choose the sample. Consequently, the researcher decided to apply 400 respondents as the sample size for collecting the data of this study. In order to conduct a reliable market research analysis using the questionnaires, it is preferable to conduct the

Table 1: Summary of Reliability

Variable	Number of Questions	Cronbach's alpha
Food Quality (FQ)	4	0.813
Physical Environment Quality (PEQ)	4	0.721
Personal Interaction Quality (PI)	3	0.709
Perceived Value (PV)	3	0.730
Customer satisfaction (SA)	3	0.703
Commitment (CO)	3	0.750
Trust (TR)	3	0.786
Word of Mouth (WOM)	3	0.790

For the research, the data was collected by survey with 400 questionnaires at TFTS shop which are located at Siam Square, Samyan, Salaya and Kaset. The number of questionnaires are divided equally to distribute 100 questionnaires at 4 locations, by using face to face distribution method. The researchers explained the questions to clarify in detail for clear understanding. The respondents will participate in the questionnaire after using the service at TFTS.

After data collection, the researchers analyzed and calculate all completed questionnaires (400) by using the statistical program, by applying Descriptive analysis for demographics and Simple Regression

questionnaires survey with at least 385 sample with a 95% confidence level and 5% margin of error which the researchers has reserved 4% or 15 of the total sample size hence using a sample of 400 questionnaires.

The questionnaire used to conduct research about customer's opinion towards TFTS on the influence of service quality, customer satisfaction, commitment and trust on WOM. The questionnaire divides questions to six key parts starting with screening criteria before going into the independent variables which are service quality in terms of food quality, physical environment quality, personal interaction quality, and perceived value; customer satisfaction, committee and trust on WOM, the dependent variable. The questionnaire was designed based on the Likert scale.

The researchers distributed 30 questionnaires to respondents in order to examine the reliability of the questionnaire. The reliability of each construct can be measured by using Cronbach's Coefficient Alpha test (Sekaran, 1992) show in the table 1. The researchers found that all the questions of each variable are reliable and suitable to apply as research instrument with the values more than 0.60. Sekaran, (1992) described that if the reliable consistency of variable is greater than 0.6, it means the questionnaires are considered as acceptable to ap

analysis and Multiple Regression analysis to test the hypotheses.

Findings

Descriptive Analysis

The researcher presented descriptive analysis of the demographic factors which included gender, age, education level, occupation, and income level, and descriptive analysis of the dependent and in dependent variables which included service quality, customer satisfaction, commitment, trust and word of mouth.

Frequency of Demographic characteristics

The researchers found that out of the total sample of 400 people, nearly 60% of the respondents were

females while 40% were male. The majority of the respondents or 60% were of the age between 21-30 years, while less than 25% were aged 20 Years or Less. Majority of the respondents, 40% were studying in high school or below. 33% of the respondents held a bachelor's degree or equivalent, while less than 4% were PHD's. More than 50% or 224 respondents were

students, 20% of the respondents were employees and less than 15% were business owners. The average monthly income was fairly spread amongst the respondents with nearly 40% earning Baht 15,000 or less while 35% earned Baht 30,000 or more. The demographics data are described shows in Table 2.

Table 2: The Analysis of demographics by using Frequency and Percentage

Geographic information	Majority group of Respondents	Frequency of total respondents (f)	Percentage of total respondents (%)
Gender	Female	227	56.75%
Age	21 – 30 years old	243	60.75%
Education Level	High School or below	160	40%
Occupation	Student	224	56%
Income	15,000 Baht or Less	149	37.25%

Results of Hypothesis

Summary of hypothesis analysis is shown in table 3. The researchers used Multiple Linear Regression analysis for H1 and H4. For H2 and H3 the researchers used Simple Linear Regression analysis to analyze.

For Hypothesis 1, the researchers concluded that service quality in terms of FQ, PEQ, PI and PV have a significant influence on customer satisfaction. For Hypothesis 3 the researchers concluded that Customer Satisfaction have significant influence on trust. For Hypothesis 4 the researchers concluded that only customer satisfaction has an influence on word of mouth.

Table 3: Summary of Hypothesis

Hypothesis	Unstandardized Coefficients	Level of Significant	Result
H1o: Service quality in terms of food quality, physical environment quality, personal interaction quality, and perceived value has no influence on customer satisfaction.			
-Food quality	.180	.034	Reject H1o
-Physical environment quality	.182	.028	Reject H1o
-Personal interaction quality	.230	.009	Reject H1o
-perceived value	.566	.000	Reject H1o
H2o: Customer satisfaction has no influence on commitment	.051	.192	Failed to reject H2o
H3o: Customer satisfaction has no influence on trust	.109	.001	Reject H3o

H4o: Commitment, customer satisfaction and trust are not influenced to word of mouth.			
-Commitment	.029	.463	Failed to reject H4o
-Customer satisfaction	.254	.000	Reject H4o
-Trust	-.028	.547	Failed to reject H4o

Conclusion

Based on the study the researchers concluded that customer in terms of service quality, perceived value had the lowest significance and the highest unstandardized coefficient. Hence implying that perceived quality more than food quality, more than physical environment or personal interaction customers of TFTS expressed strong value towards the coffee shop. TFTS emphasizes on being opened 7 days a week and 24 hrs. a day which makes it unique to any other coffee shop in the area that its opened. Customers using the coffee shop value the significance of the timings that it is opened more than anything. The researchers can conclude that the priority of the customers that come to TFTS come for its opening hours more than anything. This view also concurs with Cronin et al. (2000) which noted that Perceived value has been found to be an important predictor of customers' satisfaction and behavioral intentions.

In H4 the researchers also saw that only customer satisfaction has an influence on word of mouth while commitment and trust had no influence. The importance of customer satisfaction and WOM has been well studied and confirmed by researchers such as Chen and Xing. (2011) who found that customer satisfaction has a significant effect on positive WOM intention. There are confirmations from past studies of relationship between satisfaction and the wish to endorse (e.g. Parasuraman et al., 1988; File et al., 1994; Shemwell, 1998; So "derlund, 1998; Sivadas and Baker-Prewitt, 2000; Hennig-Thurau et al., 2002).

Recommendation

The research clearly shows the importance of perceived value towards customer satisfaction. which means that TFTS will see the most benefit from utilizing its resources to further increase the value its customers perceived. As customers of TFTS tend to sit all day doing assignments, work, reports or meeting friend adequate lightings and comfortable furniture could see increased value.

In addition, the researchers also recommend in selling stationary items such as note books, pens, pencils and erasers etc. which could further add to profitability of the coffee shop.

Food quality did also have influence on customer satisfaction hence continuing in improving its menu will also be advisable as the more choices it offers it could also result in further success of the coffee shop.

The study also clearly showed the importance of customer satisfactions towards word of mouth which is directly related to the services offered by TFTS. This study shows that excellence in service and interacting with the customers, focusing on customer satisfaction and not just on the product delivered itself can create success for the coffee shop business.

Further research

This research has been conducted to identify the factors which could influence word of mouth for a service provider which represents a new type of business i.e. combining co working space with coffee shop. Thus TFTS represents a service provider who serves a large amount of customers via its 4 branches in crowded areas in Bangkok, Thailand. Due to limitations in conducting this research, especially time constraints, the researchers believe that further research is warranted.

This research topic was conducted for only one specific coffee shop TFTS, which the researcher believes is a very well-known shop in this particular business model. However, the researchers believe that further research to see that will be adaptable with other brands in similar business model to observe and improve their performance by using differentiated conceptual framework.

This research is conducted by using only a few factors affecting to the independent variables. There are more factors which the researchers did not add into this research. Those factors missing could turn out to be more useful and reliable that what have been used and found in this research.

This research was conducted within a very limited period of time as researchers have time and resources. Further research, possibly conducted in different seasons and for a longer time period to see the popularity of coffee shop as demand and service quality could be different from time to time.

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FACTORS IMPACTING IMPULSE PURCHASE OF NEW BEVERAGE PRODUCTS IN THAILAND

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Abstract

This paper aims to examine factors that impact on making impulse purchases of new products in Thailand. This empirical study was conducted by gathering data from 410 respondents through online and offline questionnaire using convenience sampling, quota sampling and snowball sampling techniques. The target 410 respondents are live in Thailand and have ever purchased beverage from convenience store or supermarket. There are three methodologies be used in this research; Multiple Linear Regression, Simple Linear Regression and Independent Sample T-test. These were analyzed by using quantitative approach to describe the hypotheses. The conceptual framework model was adapted from the earlier study. The research studied the factors that impact to new product knowledge, impulse buying intention and impulse buying behavior. The result of the analysis represents social norms has positive impact on new beverage product knowledge toward impulse purchase of new beverage product. Consumer characteristics-excitement and esteem have positive impact on impulse buying intention on new beverage product which excitement is the most impact factor. Consumer characteristics-excitement and new beverage product knowledge have positive impact on impulse buying behavior to impulse purchase of new beverage product which excitement has the most positive impact. Impulse buying intention has positive impact on impulse buying behavior to impulse purchase of new beverage product. And the result from further study shows that there is a significant mean difference in impulse buying behavior between male and female. From the result, it means characteristic of consumers especially excitement is main factor that impact on purchase of consumers when there is interaction with impulse purchase of new beverage product at point of purchase. Also, new product knowledge is another factor that market should focus on as it is impact to impulse buying behavior of consumers which social norms is factor that can enhance perception of consumer toward new product.

Keywords: Impulse purchase, Buying behavior, New products, Consumer psychology, Buying intention,

Introduction

Background of the study

Impulse purchase is a powerful tool in terms of trade marketing strategy which plays important role in fast moving consumer goods (FMCG) business especially beverage business that value per unit is low and easy spending. Impulse purchase become common and can be encountered easily in everyday of life. Since emerging market in many countries especially Thailand, retail sector where impulse purchase is taken has been developed and grown rapidly together with emerging of start-up companies and developing new products from existing one. Both retailers and manufacturers take advantage of this point to catch up consumers by generating strategies and tactics to draw consumers to reach their products. From Nielsen information, 52% of those surveyed in Thailand often purchase things that do not need impulsively ("The Changing Wave of Wealth", 2013). Also, as supported information, R. Somboon, 2019 mentioned that 76% of Thai consumer will make a decision at point of purchase. Therefore, it can be described that Thai people has high responsiveness to impulse purchase

strategy which enables them to switch brand or even switch to another category when they find something that is attractive. This is a weapon to new beverage product to develop impulse purchase strategy to compete with existing brands or the brand that has high awareness.

Statement of the problems

In real business, new product development has high risk and difficult in terms of return on investment since there is a high level of uncertainty about consumers' satisfaction (Raju, 1979; Wind and Mahajan, 1997). Only some new products match consumers' prospects and turn to success. Thus, it is necessary to understand how consumers respond to new products when they interact with and what motivates their purchasing decision. During economic recession and market stagnant, consumer spending across nation is low. Marketing and sales strategy become the significant role to encourage and drive the business to move forward. Focusing on the strategy to make the purchase also includes marketing weapons or tricks at the point of sale to stimulate purchasing decisions because the decision to buy of the consumer

is caused by emotional stimulation at the point of sale which also called impulse purchase.

Research objective

The objective of this proposed topic is to investigate the factors impacting impulse purchase of new beverage products in Thailand. There are five specific objectives to meet the aim of this research, as follows:

- To investigate the impact of word of mouth and social norms to new beverage product knowledge;
- To investigate the impact of new beverage product knowledge, consumer characteristics which are excitement and esteem to impulse buying intention;
- To investigate the impact of new beverage product knowledge, consumer characteristics which are excitement and esteem to impulse buying behavior;
- To investigate the impact of impulse buying intention to impulse buying behavior;
- To investigate the differences in gender on impulse buying behavior

Literature review

Impulse buying behavior (BB)

Impulse buying is an unplanned behavior from both cognitive reaction and emotional reaction (Hodge, 2004, p. 11). Boone and Kurtz (1995) stated that consumers shop to satisfy their needs not only the products they acquired, but also shopping experiences or the time when they spent since their purchase was unanticipated which they realized the impulse buying products would satisfy in a particular needs and time. On the other hand, Rook (1987) found that some consumers experience negative consequences from impulse buying due to sudden purchasing time. However, different consumers act and endure on impulse buying in different ways and tendency to control feeling of impulse buying differ from each other (Rook, 1987).

Impulse buying intention (BI)

Impulse buying is a behavior that occurs suddenly when people purchase something which time consuming of consideration before purchasing is quite short (Rook 1987, P. 191). People has willing to buy it without threaten from anyone, but it happens unexpectedly and unpredictably (Sheppard et al., 1988 and Hodge, 2004). Impulse buying can be defined that customers tend to buy products and services without having a plan in advance. When customer make a decision at that moment, it is usually aroused by feeling and emotion (Zimmerman, 2012).

Consumer characteristics: Excitement (EX)

It is important to know how excitement works. Patel (2015) introduced that excitement is one of emotion that has strong physiological responses which enable effect to the decision-making abilities of consumers no matter good or bad and it leads to impulsivity. Consumers' positive emotion was related to the urge to buy impulsively (Beatty and Ferrell, 1998). Since impulse buyers have positive feelings and emotions (e.g. excitement, joy), it is possible that they will spend their money over expectation during shopping (Donovan and Rossiter, 1982). These ideas encourage a relationship between impulse buying behavior and excitement.

Consumer characteristics: Esteem (ES)

Self-esteem is described as "how much value people place on themselves" (Baumeister et al. 2003). Consumers try to avoid their own natural impulsiveness since they care about respect of others and would not like to be perceived as adolescent or unreasonable (Rook and Fisher, 1995). Spending without unconsciousness and unplan on unexpected buying tends to receive negative assessments. Therefore, consumers who have high need for esteem from others may attempt to avoid the unplanned and uncontrolled nature of impulse buying behavior (Rook and Fisher, 1995). Hausman (2000) described that trying to fulfill esteem needs force consumers to make purchase which generate their satisfactions.

New product knowledge (KN)

Flynn and Goldsmith (1999) identified three general kinds of consumer knowledge which composed of subjective knowledge, objective knowledge and experience. Subjective knowledge can be expounded as the information that consumers believe they have about an organization or product. Objective knowledge can be expounded as the information that consumers really know about an organization or product. Experience comprises of knowledge that consumers have received via real interactions with an organization or product.

Opinion leadership and social norms (WM and SN)

Opinion leaders are described as people who deliver or convey information regarding subject to others which the information is spread by those people (King & Summer, 1970). According to Rogers' (1976) explanation, opinion leadership and social norms are major factors that affect responsiveness on consumers' direction on purchasing. The conceptualizations about social influence clarifies that it is essential part in



based on the literature review to ensure the model is appropriated. A five-point Likert scale was utilized to test the hypotheses by ranking from strongly disagree (1) to strongly agree (5), from not important at all (1) to very important (5), from very thrifty (1) to very indulgent (5), and from very calm (1) to very excitable (5) to measure variables in this study. Multiple Linear Regression (MLR), Single Linear Regression (SLR), and Independent Sample T-Test are applied to analyze the significant impact on impulse buying behavior to new beverage products.

Population and sample

The questionnaires were distributed through online and offline channels to the respondents which 410 samples are qualified as target respondents for this study. After validating samples by using 2 screening questions, the respondents who live in Thailand and have ever purchased beverage from convenience store or supermarket were selected. The total number of qualified respondents was 410 which 200 are female respondents and 210 are male respondents. 384 respondents are suitable number at 95% confident level to represent Thai population (Krejcie & Morgan, 1970).

Estimating sample size technique

$$n = \frac{Z^2}{4e^2}$$

Which:

n is the sample size

e is the level of precision = 0.05

Z is the statistic for a level of confidence Z = 1.96

Hence:

$$n = \frac{(1.96)^2}{4(0.05)^2}$$

$$n = 384.16 \approx 400$$

Reliability Test

The reliability test was conducted at the pilot phase when respondents reached 30. Cronbach's Alpha Coefficient was determined to investigate level of reliability in each group in the questionnaire whether it is compatible and higher than 0.6 or not (Cronbach, 1951). From Table 2, the Cronbach's Alpha Coefficient were in a range between 0.609 to 0.776 which is greater than 0.6. It can indicate that the questionnaire emerge for this study is completely achieved required standard for reliability test and is admitted starting the research.

Table 2: Result of Cronbach's Alpha reliability test

Variables	No. of Items	Cronbach's Alpha
Impulse buying behavior (BB)	2	0.707
Impulse buying intention (BI)	2	0.634
Consumer characteristics: Excitement (EX)	3	0.621
Consumer characteristics: Esteem (ES)	3	0.692
New beverage product knowledge (KN)	3	0.609
Word of mouth (WM)	3	0.651
Compliance with social norms (KN)	4	0.776

Result and discussion

Data Analysis

Multiple linear regression (MLR) is a statistical technique used to analyze 3 hypotheses according to the conceptual framework. The first hypothesis is used MLR to explain the relationship between independent variables which are Word of mouth (WM) and Social Norms (SN) and dependent variable which is New Product Knowledge (KN). The second hypothesis is used MLR to describe the connection between independent variables which are Consumer characteristics: excitement (EX), characteristics: esteem (ES), and New Product

Knowledge (KN) and dependent variable which is Impulse buying intention (BI). The third hypothesis is used MLR to explain the relationship between independent variables which are Consumer characteristics: Excitement (EX), Consumer characteristics: Esteem (ES), and New Product Knowledge (KN) and dependent variable which is Impulse buying behavior (BB).

Simple Linear Regression (SLR) is used as a statistical tool to analyze one hypothesis according to the conceptual framework to explain the relationship between independent variable which is Impulse buying intention (BI) and dependent variable which is Impulse buying behavior (BB).

Independent Sample T-Test is used to determine if there is a significant difference in Impulse Buying Behavior (BB) between male and female.

Demographic profile summary

The demographic data were gathered from 410 respondents who live in Thailand and have ever purchased beverage product from convenience store or supermarket. The demographic information is summarized in Table 3.

This study collected quota sampling of gender



which is 210 (51.22%) male respondents and 200 (48.78%) female respondents since gender is independent variable to analyze significant mean difference in impulse buying behavior. The main age group contribution of respondents is 31 - 40 years old which represented 54.63% of total respondents, followed by respondent age group 21 - 30 years old (25.61%), 41 - 50 years old (15.61%) and More than 51 years old (4.15%) respectively. However, there is no age group of respondents below 20 years old. The major monthly income ranges are 30,001 - 50,000 THB (32.68%), followed by 15,001 - 30,000 THB (25.12%) and more than 70,000 THB (24.63%) which the number of respondents is similar. Income range 50,001 - 70,000 THB contributed 14.39% and lastly Below 15,000 THB that contributed 3.17%. Major contribution of respondents' educational level is bachelor's degree (62.20%) followed by master's degree (35.37%) and the rest are respondents that held less than bachelor's degree (1.95%) and doctorate and above (0.49%).

Table 3: Demographic profile (N=410)

Demographical Data (N = 410)		Frequency	Percentage (%)
Gender	Male	210	51.220%
	Female	200	48.780%
Age	Below 20 years old	0	0.000%
	21 - 30 years old	105	25.610%
	31 - 40 years old	224	54.634%
	41 - 50 years old	64	15.610%
	More than 51 years old	17	4.146%
Income per month	Below 15,000 THB	13	3.171%
	15,001 - 30,000 THB	103	25.122%
	30,001 - 50,000 THB	134	32.683%
	50,001 - 70,000 THB	59	14.390%
	More than 70,000 THB	101	24.634%
Educational level	Less than bachelor's degree	8	1.951%
	Bachelor's degree	255	62.195%
	Master's degree	145	35.366%
	Doctorate and above	2	0.488%

Descriptive Analysis Pearson's Correlation

Regarding Pearson's Correlation Matrix for the hypotheses in Table 1 (H1 – H5) exhibit in Table 4, some of the variables have correlations among each other which P-value is less than 0.05. However, there are not significant correlation between each pair of variables which are Consumer characteristics: Esteem (ES) with New Product Knowledge (KN), Impulse Buying Behavior (BB), Impulse Buying Intention (BI), Consumer characteristics: Esteem (ES) and New Product Knowledge (KN) with Word of Mouth (WM). Also, Consumer characteristics: Esteem (ES) and Word of Mouth (WM) with Compliance with social norms (SN).

Table 4: Pearson's Correlation Matrix

Variable	Mean	SD	BB	BI	EX	ES	KN	WM	SN
BB	2.4220	0.73342	1						
BI	3.3098	0.76867	0.251*	1					
EX	3.3837	0.59029	0.367*	0.289*	1				
ES	3.9154	0.65425	0.122*	0.194*	0.297*	1			
KN	3.2561	0.39591	0.205*	0.083*	0.305*	-0.074	1		
WM	3.1171	0.87114	0.026	0.022	-0.2*	-0.021	-0.004	1	
SN	3.3159	0.47356	0.122*	0.228*	0.347*	0.018	0.317*	-0.082	1

Note: * represents the correlation which is significant at 0.05 level (1-tailed).

Inferential Analysis and Multicollinearity Validation

Table 5: Multiple Linear Regression Result (H1a – H1b), Dependent Variable: KN

Hypotheses	Variables	Standardized Coefficient (β)	VIF	Result
H1a	Word-of-mouth	0.022	1.007	Not supported
H1b	Social norms	0.319*	1.007	Supported
R Square		0.101		
Adjusted R Square		0.097		

Note: * represents standardized coefficient (β) with P-value ≤ 0.05

Multiple linear regression was applied for H1a and H1b. Table 5 expresses R^2 at 0.101 which means 10.1% of independent variables Word of mouth (WM) and Social Norms (SN) can explain the dependent variable, New Product Knowledge (KN) to impulse purchase of new beverage product at 0.05 significant level or 95% of confident level. The P-values of the independent variable WM is greater than 0.05 which indicated that H1a is not supported while H1b is supported because P-values of the independent variable SN is less than 0.05. Thus, it can be concluded that H1 is partially supported which SN has positive impact on KN toward impulse purchase of new beverage product at the Standardized Coefficients (Beta) 0.319.

The variance inflation factors (VIFs) were examined to validate the multicollinearity problem. The result of VIFs were less than 5.00. This indicates that there is no critical issue in this research.

Table 6: Multiple Linear Regression Result (H2a – H2c), Dependent Variable: BI

Hypotheses	Variables	Standardized Coefficient (β)	VIF	Result
H2a	Consumer characteristic-excitement (EX)	0.248*	1.244	Supported
H2b	Consumer characteristic-esteem (ES)	0.122*	1.134	Supported
H2c	New product knowledge (KN)	0.016	1.14	Not supported
R Square		0.096		
Adjusted R Square		0.090		

Note: * represents standardized coefficient (β) with P-value ≤ 0.05

Multiple linear regression was applied for H2a, H2b and H2c. Table 6 represents R^2 at 0.096 which means 9.6% of 3 independent variables Consumer characteristic-excitement (EX), Consumer characteristic-esteem (ES) and New product knowledge (KN) can explain the dependent variable, Impulse Buying Intention (BI) to impulse purchase of new beverage product at 0.05 significant level or 95% of confident level. The P-values of all independent

variables are less than 0.05 except KN which indicated that the hypotheses namely H2a and H2b are supported whereas H2c is not supported according to P-values is greater than 0.05. It can be concluded that EX and ES have statistically significant impact on BI to impulse purchase of new beverage product which EX has the most positive impact with Standardized Coefficient 0.248, followed by ES at 0.122.

The variance inflation factors (VIFs) were examined to validate the multicollinearity problem. The result of VIFs were less than 5.00. This indicates that there is no critical issue in this research.

Table 7: Multiple Linear Regression Result (H3a – H3c), Dependent Variable: BB

Hypotheses	Variables	Standardized Coefficient (β)	VIF	Result
H3a	Consumer characteristic-excitement (EX)	0.323*	1.244	Supported
H3b	Consumer characteristic-esteem (ES)	0.034	1.134	Not supported
H3c	New product knowledge (KN)	0.109*	1.140	Supported
R Square		0.145		
Adjusted R Square		0.139		

Note: * represents standardized coefficient (β) with P-value ≤ 0.05

Multiple linear regression was applied for H3a, H3b and H3c. Table 7 represents R² at 0.145 which means 14.5% of 3 independent variables Consumer characteristic-excitement (EX), Consumer characteristic-esteem (ES) and New product knowledge (KN) can explain the dependent variable, Impulse Buying Behavior (BB) to impulse purchase of new beverage product at 0.05 significant level or 95% of confident level. The P-values of all independent variables are less than 0.05 except ES which indicated that the hypotheses namely H3a and H3c are supported whereas H3b is not supported according to P-values is greater than 0.05. It can be concluded that EX and KN have positive impact on BB to impulse purchase of new beverage product which EX has the most positive impact with Standardized Coefficient 0.323, followed by ES at 0.109.

The variance inflation factors (VIFs) were examined to validate the multicollinearity problem. The result of VIFs were less than 5.00. This indicates that there is no critical issue in this research.

Table 8: Single Linear Regression Result (H4), Dependent Variable: BB

Hypothesis	Variable	Standardized Coefficient (β)	P-Value	VIF	Result
H4	Impulse buying intention (BI)	0.251*	0.000	1	Supported
R Square		0.063			
Adjusted R Square		0.061			

Note: * represents standardized coefficient (β) with P-value ≤ 0.05

single linear regression was applied for H4. Table 8 represents R² at 0.063 which means 6.3% of independent variable Impulse Buying Intention (BI)

can explain the dependent variable, Impulse Buying Behavior (BB) to impulse purchase of new beverage product at 0.05 significant level or 95% of confident level. The P-value of independent variable is less than 0.05 which indicated that the H4 is supported. It can be concluded that BI has positive impact on BB to impulse purchase of new beverage product with Standardized Coefficient 0.251.

The variance inflation factors (VIFs) were examined to validate the multicollinearity problem. The result of VIFs were less than 5.00. This indicates that there is no critical issue in this research.

Table 9: Independent Sample T-Test (H5)

Hypothesis	Gender	N	Mean	Std. Deviation	Std. Error Mean		
H5	Male	210	2.5000	0.78716	0.05432		
	Female	200	2.3400	0.66454	0.04699		
Hypothesis	Equal Variances	Levene's Test		T-Test			
		F	Sig.	t	df	Sig.	Mean Difference
H5	Assumed	19.648	0.000	2.219	408	0.027	0.16000
	Not Assumed			2.228	402.259	0.026	0.16000

The result exhibit in Table 9 shows the mean of Impulse Buying Behavior (BB) between male and female (Male; M= 2.5000, SD=0.78716) and (Female; M=2.3400, SD=0.66454), Condition; T (408) = 2.219, P = 0.027. This implied that there is a significant mean difference in impulse buying behavior (BB) between male and female. Therefore, H5 is supported.

Conclusion and Recommendations

Conclusion

The research was conducted an empirical study to analyze factors impacting impulse purchase of new beverage products in Thailand which the conceptual framework in this research was adopted from the theoretical framework of the research about Impulse purchases of new products: an empirical analysis (Nukhet Harmancioglu, R. Zachary Finney, Mathew Joseph, 2009). This paper's findings are based on data from 410 respondents by sending questionnaires through online and offline channels by using convenience sampling, quota sampling and snowball sampling. All respondents live in Thailand and have ever purchased beverage product from convenience store or supermarket. This study also expanded to determine the mean difference between genders towards impulse buying behavior. The result obtained from using Simple Linear Regression, Multiple Linear Regression and Independent Sample T-test to analyze data.

According to analyzed result, H1 can be summarized that only independent variable social norms has positive impact on new product knowledge (KN). Regarding H2 result, excitement and esteem which are consumer characteristics have positive impact on impulse buying intention. However, H3



result shows that esteem have no impact on impulse buying behavior, but excitement and new product knowledge do. For H4 that used single linear regression to analyze shows that impulse buying intention have positive impact on impulse buying behavior. H5 is the expanded study shows that there is a significant mean difference in impulse buying behavior between male and female.

Implication and recommendation

From the study, there are many factors impacting impulse purchase of new beverage products in Thailand. The finding shows that social norms or opinion leaders are the source of new product knowledge that consumers seek and ask for information, advantages and characteristics of product. The company that involved in beverage industry should identify influencers whom consumers rely on, so that these influencers can communicate with consumers since new product knowledge is significant factor that impact impulse buying behavior.

According to the study in H2a and H3a, consumer characteristics - excitement plays important role to drive impulse buying intention and behavior on new beverage products. To urge impulse buying behavior of new beverage products, company should emphasize excitement, fun and extraordinary in in-store activities where most interaction with consumers take place. Regarding the result of consumer characteristics – esteem toward impulse buying intention and behavior, it shows different result from consumer characteristics – excitement. Esteem does not impact on impulse buying behavior, but impact on impulse buying intention which one's esteem may enhance driving force to fulfill desire and encourages impulse buying intention.

Impulse buying intention has positive impact on impulse buying behavior. This result shows that the drivers of impulse buying directly influence and plays a significant part in the conduct of impulse buying behavior.

The analysis of mean different between female and male can conclude that both genders have positive impact on impulse buying behavior but in a difference response. Key take away from this result is studying more on creating new and interesting campaigns or activities that can get different attention from different genders in order to gain new consumer group for the new product.

Limitations and future research

This study has limited to conduct the group of people that age is below 20 years old which is an interesting group because they are new generation that are quite active to something new. For future research the sample group which age below 20 years old is supposed to focus since new product in the future will serve this group of people. In addition, the group of respondents who has monthly income below 15,000

THB is limited. The result can be explained some groups that is most contributed the data which it can imply that the result cannot be used with the product that belongs to that target group because data is limited. For future research, quota sampling for age and income group should be taken.

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An Empirical Study of Brand Loyalty Towards International Cosmetics Brand in Bangkok, Thailand

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Abstract

Nowadays, people concern more about their appearance and style. Cosmetics are applied to enhance appearance and also used to communicate style or preference. Besides, the trend of cosmetics industry has a significant rise in income over the last decade. There are many factors that boost the growth of the market for cosmetics which are changing in lifestyles and rise in demand for skin care products and cosmetics. There are many brands in cosmetics industry with the good ideas and great quality. Some companies remain in the market while other companies are disappearing from the market. Therefore, attracting the customers become loyal to the brand can save the cost and help the business to survive. The purpose of this study is to explore the factors that influence brand loyalty towards an international cosmetics brand in Bangkok, Thailand. In this study, the researchers applied descriptive research to develop this research and applied survey technique to collect the data from the target respondents. The sample size of this study is 300 respondents collected of Siam Center Shopping Mall in Bangkok, Thailand. The results of this study showed that the independent variables which are price, perceived quality, brand awareness and customer satisfaction have significant influence on brand loyalty.

Keywords: cosmetics, perceived quality, brand awareness, customer satisfaction, brand loyalty

Introduction

Currently, people concern more about their look and style. Cosmetics are a product applied to enhance appearance and also used to transfer style or preference (Rudd and Lennon, 2000). In the cosmetics industry, the competition is growing exponentially. There are many brands in cosmetics industry with the good ideas and great quality. Some companies remain in the market while other companies are disappearing from the market. Competing in the cosmetic industry is challenging for the company. Therefore, the cosmetic company should focus on attracting the customers become loyal to the brand can save the cost and help the business to outlast. Customer brand loyalty plays an essential role for every brand and industries.

Therefore, gaining more customer loyalty is the way to ensure survival of the brand. According to Oliver (1997), brand loyalty has intensely commitment to repurchase a specific product or service constantly in the future, which affects repeat purchasing of same brand despite the situational effect and marketing powers having the possible to cause changing behavior. Likewise, Aaker (1992) found that brand loyalty creates value mostly by reducing marketing costs

because attracting the new consumers costs much more than retaining the current consumers. Moreover, the loyal customers will encourage others to buy the product from the same brand. From various previous researches, the researchers found that advertising spending, promotion, price, perceived quality, brand awareness and customer satisfaction have influence on brand loyalty both directly and indirectly. According to the previous studies, Hameed (2013) found that store image, perceived quality and customer satisfaction have positive impact on brand loyalty. In addition, Gil et al. (2007) found that brand awareness has a positive impact to brand loyalty.

Bobbi Brown cosmetics is the global prestige beauty brand. The company founded in 1991 and still survival in the cosmetic industry. Therefore, Bobbi Brown Cosmetics is subsidiary company of Estee lauder company which is a one out of three biggest company in cosmetics industry.

Research Objective

The objective of this research is to explore the factors influencing brand loyalty of Bobbi Brown cosmetics in Bangkok, Thailand. In this study, the

researchers emphasize on factors which are advertising spending, promotion, price, perceived quality, brand awareness and customer satisfaction. The specific research objectives are as follows:

1. To analyze how advertising spending has influence on customer satisfaction.
2. To analyze how advertising spending has influence on brand awareness.
3. To analyze how advertising spending, promotion and price have influence on perceived quality.
4. To analyze how customer satisfaction, brand awareness and perceived quality have influence on brand loyalty.

Literature Review

Advertising spending: Advertising is the method of marketing publicizing of things, ideas and services of the brand (Kotler and Keller, 2012). Advertising spending is used while it is not sufficient to manage actual advertising spending and perceived advertising spending determining the consumer's psychology than marketing efforts (Yoo et al., 2000). Advertising spending can be both signaling and information method (Moorthy and Zhao, 2000). Advertising spending is a significant instrument in producing awareness among the customers. Moreover, extreme advertising spending is the indicator of high displays and quality that company is investing for the product or brand (Aaker and Jacobson, 1994).

Promotion: Promotion are set of temporary price reductions that lead to increase purchase intention of customers towards the goods and repeat purchase (Gupta, 1988). Promotion is developed to lower the price for given quantity or increase the quality

recognize a brand of certain product category which involved association between product classification and brand. Brand awareness contains a variety of extending from undefined feeling towards a brand which is recognizable to belief that it is the only one in the product category (Aaker, 1991). Brand awareness can be categorized by depth and breadth. The depth of brand awareness apprehensive of the probability that brands can be recognized or recalled. The breadth of brand awareness related to purchase and utilization in situations that brand pop up in mind. In order to build the brand awareness, it needs the consumer to have exposure with the brand and also link the brand into consumer's memory to purchase the product and also in usage situations (Keller, 1993; Keller, 1998).

Customer Satisfaction: Customer satisfaction is a person's feeling of preference or disappointment which resulted from comparing a product's perceived performance against his/ her expectations (Kotler and Keller, 2006). Customer satisfaction is the summary of psychological state resulting while the emotion relating the expectation which is connected through previous feelings regarding the customer experiences (Oliver,

accessible at the same price, thus increasing value and generating an economic encouragement to buy (Raghubir and Corfman, 1999). Sale promotions is a short-term motivation to boost the use of the particular product/service (Keller, 2002). Promotion generally contains coupons, percent off deals, refunds, rebates, and special sales (Yoo et al., 2000 and Rahmani et al., 2012).

Price: Economic definition of price can be described as paid to get a product which is frequently limited to individual monetary units (Oh, 1999; Agarwal and Teas, 2001; Korda and Snoj, 2007). Price is a perception of customer towards what is lost or gain by buying a product. Customers do not constantly remember or memorize the actual price of a product but they are instinctive by encoding the prices as cheap or expensive. Therefore, customer's perception towards the price might be different from the objective price (Zeithaml, 1988).

Perceived quality: Perceived quality is the customer's perception towards overall quality of the brand (Tsiotsou, 2005). Perceived quality in a service perspective is the outcome of customer making comparison between their expectation and their perception of the service that performed (Caruana, 2002 and Parasurama et al., 1994). Moreover, Gonzalez et al. (2007) defined perceived quality as a customer's experience towards service and their perception of the company provided service to them. Additionally, perceived quality is a decision for the identification for the reliability of the product or evaluation of the value that added to a product (Bhuian, 1997).

Brand Awareness: Brand awareness is the capability of a possible buyer to identify and (1997). Moreover, customer satisfaction can have varied for the customers who have different levels of perception and different levels of satisfaction (Tsiotsou, 2005). Additionally, customer satisfaction is a judgement centered on customer collaboration (Yi, 1990).

Brand Loyalty: Brand loyalty has intense commitment to repurchase a selected product or service constantly in the future, thus affecting repeat purchasing of same brand despite situational effect and marketing powers despite the possibility of cause changing behavior (Oliver, 1997). This highlight both behavior and attitude. Brand loyalty is one of the most significant factors that effects on consumer choices (Baldinger and Rubinson, 1996). There are seven factors that can influence brand loyalty of the consumer which are brand name, product quality, design, store environment, price, promotion and service quality (Lau et al., 2006).

Related Literature Review

Advertising spending and customer satisfaction: Aaker et al. (1996) stated that customer satisfaction happens when the customers have vision to the advertisement which fascinates the attitude of customer



towards the brand. Moreover, information in advertising that influences the satisfaction that creates an attitude towards the brand (Holbrook and Batra, 1987). Likewise, Hameed (2013) constructed a research model which shows the effect of advertising spending on brand loyalty mediated by store image, perceived quality and customer satisfaction. The result showed that the advertising spending has positive effect on customer satisfaction. As the advertising spending increases, the perception towards store also increases leading to customer satisfaction.

Advertising spending and brand awareness: If the advertising campaign is more intensive, the more customer will expose to the brand. Advertising can be described as a base for attainment which connected positively to the advertising spending. The advertising spending of a brand will rise the scope and recurrence of the advertising message, the higher level of awareness will be achieved for the brand (Deighton, 1984; Hoyer and Brown, 1990). Likewise, Sali et al. (2016) also stated that the advertising value has positive effect on brand awareness. The more intensive the advertising campaign, the more consumer will try the brand. Similarly, Hauser and Wernerfelt (1990) showed that advertising stimulates brand awareness in mind of the consumer.

Advertising spending and perceived quality: Aaker and Jacob (1994) and Yoo et al. (2000) stated that the more advertising spending for the brand, the more consumers will have perceived quality and brand loyalty. Likewise, Kirmani and Wright (1989) found that the consumers have high level of confidence in products which are advertised through high the advertising spending. Also, Villarejo and Sanchez (2005) showed that there is a significant consequence of advertising towards perceived quality, brand image and brand awareness.

Promotion and perceived quality: Riel et al. (2005) proved that there is a positive effect impact of promotion and perceive service quality on brand loyalty. Similarly, Kim et al. (2010) constructed a model to investigate the influence of marketing-mix and corporate image on brand equity in the IT software sector. The result showed that promotion has positive influence on perceived quality. Likewise, Karbasi and Rad (2016) who studied about the effect of sale promotions characteristics on brand equity described that both monetary promotions and non-monetary promotions have a positive effect on the perceived quality.

Price and perceived quality: Yoo et al. (2000) discovered that consumer might use higher price as an

indicator of qualify which will accomplish decision efficiency. In contrast, a lower price product would give consumers more valued in term of the price. Therefore, consumer might be similarly aware of both low and high price product. Similarly, Peterson and Wilson (1985) acknowledged that there is a relationship between price-perceived quality and price difference which mean that the more price variance, the more consumers tend to use more prices as a quality indicators. Likewise, Olson (1977) discovered that there is a relationship between perceived quality and perceived price.

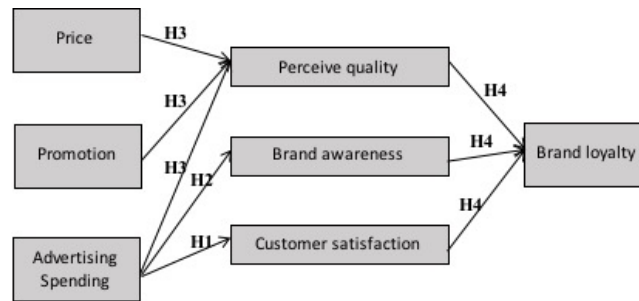
Perceived quality and brand loyalty: Judith and Richard (2002) stated that perceived quality and brand loyalty have significant connection. Likewise, Chi et al., (2009) studied the effect of among brand awareness, perceived quality, brand loyalty and customer purchase intention. The result showed that

there is a positive relationship between perceived quality and brand loyalty which means that if perceived quality is increases, the brand loyalty will also increase. Similarly, Ha et al., (2011) discovered that perceived quality has positive direct impact on brand loyalty and customer satisfaction, which can be concluded that if perceived quality of the brand increases, the customer satisfaction will also increase leading to create customer loyalty.

Brand awareness and brand loyalty: The brand with good image and high brand awareness can stimulate consumers to develop brand loyalty founds it (Aaker and Keller, 1990). Likewise, Peng (2006) stated that brand awareness has significant effect on brand loyalty. Once company introduce a new product or enter to the new market, the company should stimulate the customer's brand awareness to get the best result because brand awareness has a positive effect on brand loyalty (Aaker and Keller, 1990; Peng, 2006; Wu, 2002 and Chou, 2005).

Customer satisfaction and brand loyalty: Customer satisfaction is found to raise brand loyalty which is the repeating purchases of a similar brand (LaBarbera and Mazursky, 1983). Moreover, Ha et al. (2011) founded that perceived quality has positive direct effect on brand loyalty and customer satisfaction. Therefore, perceived quality of a brand increases, the customer satisfaction will also increase. Customer satisfaction has a direct consequence with brand loyalty (Ha et al., 2009; Selnes, 1993) Likewise, Oliver (1993) found that brand loyalty can be a consequence of customer satisfaction.

Conceptual Framework



Research Hypothesis

The conceptual framework was adjusted and constructed based on the three previous studie. There are seven variables namely advertising spending, promotion, price, perceived quality, brand awareness, customer satisfaction and brand loyalty. There are four hypotheses based on the conceptual framework and the detail are as follow;

Hypothesis 1

H1₀: Advertising spending has influence on customer satisfaction.

H1_a: Advertising spending has not influence on customer satisfaction.

Hypothesis 2

H2₀: Advertising spending has influence on brand awareness.

H2_a: Advertising spending has not influence on brand awareness.

Hypothesis 3

H3₀: Advertising spending, promotion and price have influence on perceive quality.

H3_a: Advertising spending, promotion and price have not influence on perceive quality.

Hypothesis 4

H4₀: Customer satisfaction, brand awareness and perceive quality have influence on brand loyalty.

H4_a: Customer satisfaction, brand awareness and perceive quality have not influence on brand loyalty.

Methodology

In this study, the researchers used the descriptive research to describe and develop research. Zikmund (2003) stated that descriptive research is need to explain the characteristics of a population and determine the answers of what, who, when, where and how questions. Furthermore, Shields (2013) stated that the descriptive research is designed to describe the data and characteristics of the population. The researchers applied the non-probability sampling to find the sampling unit because it is not available to know the total population of Thai people using Bobbi Brown cosmetics. According to Zikmund (2003), the non-probability sampling is the sampling technique in which units of the samples are taken on the basis of

personal judgement or convenience. In this study, the researchers designed to apply non-probability sampling

technique including judgement sampling and convenience sampling.

For research technique, the researchers applied survey technique to collect the data from the respondents by distributing the questionnaires to Bobbi Brown cosmetics customers who are available to answer the questionnaires to find out the factors influencing brand loyalty towards Bobbi Brown cosmetics in Bangkok, Thailand. According to Malhotra (2004), the similar studies can influence the sample size by taking the advantage of the sample size from previous empirical researches. Thus, in this research, the sample size was designed by using the reference from previous studied. Therefore, the researcher decided to apply 300 respondents as the sample size to collect the data in this research.

The questions are outlined based on the previous studies. The questionnaires are divided into nine parts, which are screening question, advertising, promotion, price, perceived quality, brand awareness, customer satisfaction, brand loyalty and general information. The total numbers of questions being asked are 28 questions. From part 2 to part 7, the researcher designed to use 5 point Likert scale. Consequently, the target population of this research are both male and female customers who have been using Bobbi Brown cosmetics in Bangkok area. The researchers collected the data at Bobbi Brown cosmetics shop in Siam center shopping mall, Bangkok, Thailand which is only one standalone shop in Bangkok.

Data Collection

According to White et al. (2000), data collection methods for primary data is behavioral observation, survey questionnaire and interview method. The researchers applied survey technique for collecting data by distributing the questionnaires to the respondents. The questionnaires were distributed on week days (Monday to Friday) from 1.00 pm to 5.00 pm and on weekend (Saturday and Sunday) from 1.00 pm to 5.00 pm at Bobbi Brown cosmetics shop, in Siam center. The questionnaires were distributed until meeting the required sample size during February to March, 2019.

After collecting the necessary data, the researchers were encoded the completed and returned questionnaires into symbolic form using a statistical software. According to Vanishbancha (2007),



Statistical Package for Social Science (SPSS) is a unique software solution for specific applications with fully integrated survey analysis system. The researchers used Simple Linear

Result and Discussion

Findings

In this research, the researchers collected the data from 300 respondents at Siam Center Shopping Mall in Bangkok, Thailand. From the result of descriptive analysis, the majority of respondents were female which is equal to 97.3% or 292 respondents. Most of

the respondents are aged between 26-35 years old which is equal to 73.3% or 230 respondents, the highest education level is bachelor degree equals 65.3% or 196 respondents, the highest income level is 30,001 Baht or more which equals 68.3% or equal to 205 respondents, and the highest occupation level is self-employed which is 53.7% or equals 161 respondents. Table 1 showed the summary of descriptive analysis result of demographics.

Table 1: Summary of Descriptive Analysis Result

Demographics Factors	Characteristics	Frequency (f)	Percentage (%)
Gender	Female	292	97.3%
Age	26-35 years old	220	73.3%
Education level	Bachelor degree	196	65.3%
Income level	30,001 Baht or more	205	68.3%
Occupation	Self-employ	161	53.7%

Hypothesis Testing

The following table presented the results of hypothesis testing of seven factors which are advertising spending, price, promotion, customer satisfaction, brand awareness, perceived quality and brand loyalty. The researchers applied Linear Regression analysis model to analyze each hypothesis.

Table 2: The Summary of Hypothesis Testing Result.

Hypothesis	Standardized Coefficient	Significant Level	Results
H1 ₀ : Advertising spending has not influence on customer satisfaction.	0.333	0.000	Reject H1 ₀
H2 ₀ : Advertising spending has not influence on brand awareness.	0.437	0.000	Reject H2 ₀
H3 ₀ : Advertising spending, promotion and price have not influence on perceive quality.			
- Advertising Spending	-0.004	0.851	

- Promotion	0.016	0.447	Failed
- Price	0.947	0.000	to Reject H3 ₀
H4 ₀ : Customer satisfaction, brand awareness and perceive quality have not influence on brand loyalty.			Reject H4 ₀
- Perceived Quality	0.349	0.000	
- Brand Awareness	0.164	0.002	
- Customer Satisfaction	0.365	0.000	

Based on the result of hypothesis one, advertising spending has significant influence on customer satisfaction at 0.00 significant level and standardize beta coefficient value of 0.333. The result of the study is also supported by Holbrook and Batra (1987) who stated that information in advertising influences the satisfaction that creates an attitude towards the brand. Moreover, Aaker et al. (1986) also stated that customer satisfaction happens when the customers have vision to the advertisement which fascinates attitude of customer towards the brand.

Based on the result of hypothesis two, advertising spending has significant influence on brand awareness at 0.00 significant level and standardize beta coefficient value of 0.437. The result of the study also supported by Hauser and Wernerfelt (1990) who indicated that advertising is stimulates the brand awareness in mind of the consumer. Moreover, Sali et al. (2016) also stated that the advertising value has positive effect on brand awareness. The more intensive the advertising campaign, the more consumer will try the brand.

Based on the result of hypothesis three, price has significant influence on perceived quality at 0.00 significant level and standardize beta coefficient value of 0.947. The result of the study is also supported by Peterson and Wilson (1985) who acknowledged that there is a relationship between price-perceived quality and price difference which showed that the more price variance, the more consumers tend to use more prices as a quality indicators. Likewise, Yee and San (2011)



also proposed that there is a positive relationship between price and perceived quality.

Based on the result of hypothesis four, customer satisfaction, brand awareness and perceive quality have significant influence on brand loyalty at 0.00 significant level and standardize beta coefficient value of 0.349, 0.164 and 0.365 respectively. The result of the study is also supported by Judith and Richard (2002) who stated that perceived quality and brand loyalty have significant relationship. Similarly, Ha et al. (2011) discovered that perceived quality has positively direct impact on brand loyalty. Moreover, Peng (2006) stated that brand awareness has significant effect on brand loyalty. The brand with good image and high brand awareness can stimulate consumers to develop brand loyalty (Aaker and Keller, 1990). In addition, LaBarbera and Mazursky (1983) mentioned that customer satisfaction is found to raise brand loyalty in which brand loyalty can be measure in a quantity of succeeding purchases of the similar brand. And Oliver (1993) founded that brand loyalty can be a consequence from customer satisfaction.

Conclusion

The purpose of this research is to study to explore the factors that influence brand loyalty

towards of international cosmetics in Bangkok, Thailand. In this study, the researcher will emphasize on factors influencing brand loyalty which are advertising spending, promotion, price, perceived quality, brand awareness and customer satisfaction. The population of this study is Shopping Mall in Bangkok, Thailand. The sample size is equal to 300 respondents. The researchers design to use non-probability by using the judgement sampling and convenience sampling procedure. Simple linear regression and multiple linear regression were designed to test all four hypotheses. The result of this study, the researcher found that advertising spending is influenced on customer satisfaction. The second hypothesis, advertising spending is influenced on brand awareness. The third hypothesis, the result showed that promotion and price are influenced on perceived quality. For the forth hypothesis, the result indicated that customer satisfaction, brand awareness and perceive quality are influenced on brand loyalty.

Recommendation

According to the data analysis, the result of this study can be very supportive for marketers and managers of Bobbi Brown cosmetics company to understand the factors creating brand loyalty towards the brand. This study has verified that the important variables that influenced on brand loyalty towards Bobbi Brown Cosmetics brand which are price, perceived quality, brand awareness and customer satisfaction. According to the findings of this study, the researchers would like to provide some recommendations as follows:

The first recommendation is to focus on advertising spending which has a positive influence on brand awareness and customer satisfaction. Marketers should consider to have more advertising campaign in order to have a higher effect on the brand awareness and customer satisfaction. In addition, the second recommendation is to focus on price which has a positive influence on perceived quality. Yoo et al. (2000) indicated that consumer might use higher price as a quality indication to accomplish decision efficiency. The brand should consider price of their products to be reasonable according to their products' quality.

The final recommendation is to focus more on customer satisfaction and perceived quality as they have the highest significant positive influence on brand loyalty. Therefore, the researchers would like to recommend Bobbi Brown Cosmetics company to maintain their existing customers to develop brand loyalty. The company should provide their customers with free samples, events and member card to collect the point to improve the customer satisfaction. Moreover, the company also should focus on the quality of their products.

Further Study

This study focused on analyzing the factors influencing brand loyalty towards the cosmetics brand in Bangkok, Thailand and the data was collected at Siam Center Shopping Mall. Moreover, the taste and trend of cosmetic might be different regarding to lifestyle and area of the customers as well as the brand. The further study should collect the data from different regions of the country. In addition, the researchers focus on Bobbi Brown Cosmetics brand. There are several famous brands in cosmetics industry that the further study can extend this research framework. In addition, the researchers target on specific variables to find their influence on brand loyalty. However, there are other variables which may have influence on brand loyalty towards cosmetic brand. Finally, the researchers used the survey method to distributed the questionnaire in this study. Further study might use different research methodology to conduct the research.

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Factors Influencing Online Purchase Intention of Health Beverages: A Study on Thai Senior Consumers

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Abstract

The study of research aims to investigate the factors influencing online purchase intention of health beverages among senior consumers in Thailand. The data of this research are collected from 200 senior respondents who are aged 50 and above and have online purchased health beverages online before. Judgmental sampling techniques and convenience sampling techniques are applied for online and offline survey distribution. Consequently, useable data are analyzed by using analysis tools of SPSS Program such as Cronbach's Alpha to investigate the reliability and availability of questionnaire, Descriptive Analysis to examine demographics of respondents and each item of questionnaire and Multiple Linear Regression Analysis to test hypotheses of the study. The findings of the research indicate that there are three independent variables which have influence on online purchase intention of health beverages which are attitude towards online shopping, perceived social norm and perceived relative advantage. However, there are two independent variables which have no influence on online purchase intention of health beverages which are perceived ease of use and perceived risk.

Keywords: Senior, Older consumer, Elderly shopping, Health online shopping, and Senior online shopping

Introduction

The rapid growth of health consciousness is increasing consistently and has become a popular health trend among Thai population because they believe that good health can encompass the ways of sustainable life. Consequently, Thai citizens attempt to reach their health concern through various alternatives such as exercise, eating healthy food, reducing stress to increase mental health. Additionally, Thai consumers fulfill their well-being needs by consuming health supplementary beverages which are beneficial for their health, in order to implement appropriate nutritional requirement for dairy consumption and add nutrition ingredients to repair the incomplete part of the body. So, the health beverages are categorized into the health nutritional supplement market. According to Economic Intelligence Center Analysis (2017), the graph indicated that the growth of Thai supplement market increases consistently along the year where a high proportion of the market is derived from health and medicinal supplements with 78% of the market, more than other categories and retains similar percentage of market sales each year. The health beverage manufacturers enable to bring growth opportunity of the market to serve their products to the appropriate group of target consumers. Interestingly, the age 50-plus market should be specifically concerned of the health supplementary beverage manufacturers based on two priority aspects. Firstly, Thailand became an aging society since 2005. In addition, senior population aged 60 or older accounts for 17.13 percent of the total

Thai population in 2017 and growth rate among senior generation will steadily increase in the near future (National Economic and Social Development Board Report, 2017). According to an NESDB report, the estimation supposed that senior population will increase by 20 percent of total population in 2021. So, changing to a higher level of senior population implies that senior group of consumers will highly impact the overall business. Senior consumers who are wealthy and high disposable income have high potential to purchase the product more than younger generation (Phoenix Marketing International, 2017). Secondly, consumers aged 50 or older have more health consciousness than younger generation. They are willing to spend on nutritional health products exchange the desire to be healthier and look younger comparing to their age (The Hartman Group, 2017). Additionally, senior adults prefer to consume health beverages and foods to maintain their quality of life they prefer to consume more of health beverages which offer more convenient alternatives for daily consumption better than health foods which are difficult to consume. Health beverages require minimal preparation and are easily consumed by senior adults to add to their nutritional needs (Overstreet, 2018). So, the health beverage manufacturers use the opportunity to offer their products to the senior generation through appropriate distribution channel. Nowadays, the advancement of technology significantly influences the change in behavior of online usage among senior generation in Thailand. Statistics from Electronics Transaction Development Agency (2017) shows

that senior online users tend to spend more time on internet for various purposes which have slight difference from other generations. Even though, technology was not well prepared for this senior generation in the past. Senior users are willing to spend more time to learn new technology especially from mobile devices instead of traditional media such as television and radio. So, senior population will rely more on digital lifestyle in the future. In business circumstance, the development of brick and mortar retail business into online business platform provides greater accessibility and flexibility that tends to improve shopping experience of consumers. Subsequently, the businesses of FMCG categories including health beverage industry attempt to transform their operation and utilize technology towards online platform and online communication. However, online shopping platform requires many procedures to purchase products online. The seniors can face challenges of insufficient technology acknowledgement or complex purchase procedure in online distribution channel. Thus, senior consumers who have prior experience about online purchase need to consider whether they intend to purchase health beverages online, through various internal and external factors.

Statement of the problem

Nowadays, senior markets have been paid attention from the businesses especially FMCG industry about health categories.

The older generation is not only growing consistently in the total population but will also become ageing society in the near future and point towards having the majority of wealth and health consciousness. However, most of businesses have no concern and less communication regarding online platforms such as online shopping channels to accommodate senior generation. Senior consumers who lag technology frequently ask the online administrators about problems, online buying procedures and eventually turn out offline shopping. In contrast, online marketing of health beverages among younger consumers is growing.

According to previous research, Market survey and research studies on online marketing of FMCG and health beverages among young generations are conducted at large, but little has been conducted specifically on the age 50 plus market and the existing market survey and research studies provide obsolete information. So, this study aims to focus on online purchase intention of health beverages by Thai senior consumers in order to deeply understand senior consumers' perception and external factors influence towards online purchase of health beverages. Also, the outcomes will suggest that the online marketers of

The research is beneficial for online marketing department of health beverage manufacturers in Thailand since this research enables online marketers

health beverage industry should provide appropriate tactics and marketing strategies which are more age-friendly towards senior consumers.

Research Questions

RQ 1: What comprises the factors for senior consumers to purchase health beverages via online system?

RQ 2: To what extent do these factors have influence on their online purchase of health beverages?

RQ 3: What are the appropriate marketing strategies that influence the online purchasing behavior of the senior consumers for health beverages?

Research Objectives

RO 1: To describe the factors for senior consumers to purchase health beverages via online system.

RO 2: To investigate the degree to which each factor is important to online purchase of the senior consumers.

RO 3: To analyze the appropriate marketing strategies that influence the online purchasing behavior of senior generation for health beverages.

Scope of the research

The scope of this study aims to understand online purchase intention of health beverages by Thai senior consumers through five factors consisting of attitude towards online shopping, perceived social norm, perceived ease of use, perceived relative advantage and perceived risk. The survey is conducted both online and offline with 200 senior respondents who are actual health beverage shoppers via online distribution platform. The researcher mainly focuses on senior respondents in Bangkok area by distributing questionnaire papers to formal elderly club namely "OPPY CLUB" in which they normally educate the use of internet and smartphone to the senior generation. This senior group has high potential to be familiar with online platform and purchase of health beverage online. Also, online questionnaires are distributed to senior acquaintance and relatives who have experience of online health beverage shopping.

Limitations of the Research

This study focuses on dominant factors affecting online purchase intention of health beverages by Thai senior consumers. So, the limitation of the research is that the findings represents only the context of the specific 50-Plus market and the findings do not mention about other younger generations. Furthermore, the researcher pays attention towards factors related to online purchase intention of health beverages. Another limitation of the research is not focusing on other irrelevant factors such as socio-cultural-economic factors of the respondents, the respondents' health consciousness and the respondents' orientation to health beverages.

Significance of study

to clarify the problem of E-commerce of health beverages that occurs among the senior consumers. In addition, the research represents the important factors

which influence the online behavioral intention of senior consumers during online shopping of health beverages so that online marketers realize and develop appropriate online marketing tactics and strategies towards the 50-Plus market.

Definition of terms

Health beverages

Health beverages are defined as the beverage nutritional dietary supplement providing vitamins, protein and nutrient ingredients in order to fulfill the enough nutrient consumption of body requirement and support your health and well-being (U.S. Food and Drug Administration, 2017). Health beverages offer two various forms which are ready-to-drink beverages and powder supplements which need to be mixed up with liquid beverages before consumption (Nutrition and Dietetics Services, 2010). However, health beverage of this research excludes energy drinks that focus on physical stimulation.

Senior consumers are the actual consumers who are aged 50 or older and used to purchase health beverages through online distribution channel.

Online Purchase Intention

Purchase intention refers to the individual's consciousness which leads to the approval of actual online purchase behavior. It can be considered as the motivational aspects of behavior (Ajzen, 1991). Additionally, purchase intention incurred when senior consumers had future plan to purchase specific products during a particular time. In the context of E-commerce, online purchase intention of health beverages can be considered as senior consumers who desire to purchase health beverages through online channel or website (Chen, Hsu & Lin, 2010). However, online purchase intention of health beverages can be affected by both senior consumers' own attitude and external circumstance.

Attitude towards online shopping

Attitude towards online shopping can be defined as the senior consumer's perspective related to a favorable and unfavorable judgement and appraisal of performing their online purchase behaviors towards health beverages (Taylor and Todd, 1995). The distinctive perspectives of senior generation towards online shopping are based on difference of background such as individual's past online purchase experiences, personal characteristics and personal fundamental technological skills. Attitude towards online shopping among senior consumers tends to be positive due to technology advancement. They are more familiar and understand online purchase website better than the past, where convenient alternatives of purchasing health beverages were offered beside traditional physical stores. So, senior consumers can make individual decision based on their attitude towards

can be measured from the design, the function of online system, the senior's computer skills and ability for technological adoption According to literature

online purchase and whether they should purchase health beverages online. According to previous studies, Lin (2007) discovers that attitude towards online shopping is both positively and significantly correlated to online purchase intention.

Perceived Social Norm

Perceived social norm means the perceived perspectives of other dominant groups such as family members and friends who significantly influence senior consumer's online purchase intention of health beverages (Hansen, Jensen, & Solgaard, 2004; Hansen, 2005; Hansen, 2008). Also, it can be considered as social pressure towards the consequence of senior's online purchase behavior based on others' acceptance. The higher the degree of perceived subjective norm, the higher the online purchase intention of health beverages by senior consumers (Taylor & Todd 1995). In Thailand, family members play an important role in online purchase behavior of senior generation since most seniors who are not familiar with online shopping platform ask their younger family members or their friends for help rather than searching further information on their own. So, family members and friends contribute to purchase of health beverages online. According to Yet, Ching, & Teck research (2011), they revealed that perceived social norm has significant impact on online purchase intention among older Malaysian. Furthermore, perceived social norm has become the dominant predictor in the creation of purchase intention to engage in online shopping. Moreover, another study discovers that the perceived social norm has positive impact on online purchase intention. (Järveläinen, 2007; Nasco, Toledo, & Myktyyn, 2008)

Perceived Ease of Use

Perceived ease of use refers to how senior consumers believe online system is used for purchasing health beverages that could develop their online purchase performance without any effort (Davis, 1989). The advantages about ease of use mentioned in previous E-commerce literature review include simple procedure to order health beverages online, order anywhere 24 hours and total ease of use via online system (Khalifa and Liu, 2007; Park, Lee, & Ahn, 2004). In addition, perceived ease of use for online website can be significantly affected in the early steps of senior consumer's experience for health beverages (Davis, 1989). Most online shopping websites accommodate the potential customers who are used to shopping online and have technological knowledge for online sale platform rather than conservational consumers who have less technological computer skills. So, senior consumers who are familiar with online platform will perceive ease of use for health beverage online website. The perceived ease of use research, evidence is supported that perceived ease of use is positively correlated to online purchase behavioral intention (Ramayah and Ignatius, 2005;

Shang, Chen, & Shen, 2005). In contrast, other studies suggest that perceived ease of use is not a significant determinant of online behavioral intention (Koufaris, 2002) and neither positively nor negatively influence online purchase (Verhagen & van Dolen, 2011)

Perceived Relative Advantage

Relative Advantage refers to how senior consumers perceive the superiority of online purchase better than the existing traditional offline purchase (Hansen, 2005). The senior consumers switch to online purchase platform if they gain the additional benefits of purchasing health beverages over traditional distribution channel such as cheaper price, time saving and more convenient platform (Choudhury and Karahanna, 2008). Online purchase platform offers various advantages for senior consumers. Firstly, online purchase allows senior consumers to purchase health beverages located anywhere and whenever the consumers are available to order online. Most senior adults who face health constraints problems can gain benefit from health beverages shopped online. Secondly, online purchase helps senior consumers to save cost, time, effort to purchase health beverages compared to existing traditional distribution methods. It provides more convenient alternatives towards them. Thirdly, online purchase is available for senior consumers for searching further information of health beverages with convenience.

The outcome of the study indicates that online purchase intention is positively affected by perceived relative advantage (Yeo, Goh, & Rezaei, 2017). Moreover, Forsythe, Liu, Shannon, & Gardner (2006) discovered that relative advantage is positively correlated with online purchase intention.

Perceived Risk

Perceived risk reflects senior consumer's perspectives towards the possibility of loss and harmful online purchase in the terms of security of payment procedure, avoid accepting low quality products and difficulty of exchange issue. It can be negatively affected by behavioral online purchase intention and consumption of health beverages through online platform (Hansen, 2005; Mortimer et al, 2016). Perceived risk of senior consumers towards online website can occur when they have prior online shopping experiences. Furthermore, higher value of products will increase to a higher level of perceived risk of online purchase for senior consumers. The dominant factor is the e-commerce barriers in health beverages to the adaptation of online purchase intention of senior consumers. Recent research indicates that perceived risk has a significantly negative impact on online food purchase intention (Kaur & Shukla, 2016; Mortimer et al, 2016). In contrast, the recent research discovers that perceived risk is not a significant factor affecting online food

purchase among Chinese customers (Ou & Simon, 2018).

Conceptual Framework

From three research models of Yet et al Ou & Simon and Anusha et al the studies, the conceptual model of online purchase intention of health beverages by Thai senior consumers is developed through selection of reliable factors as the variables. The researcher aims to study five dimensions of independent variables consisting of attitude towards online shopping, perceived social norm, perceived ease of use, perceived relative advantage and perceived risk. The dependent variable is online purchase intention of senior consumers.

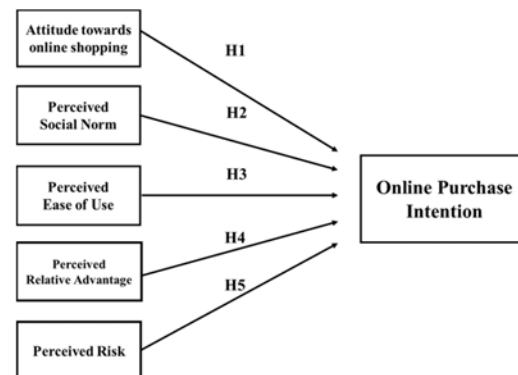


Figure 1: Conceptual Framework of online purchase intention of health beverages by Thai senior consumers

Research Hypotheses

H1₀: Attitude towards online shopping has no influence on online purchase intention of health beverages among senior consumers.

H1_a: Attitude towards online shopping has an influence on online purchase intention of health beverages among senior consumers.

H2₀: Perceived social norm has no influence on online purchase intention of health beverages among senior consumers.

H2_a: Perceived social norm has an influence on online purchase intention of health beverages among senior consumers.

H3₀: Perceived ease of use has no influence on online purchase intention of health beverages among senior consumers.

H3_a: Perceived ease of use has an influence on online purchase intention of health beverages among senior consumers.

H4₀: Perceived relative advantage has no influence on online purchase intention of health beverages among senior consumers.

H4_a: Perceived relative advantage has an influence on online purchase intention of health beverages among senior consumers.

H5₀: Perceived risk has no influence on online purchase intention of health beverages among senior consumers.

H5_a: Perceived risk has an influence on online purchase intention of health beverages among senior consumers.

Materials and Methods

According to prior empirical literature review, the secondary data from prior researches are applied to the research. The purpose of the research is to investigate the significant factors influencing online purchase intention of health beverages by Thai senior citizen who have prior experience of purchasing health beverages through online distribution channel. Consequently, the research adopted a descriptive research design to test the specific hypotheses and examine the casual relationship between five independent factors on the dependent factor, online purchase intention among senior consumers. The objective of descriptive research is to describe the accurate facts of the given population of interest. In addition, the quantitative method is used to collect the primary data through survey distribution. The self-administrative questionnaires are distributed to senior consumers in Bangkok area by using both online platform in the form of hyper link created by google form and offline platform through questionnaire papers.

The use of survey distribution method provides inexpensive, time-saving and effective alternatives to gather primary data from the larger interest group of target population.

Respondents and sampling procedures

The sampling technique applied to the research is non-probability sampling for selecting a given sample. Hamed (2016) indicated that non-probability sampling emphasizes on small groups of samples to investigate a particular phenomenon, does not attempt to make random statistical sampling from the total interest population. There are two primary methods of non-probability sampling techniques used in the research, which are judgmental sampling and convenience sampling.

Judgmental sampling method is used to gather information from potential senior consumers who have the same interest. The researcher distributed questionnaire papers to senior members of the formal elderly club namely OPPY CLUB which is established by Loxley Public Company Limited. The homogenous senior group of samples with same interest are the accurate representatives of a given population. The OPPY CLUB educate the use of internet and smartphone to senior citizen above 50 years old. So, the senior members tend to have high potential to be familiar with online platforms and purchase health beverages online.

samples. Average age of most of the senior respondents is between 50 to 59 years old (71.5%) and

Convenience sampling method is used to gather information from senior acquaintances and senior relatives such as older family members, teachers and supervisor in workplace through both online and offline questionnaire distribution. Consequently, senior acquaintances resend online survey to their friends and other senior consumers who had prior experience of online health beverage purchase through social networks such as Line and Facebook. Also, the friends of researcher sent online questionnaires to their senior parents or senior relatives.

The questionnaires are collected from a total of 200 senior respondents in Bangkok area, Thailand. Sample sizes of the study are based on 3 prior researches which are derived from Chan & Tang (2017) who studied about "Analyzing the Usage of Social Media: A Study on Elderly in Malaysia", Hardy, Zanariah, & Naura (2014), who studied about "Psychographic Characteristics Influencing Customer Behaviour on Online Purchase Intention" and Vella et al (2014) who studied about "Functional food awareness and perceptions in relation to information sources in older adults". These three previous studies with 200 respondents are related to the research. So, the researcher agrees on using 200 sample sizes for senior respondents in the study.

Summary of the findings

The outcomes of the research are generated by 200 senior respondents. The data are gathered from the structured questionnaires both through online google forms and questionnaire papers by senior consumers who have prior experience of the online purchase of health beverages. It mainly focused on target respondents who live in Bangkok area.

Table 1: Summary of demographic factors

Topic	Most Answer	Percent
Gender	Female	72.0%
Age	50 – 59	71.5%
Education	Bachelor's Degree	64%
Income	20,001-50,000	49.0%
Purchase Frequency	Once in 3 months	32.5%
Amount Spending	Less than 1,000 Baht	45.0%
Reason to Purchase	Convenience	79.0%

The research findings represent the majority of sample demographic profiles and their prior online purchase behaviors associated with health beverages as shown in Table 1. The results indicate that female respondents (72%) constitute the majority of target their education level is bachelor's degree (64%). Furthermore, most senior respondents earn average



monthly incomes from 20,001 to 50,000 Baht (49%). For online purchase behavior, the outcomes of the research indicate that most of the senior consumers purchase health beverages through online channels once in 3 months (32.5%) with less than 1,000 Baht per time (45%). The primary reason to purchase health beverages online is convenience (79%).

Multiple Linear Regressions (MLR) analysis is an appropriate method used to examine the influence of multiple independent variables on one dependent variable which is utilized with 0.05 level of significance to test hypotheses of the research.

Table 2: Model Summary of the Research

R	R Square	Adjusted R Square	Std. Error of the Estimate
.791 ^a	.626	.616	.64821

The findings of model summary indicate that R Square is equal to 0.626 which defines that the attitude towards online shopping, perceived social norm, perceived ease of use, perceived relative advantage and perceived risk collectively explain 62.6 %of the variability of online purchase intention.

Table 3: Summary of hypotheses testing

No.	Coefficient (β)	Level of Significant	Result
1	+ 0.285	.000***	Reject H1 ₀
2	+ 0.373	.000***	Reject H2 ₀
3		.445 ^{ns}	Fail to reject H3 ₀
4	+ 0.180	.009***	Reject H4 ₀
5		.188 ^{ns}	Fail to reject H5 ₀

Note: *** p-value < 0.05;

ns, no significant: p-value > 0.05

The researcher aims to find the factors which influence online purchase intention of health beverages among senior consumers in Bangkok, Thailand. Consequently, the outcomes of research findings indicate that the p-value ($p < 0.05$) lower than significant level 0.05 consists of 3 independent variables which are attitude towards online shopping (No.1), perceived social norm (No.2) and perceived relative advantage (No.4). As a result, the null

hypothesis is rejected. However, the p-value ($p > 0.05$) higher than significant level 0.05 comprises of 2 independent variables which are perceived ease of use (No.3) and perceived risk (No.5). As a result, the null hypothesis is failed to reject.

So, attitude towards online shopping, perceived social norm and perceived relative advantage have an influence on online purchase intention of health beverages among senior consumers. According to Coefficient (β) results, the degree of importance, from most important factors to least important factors can be ranked in the order of perceived social norm having Coefficient (β) of 0.373, attitude towards online shopping having Coefficient (β) of 0.285 and perceived relative advantage having Coefficient (β) of 0.180 which positively influence online purchase intention of health beverages by senior consumers respectively. On the other hand, perceived ease of use and perceived risk have no influence on online purchase intention of health beverages among senior consumers.

Results and Discussion

According to the previous research findings of the research, each hypothesis statement is analyzed by using Multiple Linear Regression to examine causal relationship between independent factors and online purchase intention of health beverages by senior consumers. So, the discussion and implication of each hypothesis is concluded as follows:

Hypothesis 1(H1): Attitude towards online shopping has an influence on online purchase intention of health beverages among senior consumers.

The result indicates that null hypothesis is rejected which means that attitude towards online shopping has an influence on online purchase intention. The research finding is supported by previous studies of Lin (2007) who discovered that attitude towards online shopping are both positively and significantly correlated to online purchase intention. Furthermore, target senior respondents have prior experience of online shopping of health beverages. When online shopping website can offer the best alternatives and good experiences for senior consumers through shopping online of previous purchase, they have positive attitude towards online shopping of health beverages on the website for next purchase. Currently, the senior adults are willing to change purchasing from physical distribution stores to online platform in case they think that online shopping of health beverage is beneficial for them. The higher the positive attitude towards online shopping of health beverages is perceived among seniors the higher online purchase intention of senior consumers for purchase health beverages



Hypothesis 2 (H2): Perceived social norm has an influence on online purchase intention of health beverages among senior consumers.

The result indicates that null hypothesis is rejected which concludes that perceived social norm has an influence on online purchase intention. The research finding is supported by

the previous research of Yet, Ching, & Teck (2011), who discovered that perceived social norm has a significant impact on online purchase intention among older Malaysians. Family members and their senior friends play important roles in influencing online purchase behavior of health beverages since senior consumers need more encouragement from others to support their purchasing decision which is derived from younger family members who have better expertise in technology and can easily explore further information about health beverages online than the older generation. Additionally, word-of-mouth of their friends from the same age through social media such as Line and Facebook can be highly involved in online purchase intention of health beverages. Perceived social norm should be considered as the first priority amongst the important factors which have most influence on online purchase intention of health beverages.

Hypothesis 3 (H3): Perceived ease of use has no influence on online purchase intention of health beverages among senior consumers.

The result indicates that null hypothesis is failed to reject which concludes that perceived ease of use has no influence on online purchase intention. The research finding is supported by previous studies of Koufaris (2002) and Anusha, Ankit, & Sneha (2017) who found that perceived ease of use is not a significant determinant of online behavioral intention. Ease of use for the online health beverage shopping website is not considered as an important factor that influences online purchase intention of health beverages. If senior consumers either lack innovative knowledge or found that it is difficult to use for specific website, they will ask their younger generation for help to purchase health beverages. Additionally, senior consumers are willing to spend more time and patience in studying online website in case they intend to purchase health beverages online without switching to other distribution channels.

Hypothesis 4(H4): Perceived relative advantage has an influence on online purchase intention of health beverages among senior consumers.

The result indicates that null hypothesis is rejected which concludes that perceived relative advantage has an influence on online purchase intention. The research finding is supported the previous research of Yeo, Goh, & Rezaei (2017) who found that online purchase intention is positively affected by perceived relative advantage. Senior consumers easily compare the price of health

beverages from each different online website and receive the best price alternative offered by online distribution channel website which is better than going through only one traditional physical store. The more the senior consumers grow older, the more they need convenience to support their lifestyle. Thus, online shopping website of health beverages can be satisfactory for senior consumer's need in terms of convenience that they had not of having to waste their money, time and energy in going to the physical stores for finding health beverages. Moreover, they can order health beverages anywhere, anytime, available 24 hours unlike traditional physical store which are available at shop during opening hours.

Hypothesis 5 (H5): Perceived risk has no influence on online purchase intention of health beverages among senior consumers.

The result indicates that null hypothesis is failed to reject which assumes that perceived risk has no influence on online purchase intention. The research finding is supported by the previous research of Ou & Simon (2018) who discovered that perceived risk is not a significant factor affecting online food purchase among Chinese customers. On the other hand, the research finding contrasts with the previous research of Mortimer et al (2016) which indicated that perceived risk has a significantly negative impact on online food purchase intention. Senior consumers do not consider perceived risk as a significant factor which influences online purchase intention of health beverages. Since health beverages is categorized in food and beverages, then the price of products is quite inexpensive compared to other high involvement products such as home appliances and mobile phones. Additionally, the amount spent on purchasing health beverages per time is a smaller portion of payment. So, the senior consumers have no concern regarding unsecured payment on online system. Even many untrustworthy online websites are available in online market place. They are still confident about the specific website they select to purchase health beverages.

Conclusions

According to the research findings mentioned above, 200 senior respondents are representatives of senior population of interest in order to study the potential factors which have influence on online purchase intention of health beverages in Bangkok, Thailand. Judgmental sampling techniques and convenience sampling techniques are applied for gathering data from senior respondents through survey distribution. The questionnaires are distributed by using both online platform in the form of hyper link created by google form and offline platform through questionnaire papers. The research findings show that senior respondents are mostly concerned about perceived social norm followed by their attitude towards online shopping and perceived

relative advantage regarding online distribution channel respectively. These 3 significant factors have influence on online purchase intention of health beverages among Thai senior consumers.

However, perceived ease of use in online website and perceived risk have no influence on their online purchase intention towards health beverages. The finding of research provides useful information for online marketers or online marketing departments of health beverages or supplementary beverages so that they have a deeper understanding about purchase behavioral intention and consider their target senior customers in terms of online platform and provide appropriate online marketing strategy towards them.

Recommendations

According to the research findings, the researcher needs to give some recommendations which provide useful information for online marketing department of health beverage industry in order to develop the appropriate online marketing strategy especially strong online distribution channel, so that senior consumers tend to switch from both purchase of health beverages partly online and offline to totally purchasing health beverages online. So, the online marketers of health beverage should mainly focus on 3 main dimensions which have an influence on online purchase intention of health beverages among senior consumers.

Firstly, they should give the first priority to perceived social norm. The online marketers should provide persuasive communication towards younger descendants about trends of online purchase for health beverages with the easier purchase procedure in the website. They can create word of mouth among younger generation by sharing online content or video content of simple process demonstration of online purchase so that they can teach their senior parents to order health beverages online easily and show visual examples for senior consumers to make them understand better. The younger family members can encourage senior adults' intention to purchase health beverages online.

Secondly, the online marketers should give second priority to attitude towards online shopping. Positive attitude towards online shopping contributes to the creation of online purchase intention of health beverages among senior consumers. Online marketers should provide positive online purchase experiences during first impression of specific online website to senior consumers. They can be offered in the form of online website which provides signal guidance to suggest and bring senior consumers to end of online purchase process with minimal effort. Moreover, online marketers can create additional values specifically for older consumers such as voice commands for help, large buttons with large fonts and clear visual picture of product information and price

available on the website. If the senior consumers are impressed during first time online purchase on a specific website, they will repurchase at the same website and tend to become more loyal than younger generation.

Finally, the online marketers should focus on perceived relative advantage. They can encourage senior consumers to ensure that online distribution channel is better than traditional physical store by offering free delivery service when they purchase health beverages online and by making online call center services available 24 hours to support their customers. This online marketing tactics can accommodate senior consumers with more convenience than what a traditional distribution channel enables to offer.

In addition, online marketers should have the loyalty program of online website towards senior consumers to stimulate the frequency of online purchase of health beverages such as collecting bonus points to get premiums or discounts for next online purchase so that senior consumers are more familiar with online shopping system and have incentives to purchase health beverages online. The online loyalty program is an appropriate marketing tool towards senior generation who are looking for additional values from purchasing health beverages online which leads positive emotion perceived by senior consumers towards online website.

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A study of factors influencing Online Clothing Purchase of Thai Female Customers towards an Online Shopping Website in Thailand

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Abstract

In this study, the researchers targeted to investigate the influence factor of fashion leadership, website attitude, need for advice from personnel, shopping for fun and quick shopping on online clothing purchase intention. Moreover, the researchers try to find the difference in online clothing purchasing when segmented by age and income levels toward an online fashion store in Thailand. The self-administered questionnaires were distributed to 300 Thai female respondents at three three A-graded office buildings namely, Sarthon Square, Bhiraj Tower and G Tower, located in the central business districts of Bangkok. The Multi Linear Regression (MLR) method and Analysis of Variance (ANOVA) test were used to analyze the hypotheses. There is a strong positive influence of fashion leadership, website attitude, need for advice from personnel, shopping for fun and quick shopping on online clothing purchase intention. In addition, the researcher also found that there are significant differences in online clothing purchase intention when segmented by income and age level. Thai female of the age between 26-30 years old with an approximate income of 10,001-20,000 Baht have higher purchase intention than other groups of customers.

Keywords: purchase intention, online clothing purchase, online fashion store, online shopping, ecommerce

Introduction

Ecommerce clothing segment becomes more visible and the trend of buying fashion clothing through ecommerce platforms is increasing year by year all over the world. But most of the shoppers feels reluctant to buy fashion clothing from online stores due to the lack of physical contacts and confidence upon their fashion sense. Clothing is one of the most common product categories purchased online (Hansen and Jensen, 2008). Peterson et al. (1997) explained that apparel is an experience good and it may vary extensively based on price, quality, body fit, and the preference. For this kind of products, consumers tend to perceive great variations in product quality and thus, shopping via eCommerce platform is riskier than tangible purchasing (Grewal et al., 2004).

People often consider fashion apparel purchasing as fun rather than as task (Babin et al., 1994; Bloch et al., 1986). Hence, the shoppers may reluctance to give up their hedonic experiences when purchasing apparels from physical store. According to Hensen and Jensen (2008), the researchers mentioned that the consumers who shop clothing for themselves find more hedonic and rarely ask for advice from store personnel during shopping. O'Cass (2004) found that women are more need of this objective, there are three specific objectives as follows:

involved in fashion and clothing than men. Therefore, female shoppers may have greater knowledge about clothing and fashion than male customers. The difference between women and men may affect the perceived difficulty in finding suitable items online (Hensen and Jensen, 2008). The previous researchers found a relationship between fashion leadership, website attitude and online purchase intention (Martinez and Kim, 2012). Moreover, Hensen and Jensen (2008) found the relationship between need advice for personnel, shopping for fun, quick shopping and online clothing purchase intention.

In this study, the researchers targeted to investigate the influence of fashion leadership, website attitude, need for advice from personnel, shopping for fun and quick shopping on online clothing purchase intention towards POMELO website. The researcher designed to collect the data from people who have experience in shopping with POMELO online fashion store (www.pomelo.co.th).

Research Objective

The main objective of this research is to investigate the factors influencing online clothing purchase of Thai female customers towards an online shopping website in Thailand. To fulfill the

To study the influence of fashion leadership, website attitude, need for advice from personnel,

shopping for fun and quick shopping on online clothing purchase intention.

To investigate the difference in online clothing purchase intention when segmented by income level.

To find the difference in online clothing purchase intention when segmented by age level.

Theory

Online Purchase Intention

Online purchase intention can be defined as the motive that gives the strength to a customer willing to purchase from an online store (Salisbury et al., 2001). According to Close and Kukar-Kinney (2010), online purchase intention, stimulates the purchases from the online virtual store, originated from purchase intention, which sparks the purchases. Online purchase intention can be defined as the consumers' willingness to buy a product or service via internet stores (Li and Zhang, 2002). Moreover, Iqbal et al. (2012) defined that online purchase intention is the willingness to use eCommerce platform to make a real purchase of goods and services or to compare the prices of products.

Fashion Leadership

Martinez and Kim (2012) defined fashion leadership as the combination of fashion innovativeness, willing to buy a new fashion before the others to stay updated with fashion and fashion opinion leadership, ability to distribute information related to an up to date fashion trend to influence successive purchasers to accept or reject it. Fashion leadership is one of the main ways to the prospective acceptance of new fashion trends by the majority (Martinez and Kim, 2012). People with high levels of fashion innovativeness tend to be the first to wear a new fashion (Goldsmith et al., 1999; Sproles, 1979). Fashion leaders would like to involve more in fashion, enjoy shopping often, consider less about the price, and they are not likely to be rational about their purchases (Goldsmith and Smith, 1992).

Website Attitude

Website attitude is the idea, thinking, opinion and also customer perception toward the quality of website and it can be defined by three factors: website innovativeness, information and ease of use by (Martinez and Kim, 2012). Loiacono (2000) mentioned that website attitude is a multi-dimensional concept which may include the various dimensions for transaction sites. Since the information demands and relationship of the customers can differ by product or service, the important characteristics of website attitude vary (Burke, 2002).

Need for Advice from Personnel

Need for advice from personnel is the mental need of buyers to be assisted by the personnel because some to date with new fashion might influence consumers' intention to shop online.

Website Attitude and Online Clothing Purchase Intention

apparel shoppers (mostly females) feel confident in their ability to select the right or suitable design for themselves while others need more guidance and supporting idea from others during clothing shopping (Hensen and Jensen, 2008). Numbers of previous researchers found the evidence that clothing shoppers differed in their requirement for advice from store personnel (Moye and Kincade, 2003). Many consumers, especially who need support from personnel may perceive it as more difficult to select items online than offline (Hensen and Jensen, 2008)

Shopping for Fun

Shopping for fun or hedonic shopping orientation can be defined as the joyous or hedonistic side (Sherry, 1990), which is motivated by a desire to have enjoyment and cheerful (Kang and Park-Poaps, 2010). Shopping for hedonism reflects the experiential values of shopping consisting of fantasy, enjoyment, pleasure, curiosity, arousal, sensory stimulation, and escapism (Scarpi, 2006). Scarpi (2006) also recognized the different hedonic reasons for shopping such as fun, pleasure, social experience, and other values related to entertainment perspectives of shopping.

Quick Shopping

Since time is a predecessor and stimulator of purchase during shopping (Jacoby et al., 1976). Jacoby et al. (1976) explained from an aspect of economic that time is considered as an intangible commodity which is limited and finite in quantity. And time value can be acquired by exchanging with another form of resource such as money or effort (Becker, 1965; Jacoby et al., 1976). Hence, the customers usually tend to save their time during shopping. Customers who see time as a scarce resource often schedule their time usage properly and prefer to use their time efficiently by completing many works in specific time period (Jacoby et al., 1976). Thus, quick shopping or time-saving shopping becomes popular.

Related Literature Review

Fashion Leadership and Online Clothing Purchase Intention

Fashion leaders, especially fashion innovators, prefer to shop at specialty stores and department stores, where the designs are trendier and the price is higher, but those who lack of fashion innovativeness tend to be more price conscious and desire to shop at discount stores (Lumpkin and McConkey, 1984). Lim et al. (2009) pointed out that fashion leaders with elevated fashion interest had more emotional attachment to luxury fashion brands and this supported that there was a positive relationship between fashion leadership and purchasing behavior or intention of apparel brands. Shang et al. (2005) mentioned that willing to stay up

For many pure eCommerce retailers, web-site is the major way to communicate with their customers and thus, the quality of the web-sites is a noticeable predictor affecting consumer behaviors and the attitude



towards purchase intention (Chang and Chen, 2008). Various researchers showed that the online shopper evaluates the online experiences and site performance, which have ultimate effect on their decision making to purchase items, based on the characteristics of website (Huang, 2003). Due to the information and relationship preferred by a consumer can be different based on products or services, the required characteristics to evaluate the web-site attitude may vary (Burke, 2002). According to Chang and Chen (2008), web site attitude influenced the purchase intention with the trust as a mediating variable.

Need Advice from Personnel and Online Clothing Purchase Intention

The clothing shoppers who have less confident in choosing the suitable or right apparel would be less motivated and more reluctant to purchase clothing online (Hensen and Jensen, 2008). However, Hensen and Jensen (2008) could not confirm that the online clothing purchase intention would be varied due to the influence of customers' need for advice and support for choosing the right apparel from store personnel. On the other hand, the researchers proposed that need of advice from store personnel has positive effect on the difficulty to choose the right item which has influence on online clothing purchase intention.

Shopping for Fun and Online Clothing Purchase Intention

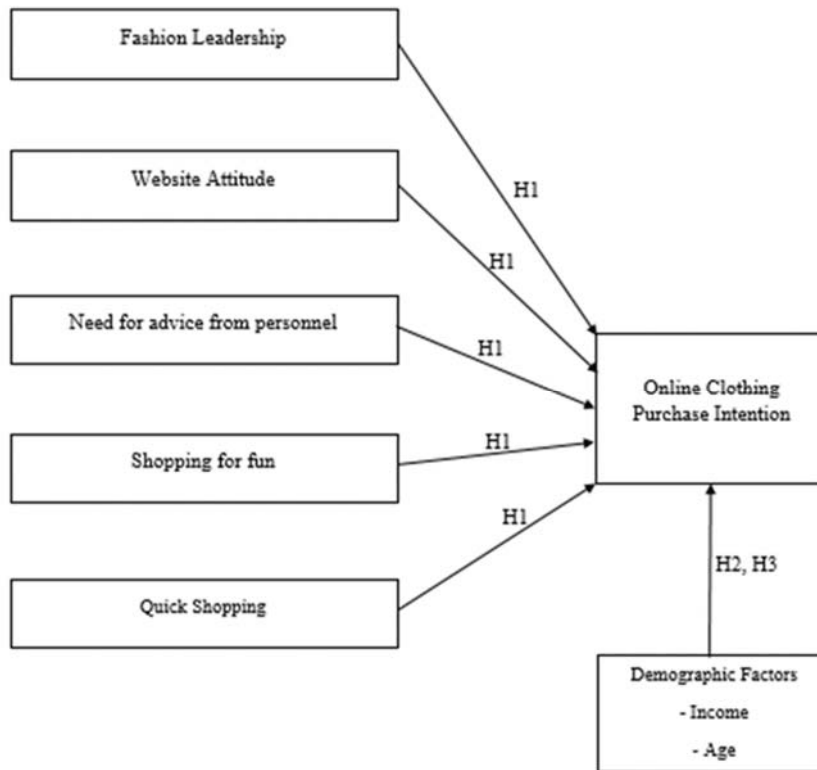
Research by Dennis et al. (2002) mentioned that many shoppers consider offline shopping to be more

fun than online shopping. Bloch et al. (1986) suggested that clothing as a product having the potential for entertaining ongoing search among consumers. Scarpi (2006) provided that hedonic-shopping oriented consumers (i.e. shopping for fun) will regard purchasing clothes online as less enjoyable and less likely to shop for apparel online. Overby and Lee, (2006) explained that buying is an outcome of enjoyment experienced by the shoppers. Hedonic motivations of shopping associates with the desire for fun, entertainment and escapism (Babin et al., 1994). Moreover, the hedonic motivations affect the impulse of buying behavior and intention (Yu and Bastin, 2010)

Quick Shopping and Online Clothing Purchase Intention

The influence of time-saving shopping on consumers' behavior in shopping was approved by many researchers in the past (Jacoby et al., 1976). Customers who put the time-saving in the first place when shopping want to complete the shopping trip as fast as possible to save more time and hence, they prefer to shop at the store where they can shop easily and quickly. Kim and Kim (2004) showed that many consumers accept the fact of quick shopping can be done more efficiently and conveniently on the internet. Davis and Vollmann (1990) argued that the limitation in amount of time attainable for a customer to become more impatient to do time consuming shopping.

Conceptual Framework



Research Hypotheses

H1_o: Online clothing purchase intention is not influenced by fashion leadership, website attitude, need for advice from personnel, shopping for fun and quick shopping.

H1_a: Online clothing purchase intention is influenced by fashion leadership, website attitude, need for advice from personnel, shopping for fun and quick shopping.

H2_o: There is no significant difference in online clothing purchase intention when segmented by income.

H2_a: There is a significant difference in online clothing purchase intention when segmented by income.

H3_o: There is no significant difference in online clothing purchase intention when segmented by age.

H3_a: There is a significant difference in online clothing purchase intention when segmented by age.

Methodology

In this study, the descriptive research method was used with quantitative approach to test the hypotheses. Sekaran (2009) mentioned that the descriptive research interprets the characteristic of target respondents or an occurrence in some particular situations. Comfrey and Lee (1992) suggested that “the adequacy of sample size might be evaluated very roughly on the following scale: 50 - very poor; 100 - poor; 200 - fair; 300 - good; 500 - very good; 1000 or more - excellent”. The sample size of 300 was adopted from the previous study of Comfrey and Lee (1992). According to ECommerce - Thailand (2018), the major Thai ecommerce users of fashion segment are in the age range of 25-34 years. By analyzing those age ranges, the researcher found that the majority of ecommerce users for fashion segment in Thailand are working people. The aim of Pomelo fashion is to offer women everywhere their best look to become their best selves (POMELO Fashion, 2013). Thus, the researchers set the targeted population in this study as working-class Thai female customers. The researchers selected three A-graded office buildings namely, Sarthon Square, Bhiraj Tower and G Tower, from the central business districts of Bangkok based on Office Space Bangkok website (<http://officespacebangkok.com/property-type/grade-a/>) for collecting the samples. Survey method by distributing self-administered questionnaires was applied to collect the data. The data were collected from 300 respondents from three selected office buildings.

The questionnaire includes eight parts; screening question, fashion leadership, website attitude, need for advice from personnel, shopping for fun, quick shopping, online purchase intention and demographic with five-point likert scale to measure. The sampling is the process of selecting a number of units for a study in such a way that the unit represents the larger group from which they were selected (Gay and Diehl, 1996). The researchers



applied the non-probability sampling method with purposive, convenience and quota technique to find the sampling unit since the total population is unknown. The researcher selected the respondents who had experience with POMELO by distributing 100 questionnaires equally at three selected office buildings, Sarthon Square, Bhiraj Tower and G Tower, in Bangkok, on weekdays (Monday to Friday) 9:00 am to 01:00 pm and weekend (Saturday to Sunday) 9:00 am to 01:00 pm within February 2019.

The multi linear regression method and ANOVA test were used to analyze the hypothesis testing with the collected data.

Findings

With the data collected from the pretest, which was conducted with 50 respondents, the Cronbach's alpha test was carried out to estimate the overall consistency of the variables. The alpha values of all independent variables and a dependent variable are greater than 0.6 which can be concluded that all questionnaires are reliable to apply for this research.

All the participants of this survey were only Thai women since the target group is Thai female customers of POMELO fashion brand. The majority of the respondents are in the age range of 26-30 years which represents 49.7% (149 respondents) of the total respondents. Majority of the respondents has the income level of 20,001-30,000THB

Table 1: Reliability Test

Variables	Alpha Test
Fashion Leadership (FL)	0.954
Website Attitude (WA)	0.891
Need for Advice from Personnel (NAP)	0.721
Shopping for Fun (SF)	0.754
Quick Shopping (QS)	0.903
Online Clothing Purchase Intention (OCPI)	0.822

Summary of Hypothesis testing

According to the conceptual framework, there are three hypotheses were included in this research. Hypothesis one was analyzed by the Multi Linear Regression (MLR) method and the rest two hypothesis, H2 and H3, were tested by Analysis of Variance (ANOVA) method.

Discussion

The null hypothesis of hypothesis one, H1₀, is rejected because the significant level of the regression model is 0.000 (<0.05). It means that at least one out of five predictors, fashion leadership, website attitude, need for advice from personnel, shopping for fun and quick shopping, has influence on the online clothing purchase intention. The correlation coefficient value (R) of hypothesis one is 0.897 which shows that the predictors have strong positive correlation to the dependent variable. The significant levels of shopping for fun and quick shopping are 0.137 and 0.252, respectively, which are greater than 0.05. Thus, shopping for fun and quick shopping do not have significant influence upon online clothing purchase intention.

Based on the result of hypothesis two, the significant level is 0.000 which is less than 0.05. Therefore, the null hypothesis is rejected and the researchers noticed that the online clothing purchase intention has significant difference when segmented by income. The respondents with the income level of 10,001-20,000THB, with the mean values of 4.09, have the highest mean value of online clothing purchase intention than the other income levels.

From the result of hypothesis, the null hypothesis, H3₀, is rejected ($p=0.001<0.05$) and there is a significant difference in online clothing purchase intention when segmented by age. The respondents with the age level of 26-30years, with the mean values of 3.98, have the highest mean value of online clothing purchase intention than the other age levels.

Recommendation

According to the results of hypothesis one, there is a strong positive influence of fashion leadership, website attitude, need for advice from personnel, shopping for fun and quick shopping on online clothing purchase intention. Need for advice from personnel has the strongest positive correlation ($\beta = 0.342$). Thus, the researchers would like to suggest the company to

provide virtual personal stylist or virtual assistant for choosing apparel by using AI technology on the website. It will be more convenient for the shoppers to ask for the advice until they feel satisfied. Moreover, shoppers will be less stressed to ask advice from virtual assistant than asking from the real human personnel. The company should pay attention to their website design to be innovative and updated since the second most influencing variable is website attitude ($\beta = 0.331$). Using high quality photos, interesting contents and user-friendly website layout will make the customers see the website more fascinating to shop. Due to the positive influence between fashion leadership and online clothing purchase intention, the researcher would like to suggest the company to create a community in social media where the customers can stay updated with the new fashion and can discuss about the brand in order to stimulate the fashion innovativeness and fashion opinion leadership.

From the results of hypothesis two and three, the researcher found that there are significant differences in online clothing purchase intention when segmented by income and age level. The female young adults with the age between 26-30 years old and an approximate income level of 20,001-30,000THB are the majority of respondents for this study. Thus, POMELO Thailand could use this particular information to develop product strategy to focus on their marketing resources on this specific group of customers. In addition, another alternative would be to plan and implement new growth strategies to develop new markets, in this case they should try to attract more clients who are not in their majority group such as group of people who have higher income as they tend to have higher purchasing power.

Future study

In this study, the researchers aimed to investigate the factors influencing online clothing purchase intention toward POMELO fashion website in Thailand. The results of this investigation have quantities of confinements which may not relevant to the clients from geographic locations other than Bangkok, Thailand. The further investigation should extend this research to cover more geographic areas in order to more understand more influence of the factors on the online purchase intention.

Different predictors might have influence on online clothing purchase intention, such as perceived risk, brand awareness, etc. should be explored by further studies. Different research methodology should be added in the future study to obtain the deeper understanding. Additionally, demographic factors other than age and income levels are recommended to consider for future study.

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Finally, this research focus only on POMELO fashion, thus, the conceptual framework of this study can be applied on other different clothing ecommerce platforms, such as ZARA, H&M, etc. to understand more about the online clothing purchase intention.

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EXPLORING THE RELATIONSHIP BETWEEN AGE EDUCATION LEVEL WITH INDIVIDUALS' PREFERENCE TOWARDS PERSONAL FINANCIAL PLANNING: THE CASE OF BANGKOK

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Abstract

The study investigates whether age and education level relate to individual's preference towards financial planning which includes channel, goals, types of financial plan and influencers. Survey questionnaires were conducted in Bangkok during August to November 2018 with 427 valid responses, from multiple age groups. Hypothesis testing was performed using Pearson Chi's Square. Results showed that generation was associated with goals and influencers of personal financial planning, while education gap was associated with goals and types of personal financial planning. Additionally, education played a role in enabling individuals to understand the process of personal financial planning, while individuals, regardless of generations, tended to prefer having personal financial advisors to guide them through personal financial planning process. Future research should focus on establishing an understanding on how each age group with different education level managed personal financial planning as well as the importance of financial literacy and its relationship with education level.

Keywords – *Generations, Financial literacy, Scope of personal financial planning, Goals of personal financial planning, Types of personal financial planning, Economic factor and Personal financial planning*

Introduction

Financial planning has been one of the important national agenda during the past few years. At the national level, the Bank of Thailand has been conducting the Financial Literacy survey in line with OECD guidelines, while several organizations have been launching educational initiatives targeting at financial literacy to create awareness and urge Thai people of all ages to take control of their personal financial planning. Several banks, for instance, have financial literacy program as part of their corporate social responsibilities, while there are many free on-line resources from the SET education corner from basic topics of financial planning to 24 hours knowledge channel for investors.

Despite the aforementioned efforts, financial literacy and financial planning remain key challenge for Thailand. According to the financial literacy survey in 2016, conducted by the Bank of Thailand, the overall score for financial skill was slightly below OECD average of 62.9. Further breakdown showed that Thai scored well below the average for financial knowledge, recording 48.6 points, compared with 55.7 reported in

2015 and 65.7 being the average score of countries participating in the OECD survey. In terms of financial behaviors and financial attitudes, the overall scored were slightly above average at 62.2 and 76.0. The most notable finding was that people did not plan over the long-term and were more likely to over-spend in the short-term (The Bank of Thailand, 2018).

Such finding is consistent with the work of Ngamchan (2016), who reported that about 70 % of the respondents in the pilot study did not plan for their retirement, while 50% reported that they would start planning when they were 40-50 years old. Nevertheless, there had not been a widespread research on individuals' preference towards financial planning. For instance, Aujirapongpan and Kao-jean (2015) studied factors influencing personal financial management of 310 Chumphon Provincial Police Commissioners. The results were specific to Government Officers. The work of Srisuwan, Churin, and Suksri (2014) studied the relationship between financial management factor and personal financial planning behavior of commercial bank customers in Surathani. Their research found significance level of understanding



of financial management and the influence towards financing planning.

For respondents in Bangkok Metropolitan area, Sithipan (2009) explored demographic and external factors influencing financial planning among population in Thailand. They found that education was related to financial planning goals and the types of financial plans. It is important to note that their work focused mainly on 20-30 age group. Furthermore, the respondents were mainly graduating from Bachelor degree.

More recently, Kowhakul (2016) studied personal financial management and saving behavior in Bangkok. The main group of respondents for this study graduated from Master Level and were largely female. This study found that age did not have any relationship with saving behaviors or the influencer of saving decision.

With the aim to contribute to the existing empirical research in Thailand, this study extended the research framework of Sithipan (2009) by expanding the target respondents' age group and education level in Bangkok Metropolitan areas. The results of this study could be used to cross validate the National Financial Literacy survey and provided information for policy makers, service providers and individual to obtain insights into key factors that could facilitate financial planning.

Literacy Review

Financial Planning has received significant attention from academic and business communities, particularly in the aftermath of the Global Financial Crisis in 2008. Since then, there had been a general trend towards self-funded retirement, with less reliance on the state and long with changes in regulations in the financial markets around the world to address financial crises and market integrity (Brimble, Murphy and Gupta, 2012).

In general, financial planning can be defined as a process that helps maximize an individual's potential for meeting life goals through managing relevant elements of the individual's personal and financial circumstances, which may include the need for or desire to: develop goals, manage assets and liabilities, manage cash flow, identify and manage risks, provide for educational needs, achieve financial security, preserve or increase wealth, identify tax considerations, prepare for retirement, pursue philanthropic interests and address estate and legacy matters (CFP Board, 2018).

In Thailand, the definition of financial planning has been more closely associated with personal finance. According to Sektrakul (2010), knowledge about personal finance is vital for individual's sustainable and quality ways of lives. Financial

Planning could comprise five elements, namely asset and liabilities management, investment management, risk management, retirement management, tax planning and inheritance planning (Auijiraponpan and Kao-ian, 2015).

Based on the framework proposed by Sithipan (2009), this study investigates the relationship between age and education level on

four elements of financial planning namely channel, goals, types of planning and influencers. Each element is discussed below.

Channel)CP(

Channel of Financial Planning could be broadly grouped into two categories namely self-initiated and serviced through financial advisors with established banks, asset management or insurance companies both in Thailand and abroad (Sithipan, 2009).

Services through the latter is often provided by professional financial advisors, holding internationally recognized certificates such as Certified Financial Planners (CFP®) or other certification such as Chartered Financial Analyst (CFA), chartered financial consultant)ChFC (or registered investment advisor)RIA(.

According to the Household Financial Survey released by CFP boards in 2012, upper middle class American could be separated into three groups. The independent accounted for 33 percent of the respondent and was characterized by self-initiation in financial planning, including information research and own decision-making process. The second group accounted for 38% of the respondents. Although they were aware of financial planning, this group faced certain challenges and required support from professional financial planner. The last group, representing 29% of the respondents felt that they required professional support to give them confidence for financial planning.

Based on this observation, it is hypothesized that age and education level are related to channel of financial planning with sub-hypothesis on self-planning and using professional services from financial planner.

Goals)GP(

Financial Planning incorporates three types of goals, namely short-term, medium term and long-term goals. Inlakorn (2005) defined goals of financial planning as follows. Firstly, the short-term goal is one in which in can achieve the goal in one to two years . Secondly, the medium term goal refers to ones that could be achieved within two to five years. Examples of the medium term goals include funding ones' education or purchasing a car. Finally, the long-term goal relates to financial plans that require more than five to ten years to accomplish. Examples of long-term goal include marriage, retirement planning or estate planning.

Recent evidence from the Thai Financial Literacy Survey suggested that there was an association between age and education on the range of financial planning goal. According to the survey, respondents with lower level of education and younger in age did not have proper budgeting control. Neither did they plan their financial goal over the long-term. Therefore, it is hypothesized that age and education level are positively related to financial planning goals.

Types of Financial Planning) TP(

Hongthong)2008 (suggested that financial planning might cover six types of planning namely saving, investment, debt-management, risk management, retirement and tax planning. Existing empirical evidence in Thailand suggested that age and education level were related to comprehensiveness of financial planning. More specifically, young working adults were challenged by overspending habits and were not able to manage their assets and liabilities in the short-term. Adults aged between 35 – 60, despite having a higher level of financial knowledge, were not able to plan investment and saving appropriately to meet with multiple priorities.

Therefore, this study hypothesizes that age and education are related to types of financial planning.

Influencers of Financial Planinnng)IP(

Household financial survey (2012) suggested that individuals may need advices regarding financial decisions. Influencers of financial planning may include ‘self’, ‘parents’, ‘friends’ and ‘professional’ (Sithipong, 2009). Prior research suggested that individuals tended to make financial planning decision independently without inputs from other people (Kowhakul, 2016), particularly for individuals with higher level of education and years of experience.

To understand the level of influence among different group of people, this study hypothesizes that age and education level influenced how individuals make financial decision.

Research Framework and Methodology:

Conceptual Framework

In line with the framework of Sithipong (2009), this research hypothesized that age and education were related to the proposed four elements of financial planning.

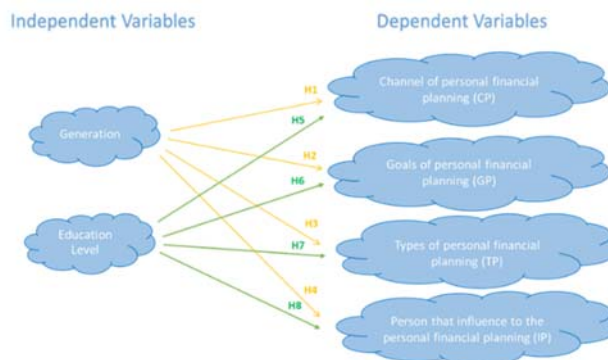


Figure 1 :Conceptual Framework

No.	
H1	Age is associated with Channel of Financial Planning.
H2	Age is associated with Goals of Financial Planning.
H3	Age is associated with Types of Financial Planning.
H4	Age is associated with Influencers of Financial Planning.
H5	Education is associated with Channel of Financial Planning.
H6	Education is associated with Goals of Financial Planning.
H7	Education is associated with Types of Financial Planning.
H8	Education is associated with Influencers of Financial Planning.

Table 1: Defined Hypothesis

Research methodology

The survey questionnaire was administered during August – October 2018. The target respondents of this study are residents in Bangkok Metropolitan areas from multiple age groups and education levels. According to Cochran (1996), the sampling size for this study, calculated at 95% confidence level is equivalent to 384. With the aim to expand the age and education level of the respondents, this study targets the number of respondents at 400.

On-line survey questionnaires have been developed and distributed through simple random sampling and convenience sampling methods. The questionnaires were shared among researchers’ friends on social network, instructors’ and professional investment groups such as CFA Society of Thailand. After validation



of all submission, the total responses of 427 were valid for data analysis.

Descriptive statistics was performed, while Chi's Square was used to test the hypothesized relationship among age and education level to four elements of financial planning.

Reliability Test

To test the validity of the questionnaire, pilot test was performed during September 2018 for 30 sets. Cronbach's Coefficient Alpha was used to test the instrument's validity. Results are reported in table 2.

Variables	Cronbach's Alpha	Number of items
Channels (CN)	0.848	2
Goals (G)	0.829	2
Types (T)	0.789	4
Influencers (I)	0.896	3

Table 2: Reliability Test

Results

Demographic Profile Summary

The demographic profile of the respondents is presented in Table 3. In terms of gender, the majority of the respondents is female, accounting for 58%. The age group is equally distributed among each age group, namely 18-32 years old, 33-47 years old and above 48 years old.

The majority of the respondents held bachelor's degree (49%) and master's degree (46%). The combined percentage accounted for 95% of the respondents. In terms of income level, the majority of the respondents earned monthly income in the range of THB 20,000 to THB 100,000.- with the combined percentage accounting for 95% of the respondents.

Demographical Data (N = 427)		N	%
Gender	Male	179	42
	Female	248	58
Age	18-32 years old	145	34
	33-47 years old	142	33
	Above 48 years old	140	33
Education	Bachelor's degree	209	49
	Master's degree	196	46
	Doctoral Degree	21	5
Marital Status	Single	307	72
	Married	120	28
Monthly Income	Below 20,000 Baht	13	3
	20,001-45,000 Baht	141	33
	45,001-70,000 Baht	145	34
	70,001-100,000 Baht	120	28

100,001-150,000 Baht	4	1
More than 150,000 Baht	4	1

Table 3: Demographical Profile Summary

Frequency Distribution

Examining the results from the four components of financial planning revealed that the majority of respondents independently planned their financial planning, accounting for 84%. 15% used financial planning by other organizations, while only 1% of the respondent used the services provided by wealth management providers or financial advisors.

In terms of the range of financial planning goals, the majority of the respondents (79%) responded that the goals of their financial planning were mainly short-term and medium-term goals, while only 21% responded that financial planning supported their long-term goals.

Looking at the types of financial planning, the highest level of responses were investment planning, followed by saving and debt management with combined percentage of responses of 29%, followed by risk management (24%), retirement planning (7%) and tax planning (5%) respectively.

Finally, the majority of respondents independently made decision on their financial planning with the response rate of 83%. About 14% of the respondents may receive advices from family members with minimal numbers of respondents, relying on friends or financial advisors.

	N	%
Channels (CN)		
Self-planning	359	84
Use services provided by wealth management providers	4	1
Use services provided by other organizations	64	15
Goals (G)		
Short-term	167	39
Medium-term	171	40
Long-term	90	21
Types (T)		
Saving	64	15
Investment	149	35
Debt Management	60	14
Risk Management	102	24
Retirement Planning	30	7
Tax Planning	21	5
Influencers		



Self	354	83
Family Members	60	14
Friends	4	1
Financial Advisors	9	2

Table 4: Summary of responses to four elements of financial planning

Inferential Analysis

To test all eight hypotheses, Chi Square was performed at 95% confident level. The null hypothesis would be rejected when p is higher than 0.05. The results of inferential analysis are shown in Table 5.

Out of all eight hypotheses, four hypotheses were supported. The results indicated age was associated with financial planning goals and influencers, while education level related to goals and types of financial planning.

Hypotheses	Chi'Square (p)	Results
H1 Age -> Channel (CN)	0.565	Not Supported
H2 Age -> Goal (G)	0.000	Supported
H3 Age -> Type (T)	0.709	Not Supported
H4 Age -> Influencers (I)	0.000	Supported
H5 ED -> Channel (CN)	0.965	Not Supported
H6 ED -> Goal (G)	0.020	Supported
H7 ED -> Type (T)	0.455	Supported
H8 ED -> Influencers (I)	0.034	Not Supported

Table 5: Summary of inferential analysis

Discussion

Findings of this study shared similarities with prior empirical evidence, particularly in terms of the relationship between education level and goal and types of financial planning (Sithipan, 2009). Kowhakul (2016) found that various demographic level, including education, income level, professions were associated with saving behaviors of residents in Bangkok and vicinity areas.

In terms of the hypothesized relationship on age, the results of this study were not consistent with the work of Sithipan (2009) or the work of Kowhakul (2016), through which age did not show any statistical providers or policy makers. Alternatively, the scope of the study could be adjusted to focus on a particular target group such as Millennial, Generation

relationship towards financial planning or financial management and saving behaviors.

When comparing these inconsistent observations with the Thai Financial Literacy Survey released by the Bank of Thailand in 2018, the influence of education towards financial literacy and financial behaviors were clear, particularly the lack of knowledge and inadequate household financial planning. The influence of age was more evident in terms of spending patterns, and goals of financial management. Generation Y or individuals aged between 18-32 tended to spend for short-term satisfaction without anticipating the consequences on the long-term (The Bank of Thailand, 2018). Lack of proper financial planning had been noted among age group over 47 years and above or Baby Boomer.

These differences in findings warranted further studies, which would be discussed in recommendation.

Conclusion

This study investigated the relationship between age and education level towards four elements of financial planning, namely channel, goals, types of financial planning and influencers. Based on the survey questionnaires among 427 respondents, the study found that age was associated with goals and influencers of financial planning, while education level was associated with goal and types of financial planning. The results of the study offered partial support to prior academic work in this area, which found that education level was associated with financial planning particularly in terms of saving behavior and goal and types of financial planning. Age, however, did not show any statistical significance in the previous study, leaving rooms for future research.

Limitations and Recommendations for future research

This study noted the following limitations. Firstly, although the study expanded target group of respondents to include various age group, the study did not conduct a detailed analysis by age group, which could provide additional information to deepen understanding in financial planning practices among different generations. Secondly, the research construct did not consider other demographic variables such as profession, monthly income or marital status into consideration. Thirdly, there is no detailed breakdown on disciplines of study to understand the association between education and core elements of financial planning.

For future research, it is recommended that research scope is narrowed to focus on one or two particular aspects of demographic factors to provide relevant and beneficial action points for service

Y or Generation X to comprehensively understand factors that influenced their financial planning.

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An Evaluation of the Factors Affecting Brand Equity towards a Skin Care Product in Bangkok, Thailand

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ABSTRACT

The research aims to examine the factors affecting brand equity towards a skin care product in Bangkok, Thailand. The researchers applied the quantitative method by compiling questionnaires from 300 customers of a skin care product in Bangkok, Thailand. The researchers surveyed at 3 branches of the selected skin care brand located in Siam Paragon, Central World, and Central Chidlom. In this study the researchers applied 3 steps of non-probability sampling techniques consisting of judgement sampling, quota sampling, and convenience sampling. The conceptual framework is developed based on six variables which are perceived quality, brand awareness, brand image, brand association, and brand loyalty as the independent variables and brand equity as the dependent variables. Multiple regression analysis was applied to examine the hypotheses of the study. The result demonstrated that all variables have significant influence on dependent variable.

Keywords: perceived quality, brand awareness, brand image, brand association, brand loyalty, and brand equity.

Introduction

In the current market situation, customers are looking for eco-accommodating products which are free from the harsh chemicals harmful for their health and the environment. This is a main consideration for the development of natural healthy skin care industry all over the world. The information from Statista.com, describing the estimated size of Thailand skin care market from 2010 to 2023, showed that the revenue in the Skin Care segment in 2018 is 1,834.70 million in U.S. dollars. By 2024, Thailand skin care market is estimated to reach 2,198.80 million in U.S. dollars. Therefore, the skin care market is expected to grow annually by 3.4% (Compound Average Growth Rate 2019 - 2023). Furthermore, L'occitane is the one of top five ranking in premium brand ranking by website brandindex.com.

L'occitane was established in 1976 by French entrepreneur Olivier Baussen, who started refining rosemary basic oil to sell locally. He expanded his production from oils to cleansers to creams, taking inspiration and motivation from the land of his childhood to convey natural beauty products to homes across the world. Characteristic of the L'occitane group is its focus on pure natural ingredients in their products. The products are available in 90 countries worldwide through 3,285 retail outlets, including 1,555 stores operated directly by the group.

Lassar et al. (1995) characterized brand equity as the improved knowledge and attractive quality of brand including being pleased with the product. The specific objectives of this study are as follows:

Generally, brand equity is the consumer's recognition of the overall primacy of a product which supports brand in comparison with the other brands. The data from Attest Technologies Ltd. described that 69% of customers would like to choose the well known and trusted brand when the customers were asked whether they prefer to purchase the well know product or the product with relatively lower price. Therefore the researchers would like to study the factors effecting brand equity and brand loyalty which to influence the customers to purchase more product assuring that they would stay with company for the long time.

The researchers' decided to provide a fuller understanding and benefit for the brand by finding the factors which have an influence on brand equity. There are many variables that might influence on brand equity. However this research focused on the factors namely perceived quality, brand awareness, brand image, brand association, and brand loyalty to examine their effect on brand equity. This will help the brand to understand more about brand equity leading to expand the market by increasing sales volume and revenues. Moreover, this research aims to enhance the value of the brand by identifying factors affecting the brand equity.

Research Objectives

The major objective of this study is to investigate the factors influencing brand equity towards an international organic skin care brand in Bangkok, Thailand.

To investigate the effect of perceived quality, and brand awareness on brand loyalty.

To investigate the effect of perceived quality, brand awareness, brand image, brand association, and brand loyalty on brand equity.

Literature Review

Brand Association

Brand association can be defined as the customer thought about the brand, whether positive or negative directions and this will associated with the brain memory (Emari et al., 2012). In addition, brand association performs as an data gathering tool to execute brand differentiation and brand augmentation (Osselaer and Janiszewski, 2001). Generally, any data that come over with brand association is associated to the brand name regarding customer review, revealing the brand image (Keller, 1993; Romaniuk and Sharp, 2003).

Brand Awareness

Brand awareness can be defined as the emotion of consumers that how they associated to the brand with the specific product that they intend to own. Brand awareness is essential for the communications process emerging a highest awareness (Macdonald and Sharp, 2003; Netemeyer et al., 2004). Brand awareness significantly impacts decision making of customer which will benefit to the brand (Chung et al., 2013; Huang and Sarigollu, 2011; Norazah, 2013a). In addition, brand awareness alludes to the power of a potential buyer to recognize or recall that the brand is a member of a certain product category (Aaker, 1991).

Brand Equity

Brand equity can be defined as customers perception in confident towards a specific brand compared to competitor brands which enhances the loyalty of consumer and willingness to pay a premium price for the brand (Lassar et al., 1995). Since its appearance during the 1980s, brand equity has been one of the principle needs in marketing research (Marketing Science Institute, 2002). It is significant for the organizations enthusiastic to make strong brands in order to acquire sustainable competitive advantages and to differentiate their products (Aaker, 1991; Keller, 2003). Lassar et al. (1995) defines brand equity as the enhancement in the apparent utility and attractive quality of a brand name presenting a product. In general, it is the purchaser's perception towards the overall primacy of a product conveying the brand name when compared to different brands.

Brand Image

Brand image can be defined as the customers' utilization of the brand to reveal their emblematic significance of consumption and identify self-expression (Lau and Phau, 2007). Brand image is well-comparing the brand that the purchaser currently utilizing alternate brands in a similar classification.

known to consumer that can assist the organizations to organize new brands and receive the offers of current brands (Burt and Davies, 2010; Diallo et al. 2013; Martenson, 2007; Wu et al., 2011). In addition, customers commonly associate the brands with the famous figures (Lau and Phau, 2007).

Brand Loyalty

Brand loyalty can be defined as the customer's repetitive purchasing behaviour over the time with a positive emotion, evaluation and/ or behavioural tendency towards the brand, label, evaluated option or product decision (Jagdish and Sheth, 1974). Likewise, brand loyalty impacts their buying decisions to the similar product (Ahmed, 2011; Huang and Huddleston, 2009; Lam, 2007; Martenson, 2007). In addition, customers become loyal to their favourite brands and stick to well-known brand names (Sun et al., 2004), as well as utilized it for social acknowledgment (Manrai et al., 2001). Consumers created brand loyalty by developing a positive outcome of brand equity which positively brand preference over different brands (Atilgan et al., 2005; Binninger, 2008; Ling, 2013; Vogel et al., 2008; Zhang et al., 2014).

Perceived Quality

Perceived quality can be defined as the customer judgment about the overall product superiority (Zeithaml, 1988). The most effective way for brand to expand perceived quality is to improve product quality. In addition, the brand has to connect the quality through quality sign in the marketing operation. Thus, customer notices the brand quality through the direct experiences with the brand and the information exist in the market environment (Groenroos, 1984; Yoo et al., 2000). Aaker (1991) also suggested that perceived quality is an association that is usually vital for brand equity.

Related Literature Review

One of the most accepted classifications of brand equity is the one proposed by Aaker (1991), who distinguished it into five dimensions: namely, brand awareness, brand associations, perceived quality, brand loyalty and other brand-related assets. In practice, only the first four dimensions can be analyzed in buyer-based brand equity researches, since the fifth dimension, other brand related assets, refers to licenses, distribution channels of the organization and different aspects not straightforwardly identified by the customers. Yoo et al. (2000) built up the Overall Brand Equity Scale and four variables from this scale were embraced to gauge the customer based brand equity. Three additional variables were created for this investigation. This consumer-based strategy for estimating brand value encourages the meaning of brand value from the consumer perspective by

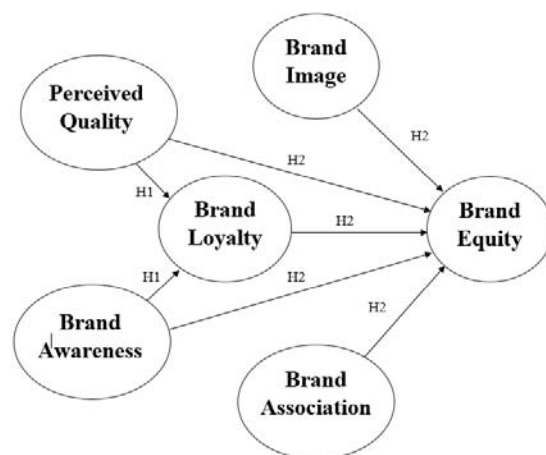
Gil et al. (2007) described that information provided by the family to the young adults has an essential impact on brand equity. However, the

researchers stated that brand awareness and perceived quality shows higher influence than brand information towards brand equity of young adult.

Research Framework and Research Hypotheses

The conceptual framework was created based on six variables which are perceived quality, brand awareness, brand image, brand association, and brand loyalty as the independent variables and brand equity as the dependent variables.

Figure 1: *The research model of “Conceptual framework”*



The hypotheses of this study are as follows:

Hypothesis 1

H1_o: Perceived quality, and brand awareness have no significant influence on brand loyalty.

H1_a: Perceived quality, and brand awareness have significant influence on brand loyalty.

Hypothesis 2

H2_o: Perceived quality, brand awareness, brand image, brand association, and brand loyalty have no significant influence on brand equity.

H2_a: Perceived quality, brand awareness, brand image, brand association, and brand loyalty have significant influence on brand equity.

Research Methodology

The researchers applied descriptive research which aims to answer who, what, when and where questions and to describe the characteristic of population or phenomenon (Zikmund, 2003). Also, the researchers used survey research method for collecting information by asking questions through questionnaires (Babbie, 1990). This study conveyed questionnaire to collect the primary data collected at the 3 branches of L'occitane brand, which consists of Siam Paragon, Central World, and Central Chidlom according to the ranking data of 10 popular department

stores in Bangkok, Thailand (www. topten thailand.com). This research focused on customers who have consumed L'occitane brand as well as the customers interested in L'occitane brand. Roscoe (1975) stated that the sample size between 300 samples is considered satisfactory. Therefore in this study the total sample sized is 300 respondents which is reasonable quantity to get satisfactory outcome.

In this study the researchers designed to apply 3 steps of non-probability sampling techniques. Sharma (2014) defined that non-probability sampling is a technique, which the samples are gathered in a process that does not give all the individuals in the population equal changed of being selected in the sample. In this study the researchers designed to apply 3 steps of non-probability sampling techniques which consist of judgement sampling, quota sampling, and convenience sampling as following;

Step 1: Judgement sampling

Judgement sampling is selected based on the researchers's judgement for appropriate characteristics required to be the sample member. In other words, the researchers choose those sampling who are right to fit on researchers's decision with respect to attributes and representation of a population to participate in this study (Zikmund, 2003). In this study, the researchers focused on 3 branches of L'occitane brand consists of Siam Paragon, Central World, and Central Chidlom located in the middle of Bangkok, Thailand.

Step 2: Quota sampling

Quota sampling is well-known and mostly utilized techniques, especially in marketing field. Quota sampling aim to acquire interviews from a particular number of respondents that match to the population (Rivers and Bailey, 2009). Therefore, the researchers applied quota sampling to divide the population into 3 group at different L'occitane branches. The population of 100 respondents are surveyed at each branch.

Table 1: The summary of populations by using Quota Sampling Method

L'occitane branch	Sample Size
Siam Paragon	100
Central World	100
Central Chidlom	100
Total	300

Step 3: Convenience sampling

Convenience sampling is a non-probability sampling technique in which subjects are selected based on their convenient accessibility and proximity to the researchers (Thornhill, 2012). The researchers collected data from customer who are convenient to answer the questionnaires.

Reliability test



The researchers distributed 50 questionnaires as a pilot test in January 2019. The researchers applied Cronbach's alpha to analyze the data of pretest.

Table 2: The summary of Reliability analysis by using Cronbach's alpha test

Variables	Cronbach's alpha test (α -test)	N of Items	N
All Questions	0.977	18	50
Perceived Quality	0.917	3	50
Brand Awareness	0.903	3	50
Brand Image	0.891	3	50
Brand Association	0.924	3	50
Brand loyalty	0.946	3	50
Brand Equity	0.929	3	50

Based on the result from Table 2, each variable has alpha value more than .60. Therefore, all the questions are reliable to apply in this study (Cronbach, 1951)

Data Collection and Research Instruments Questionnaire

In this study, the questionnaire can be divided into 4 parts. Part 1 is the screening question that the

Table 3: The summary analysis of demographic factors and general information by using Frequency and Percentage

Variables	Major Group	Frequency (f)	Percentage (%)
Demographic factors			
Age (year)	26 to 30	133	44.3
Gender	Female	288	96.0
Income level (per month)	25,001 to 35,000 baht	98	32.7
General information			
Frequency of purchasing (per year)	3 to 4 times	151	50.3
Purchasing budget (per one purchase)	2,001 to 3,000 baht	86	28.7

respondents have ever use L'occitane brand or not. Part 2 is the independent variables including perceived quality, brand awareness, brand image, brand association and brand loyalty. Parts 3 is the dependent variable namely brand equity. Part 4 is the demographic factors and general information of the respondents by means of age, gender, income level (per month), frequency of buying product in one year, and the approximate budget amount that they spend for one purchase. The researchers designs 5 point Likert scale (Rensis Likert, 1932) for the questions.

Data Collection

The period to collect the data is one month during 26 January 2019 to 23 February 2019 by asking the respondents if they are interested to participate in the survey. The researchers accommodate to approach customer with 3 branches of L'occitane brand which consists of Siam Paragon, Central World, and Central Chidlom. This study conveyed questionnaire by surveys to collect the primary data from 300 respondents which the mainly targeted customer of L'occitane brand.

Findings

Descriptive analysis of demographics and general information

According Table 3, demographic factors consists of age level, gender, and income level per month. The result showed that the highest percentage of respondent's age level is between 26 to 30 years' old which is equal to 44.3 % (133) of the total respondents. For the gender, the highest percentage of respondent's gender is female which is equal to 96% (288) of the respondents. For general information, the highest percentage of the frequency of purchasing per year is 3 to 4 times which equals to 50.3 % (151) of the total respondents. For purchasing budget per one purchase, the highest percentage of respondent purchased 2,001 to 3,000 baht which equals to 28.7 % (86) of the total respondent

Table 4: The summary analysis of Hypothesis Testing by using multiple regression

Hypothesis	Standardized Coefficients (β)	Level of Significant (p)	Testing Result
H1_o: Perceived quality, and brand awareness have no significant influence on brand loyalty.			
Perceived quality	.236	.000	Reject H1 _o
Brand awareness	.717	.000	Reject H1 _o
H2_o: Perceived quality, brand awareness, brand image, brand association, and brand loyalty have no significant influence on brand equity.			
Perceived quality	.154	.001	Reject H2 _o
Brand awareness	.232	.000	Reject H2 _o
Brand image	.210	.000	Reject H2 _o
Brand association	.154	.008	Reject H2 _o
Brand loyalty	.236	.000	Reject H2 _o

Hypothesis testing

According to the result of hypothesis one, the result from the level of significant of perceived quality, and brand awareness is equal to .00, which is less than .05 ($.00 < .05$). It means that null hypothesis (H1_o) was rejected. In addition, the highest standardized coefficient (β) is brand awareness which equals .717. The lowest standardized coefficient (β) is perceived quality which equals .236. Then, perceived quality, and brand awareness have significant influence on brand loyalty. It also supported by the previous study, Su J. (2016) studied about the relationships between factors of brand equity towards empirical evidence from fast fashion. The results indicated that there are significant impact of perceived quality, and brand awareness on brand loyalty, when customers are well known about the brand, or having satisfy of perceived quality on a brand, they are more prefer to develop brand loyalty toward the brand.

According to the result of hypothesis two, the result from level of significant of perceived quality, brand awareness, brand image, brand association, and brand loyalty is less than .05 ($p < .05$). It means that null hypothesis (H2_o) was rejected. In addition, the highest standardized coefficient (β) is brand loyalty which equals to .236 and the lowest standardized coefficient (β) is brand association and perceived quality which equals to .154. Then, perceived quality, brand awareness, brand image, brand association, and brand loyalty have significant influence on brand equity. It is also supported by the previous study of Sasmita et al. (2007) who studied about the effects of brand association, brand loyalty, brand awareness, and brand image on brand equity among young consumers.

The results confirmed that brand association, brand loyalty, brand awareness, and brand image simultaneously influence brand equity among young consumers in Malaysia.

Conclusion

This studied aimed to investigate an evaluation of factors affecting brand equity towards a skin care product in Bangkok, Thailand. The factors includes perceived quality, brand awareness, brand image, brand association, and brand loyalty. According to the results of hypotheses testing, the highest standardized coefficient (β) of hypothesis one is brand awareness and the highest standardized coefficient (β) of hypothesis two is brand loyalty. Therefore, brand awareness has the most significant influence on brand loyalty and brand loyalty has the most significant influence on brand equity. Thus, the researchers concluded that when brand awareness increase, brand loyalty will increase leading to increase the brand equity eventually. In order to support this conclusion, the second highest standardized coefficient (β) of hypothesis two is brand awareness which means that brand awareness has significant influence on brand equity as the second after brand loyalty.

Furthermore, demographic factors and general information are important to increase the brand equity. Based on Table 3, the results shows that the major group of customer from total respondents 300 peoples is female which equal to 96 % (288), in term of age the highest percentage is 26 to 30 years old which is equal to 44.3 % (133), in term of income level per month is in range 25,001 to 35,000 baht which is equal to 32.7 % (98). For general information factors, the highest percentage of



frequency of purchasing per year is 3 to 4 times, the highest percentage of purchasing budget per one purchase is 2,001 to 3,000 baht which equal to 28.7 % (86). From above results of demographic factors and general information are all need to consider as factors that might influence on brand equity.

Recommendation

From all the results of this study, L'occitane brand should focus on increasing the frequency of purchasing per year because brand awareness and brand loyalty have the most significant influence on brand equity. When the brand increases the frequency of purchasing per year means the level of brand loyalty increase because they keep come back to purchase this brand the same brand. In additions, when frequency of purchasing per year increasing it will effect to increase brand awareness also because when customers purchase they will have more awareness in brand because they have try the product, they saw the product, they can smell the product, and they use the product. The suitable strategy that brand should apply is to distribute the free testers to customers, by launching new product and giving the testers to attract current customers as well as new customers in order to create the desire to purchase the real size products. Furthermore, brand should focused on customers who purchase more than 3 to 4 times because they are the major group customer so if brand can increased their purchased it will help brand to increase brand awareness and brand loyalty. The way to increase purchasing, brand should develop the member systems for customers to collect the points and can change the points to received the original size product, this can motivated customer to increase their purchasing. From the analysis of general information by using Frequency and Percentage demonstrated that major group of customer age 26 to 30 years old have the highest percentage, so brand should create product of anti-aging because skin begins to slow production of important youth-boosting components and signs of ageing can start to appear so this factor can help to increase their purchasing.

Furthur study

As with many studies, the research was conducted in the middle of certain limitations. This research study focus on natural skin care product only so it has some unavoidable limitations that may concern to the finding. Based on the product nature, natural skin care product have different nature from other product thus, this study may not be able to apply to other type of product so it might support to this study to research in different brand and different geographic in term of related factor that will effect to brand equity it might worth further study.

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An Empirical Research of Brand Loyalty and Brand Equity Towards an Outstanding Coffee Shop in Bangkok, Thailand

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Abstract

Coffee is becoming one of the most popular beverages in Thailand, which reflected by increasing consumption throughout years. Coffee is not for awakening purpose but also becoming a trend for consumer as much as other type of beverages. Currently, coffee shop market is in highly competitive situation. Therefore, it is important to study the brand equity of coffee shops brands as it is the key driven factor to create competitive advantage in the market. The data was collected from a total of 300 respondents who regularly buy products/services at famous coffee shop brand. The non-probability sampling methods including judgment sampling, quota sampling and convenience sampling were applied to collect the data and Multiple Linear Regression was applied for data analysis in this study. The finding concluded that brand uniqueness and perceive quality have significant influence on brand loyalty. And brand association, perceive quality, and brand loyalty are factors significantly influencing brand equity towards the coffee shop in Bangkok, Thailand.

Keyword: Brand equity, Brand loyalty, Coffee shop, Bangkok, Thailand

Introduction

Coffee is the highest consumed beverage in developed countries. It is produced with many limitations in the developing world, which includes about 17 least developed countries. The coffee-producing nations are increasing their domestic consumption. China, Panama, Kenya, Senegal and the United States are considered the highest potential markets in the coming years. Coffee is not for awakening purpose but also becoming a trend for consumer as much as other type of beverages. Although, the coffee consumption is continuously growing, it is still very small when comparing to major drinkers around the world. There is plenty market space left for competitors and newcomers. Thai people interested more in fresh ground coffee which bring attention from companies to start their businesses in coffee. These movements affect the coffee market in Thailand to be more competitive. Currently, coffee shop market is in highly competitive situation and it's important to study about brand equity towards brands as it is key driven factor to create competitive advantage in the market.

Brand equity defined as a set of assets and liabilities related to a brand, its trademark, that adds to or subtracts from the value created by a product or service to a firm and/or to that firm's customers (Aaker, 1991) it's regularly the outcome of brand loyalty which encourage the brand to create its market share. In fact, there are 5 stages of brand experience that influence a positive brand equity including brand awareness, brand

recognition, brand trial, brand preference, and brand loyalty. The study described that brand equity is controlled by associated components combined. It is essential to understand those components to clearly figure the overview of brand equity. Components including brand loyalty, brand awareness, perceive quality, brand association, and other proprietary. (Aaker, 1991) The idea of the brand equity is very remarkable and more complicate than what it would seem. The generally accepted notion for a brand owner is that a better brand reputation in the market could create more income and goodwill comparing to the lesser known ones. There are many approaches and researchs created to find the concept of brand equity.

Many empirical researchs found that variables were direct and indirect influenced brand equity of particular brand. Buil, Martinez and de Chenatony (2013) found that overall brand equity will improve when there exists a higher level of perceived quality.

Perceived value and organizational association have a positive effect on overall brand equity. Contrary to expectations, brand personality has an insignificant influence on this construct (Mengxia, 2007). Finally, brand loyalty has a positive effect on overall brand equity. (Yoo et al., 2000)

As reported by Bangkok Post, in recent years, Thailand coffee market is valued over 20 billion baht, with a growth rate of 20-30% a year the coffee shop has seen increase in popularity due to a change in consumer behaviors. Thailand's Coffee market expected to get over 25 billion within 2019 with an average of 200 cups of coffee a year for

individuals.

Since Café Amazon is one of the most popular coffee shops, their business has started and developed by Thai company. The study is significant in order to identify the relationship on how sources of brand loyalty reflect brand equity. The study intends to see what is the critical factor that satisfy customer needs and what exceeds customers' expectations by giving a significant evidence of what is important in the customers' view.

Research objective

The objective of this study is to find out the relationship among the factors affecting brand loyalty and brand equity of Café Amazon coffee shop at Siam Paragon and Central World. The research focused on brand association, brand personality, perceive quality, brand uniqueness, brand loyalty, and brand equity. For this reason, a set of specific research objective was proposed as follows:

To study the influencing factors of brand associations, brand personality, brand uniqueness, and perceive quality on brand loyalty towards Café Amazon.

To study the influencing factors of brand associations, perceive quality and brand loyalty on brand equity towards Café Amazon.

Literature Review

Brand Association

Brand association is recognition towards the brand

Brand Uniqueness

Brand uniqueness is defined as the level of differentiation between brands in customer mind, it also indicates the degree of product relation among the competing brand in the market (Romaniuk and Sharp, 2003). It is difficult to bring customer attention, creating consumer preferences and

commitment towards the brand when the brand is not

unique or different from the competitors. Moreover, brand uniqueness is considered as a core consumer-based brand equity facet (Netemeyer et al., 2004). The variety of products among competing brand, features of goods may cancel each other out as they are offering tiny differences in its product. On the other hand, uniqueness in terms of features and appearance could bring attention and help the brand to be differentiated from competitors. Performance is influenced by the desire for newness which is related to creative choice anti-conformity (Barnes and Lea-Greenwood, 2010; Shen et al., 2014).

Perceived Quality

Perceived quality is described as the customer preference for a product's overall prevalence or splendor (Zeithaml, 1988). Perceived quality is unique when compare to any specific attribute, it is different from objective quality as perceived quality has unique relationship with attitudinal assessment of a brand – a global affective assessment of a brand's performance

including information in both positive and negative ways, which recall the memory from their mind (Emari et al., 2012). Brand association act as a data

gathering procedure for particular brand to create plan for differentiation and expansion of the brand (Osselaer and Janiszewski, 2001). Fundamentally, any information involved with brand association will leads to its trademark in customer recognition, and finally affect on its brand image (Keller, 1993; Romaniuk and Sharp, 2003). The greater brand relation in goods could lead more brand recognition from customers which also create their loyalty towards the brand. Previous study found the positive and significant relationship between brand association and brand loyalty (Pouromid and Iranzadeh, 2012).

Brand Personality

Brand personality can be described as the brand characteristics that represent core values which brand can assume from customer perception. (Aaker, 1991; Keller, 1993). A brand personality is one of the factors that driven brand to express or assert its benefit, customer relationships and the communication of useful benefits. Aaker (1991) described the brand personality as traits in human expression towards a brand. In this study brand personality is characterized as the product and service attributes correspond with a brand (Aaker, 1997).

relative to other brands (Aaker, 1996b; Keller, 1993; Netemeyer et al., 2004; Zeithaml, 1988). Perceived quality is one of the key indicators in brand equity models as it affecting to brand equity by risk minimization (Aaker, 1991; Keller, 2008). There is a significant evidence to proof that perceive quality is one of main structural factors to create brand equity. Reliable information for product in term of quality could be gathered from promotion where the general quality of the brand is stressed or where quality is inferred from intrinsic or extrinsic brand attributes (Kirmani and Zeithaml, 1993; Netemeyer et al., 2004). Perceive quality can also described by direct engagement with the brand, with interaction, consumer can judge with more reliable evidence rather than judgement from the past (Netemeyer et al., 2004).

Brand Loyalty

Brand loyalty involved with customers' repetitive purchasing behavior during specific period with good, evaluative and/or positive tendency towards a branded, labelled or graded alternative or product choice (Jagdish and Sheth, 1974). Brand loyalty can

be defined as Customer purchasing or supporting a preferred product continuously with a monotonous purchasing of the brand. (Luarn and Lin, 2003). Also, brand loyalty affect customer purchasing decisions towards the preferred product. (Ahmed, 2011; Huang and Huddleston, 2009; Lam, 2007; Martenson, 2007). Similarly, they become loyal with their preferred product brands and stick to well-known brand names (Sun et al., 2004), as well as used it for social recognition (Manrai et al., 2001). Consumers create brand loyalty by producing a positive result of brand equity which genuinely build brand preference towards other brands. (Atilgan et al., 2005; Binninger, 2008; Ling, 2013; Vogel et al., 2008; Zhang et al., 2014).

Brand Equity

Brand equity can be described as assets and liabilities attached to a brand, its trademark, that adds to or subtracts from the value created by a product or service to a firm and/or to that firm's customers (Aaker, 1991) which is regularly the outcome of brand loyalty which encouraging the brand to create its market share. In fact, there are 5 stages of brand experience that influence a positive brand equity including brand awareness, brand recognition, brand trial, brand preference, and brand loyalty. Brand equity is controlled by associated components combined. It is essential to understand those components to clearly figure the overview of brand equity. Components including brand loyalty, brand awareness, perceive quality, brand association, and other proprietary (Aaker, 1991) The idea of the brand equity is very remarkable and more complicate than what it would seem. The generally accepted notion for a brand owner is that a better brand reputation in the market could create more income and goodwill comparing to the lesser known ones. There are many approaches and research created to find the concept of brand equity.

Related Literature Review Brand Association and Brand Loyalty

Brand association is a factor affecting purchase intention and it is also the evidence that reflects on brand loyalty (Chen, 2001). The more product relation between the brand and its subsidiaries could result in more product recognition (Sasmita and Suki, 2015). Company can be individualized and reposition its business, also creating attitude and image towards brand in consumer sight (Dean, 2004). which it would be able to influence higher level of brand equity (Yoo et al., 2000; Chen, 2001). Gil, Andrés, and Salinas (2007) studied the relationship between brand association and brand loyalty and found that there is

a positive relationship between two variables but it's not significant.

Brand Association and Brand Equity

Brand equity dimensions including brand association as a part contribute to an expedient effect on overall brand equity. Overall brand equity is considered as international priority for brands over other substitutes, as described in different rationale of this concept. Strong positive associations influence product preference for consumers and higher consumer-based brand equity. The result from many empirical researches have shown that it is one of the dimensions has absolute influence on overall brand equity (Yoo et al., 2000; Zinnbauer and Bakay, 2004; Atilgan et al., 2005).

Brand Personality and Brand Loyalty

Brand personality, specifically the unique and favorable one, is profitable for marketer and customers and able to build an obligation between them. It altered the brand image for consumers which more likely to improve the level of brand loyalty (Sung and Kim, 2010). Lin (2010) who studied the relationship between brand personality and brand loyalty found there is a partial positive relationship between two variables. Mengxia (2007) investigated the influence of brand personality on consumers' brand preference, affection, loyalty, and purchasing intention. The result showed that brand personality has a positive influence on brand preference affection, loyalty and purchase intention. Kumar et al. (2006) investigated the connection between brand personality and brand loyalty to explore the relationship between brand personality and brand loyalty. The result showed that brand personality may influence consumers' brand loyalty to consumable goods.

Brand Uniqueness and Brand Loyalty

Consumers is driven by their knowledge and wish for uniqueness which influence them to create their own brand perceptions with experience towards the goods from particular brands (Keller, 2010). Consumers are more likely to react against the distinctive features combined with uniqueness in products to formulate their perception in brand that help them to select among alternatives in market (Netemeyer et al., 2004). Some industry which is h

ighly competitive like fast fashion retailers also use uniqueness to create opportunity over the competing brands (Park and Sternquist, 2008). Fast fashion apparel serves their customer for uniqueness which described as differences pursuing behavior so it can improve individual image and social preferences (Shen et al., 2014). Eventually, several studies explained that

uniqueness can enhance consumers'

recognition towards a brand with purchase intention which could lead to competitive and reliable price in market. An empirical research found the positive significant relationship between brand uniqueness and brand loyalty (Su and Chang, 2018).

Perceive Quality and Brand Loyalty

Consumer perspective on perceive quality as a consumer perception to overall quality, esteem and prestige of the brand with respect to expectation related to substitutes. There is proved evidence that perceived quality can reflect to brand differentiation and brand expansion (Pappu et al., 2005) with additional advantage pricing for companies (Keller, 1993; Netemeyer et al., 2004). Perceive quality is the supporting evidence for consumers to create purchase intention over the brands Gil, Andres, and Salinas (2007) found the positive relationship between perceive quality and brand loyalty in their study.

Perceive Quality and Brand Equity

Yoo et al. (2000) described that strong brand equity can be built by the strong perceive quality in customer perception. Chiou et al. (2002) and Zinnbauer & Bakay (2004) studies are supporting evidence for favorable influence of perceived quality on brand equity. Moreover, Atilgan et al. (2005) proposed that value of brand equity is enhanced by making better opinion about their quality in customers' mind. Gil et al. (2007), Kumar et al. (2009), and Buil et al. (2013) also supported the positive relationship between two variables and mentioned that perceived quality reflects positive relationship to brand equity.

Brand Loyalty and Brand Equity

Brand loyalty is commonly described as a core factor that influenced brand equity and for Aaker (1991) it affected to a situation that reflects customer switching intention from brand to brand. Brand loyalty could also be related to connection of customers with the brand, which later reflecting the nature of the customer-brand relationship (Keller, 2003) Brand loyalty has been found to be one of the main drivers of brand equity (Yoo et al., 2000; Atilgan et al., 2005; Yasin et al., 2007). Loyal customer tends to return more valuable response to the brand which result in product and service development which finally create brand equity. Moreover, Gil, Andres, and Martinez (2007) found significant positive relationship between brand loyalty and brand equity in their study.

sampling procedure is a technique of selection to represent samples from research population and together with situation. The samplings are non-probability which know the population and non-probability which is based on convenience judgement of the researcher (Zikmund, 2003).

The researchers developed a set of survey Likert-scale questionnaire (total 26 questions) was divided into 3

Conceptual Framework

The figure described the conceptual framework of An Empirical Research of Brand Loyalty and Brand Equity Towards Outstanding Coffee Shop in Bangkok, Thailand as follows;

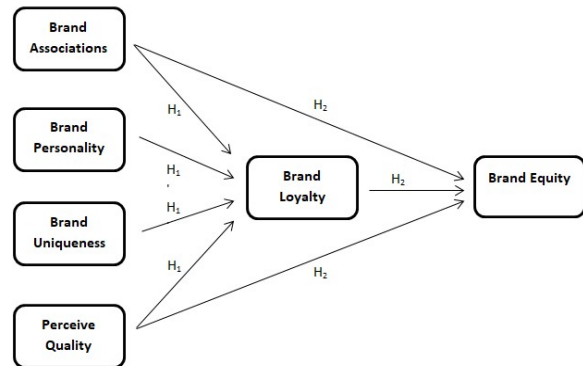


Figure 1: The Conceptual Framework Hypothesis

Hypothesis 1

H1o: Brand associations, brand personality, brand uniqueness, and perceive quality are not significant influenced the brand loyalty of Café Amazon.
 H1a: Brand associations, brand personality, brand uniqueness, and perceive quality are significant influenced the brand loyalty of Café Amazon.

Hypothesis2

H2o: Brand associations, perceive quality and brand loyalty are not significant influenced the brand equity of Café Amazon.
 H2a: Brand associations, perceive quality and brand loyalty are significant influenced the brand equity of Café Amazon.

Materials and Methodology

The descriptive research is applied in this study to verify whether the selected independent variables are the factors that affect customer loyalty through the brand loyalty and brand equity in the case of Café Amazon. Descriptive research determined the market characteristics and/or marketing mix characteristics. Generally, a descriptive study is used for evaluation of the market conditions including number and size of market with the choices in which products are currently distributed, listing and comparison of the attributes and features of competitive products, etc. (Panda et al., 2015) Moreover, descriptive studies may be characterized simply as the attempt to determine, describe or identify what is, while analytical research attempts to establish why it is that way or how it came to be (Ethridge, 2004). The sections. Questions are designed relied on the previous studies. First section, the screening section included question "Have you ever been to Café Amazon coffee shop?". The screening questions helped the researchers to collect responses who have experience in Café Amazon Coffee shop. Next section, the researcher used a five points



to measure the questions for each variable. Last section, the demographic factors include gender, age, level of education, occupation and income. The researchers have distributed questionnaire to 50 respondents as a pretest. After collecting the data, the researchers examined the reliability of questionnaires by using Cronbach's Alpha test.

Table 1: Reliability Test for Pretest

Variables	Alpha (α -test)
Brand Association	.652
Brand Personality	.682
Brand Uniqueness	.754
Perceive Quality	.894
Brand loyalty	.808
Brand Equity	.952

In this research, the researchers intended to apply non-probability sampling procedures including judgment sampling, quota sampling by distributing survey equally at 2 branches of Café Amazon at Central World and Siam Paragon in Bangkok, Thailand during February 15- March 10, 2019 and the researchers applied convenience sampling by distributing survey to customers who are convenient and willing to answer. Questionnaires survey is applied to assess clients' sentiments toward Café Amazon Coffee. The questionnaires contain questions that evaluate the degree of agreement which are about brand associations, brand personality, brand uniqueness, perceive quality, brand loyalty, and brand equity as dependent variable with explicit constrained option for respondents to answer. Statistical treatment in this research applied descriptive analysis in terms of frequency and percentage to analyze demographic data, and Multiple Linear Regression to test the influence factors between independent and dependent variables.

Finding and Conclusion

In this research, the researchers collected 300 questionnaires at 2 branches of Café Amazon at Siam Paragon and Central World in Bangkok, Thailand. The result from descriptive analysis showed in Table 2 described the majority of customer are female at 52.8% "159 respondents" where the highest frequency of age is 21-30 at 71.4% with "215 respondents". The highest education level is bachelor's degree at 75.1% with "226 respondents" and highest monthly income group is 15,001-30,000 with 63.5% "226 respondents". Lastly, the highest job percentage is employee with 84.7% "255 respondents".

Table 2: Summary of highest frequency and percentage of independent and dependent variables

Demographics Factor	Characteristics	Frequency (f)	Percentage (%)
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brand loyalty sub-dimensions. The result of

Gender	Female	158	52.7
Age	21-30	214	71.3
Income	15,000-30,000	191	63.7
Education Level	Bachelor's Degree	225	75
Job	Employee	255	85

Table 3: Summary of Hypothesis Testing

Hypothesis	Standardization of Beta	Level of significant	Result
H1o: Brand associations, brand personality, brand uniqueness, and perceive quality are not significant influenced the brand loyalty of Café Amazon			
- Brand association	0.089	0.250	Fail to Reject Ho
- Brand personality	0.083	0.204	Fail to Reject Ho
- Brand uniqueness	0.227	0.001	Rejected Ho
- Perceive quality	0.352	0.000	Rejected Ho
H2o: Brand associations, perceive quality and brand loyalty are not significant influenced the brand equity of Café Amazon.			
- Brand Association	0.155	0.004	Rejected Ho
- Perceive Quality	0.203	0.000	Rejected Ho
- Brand loyalty	0.527	0.000	Rejected Ho

Based on the results of hypothesis one, brand uniqueness and perceive quality have significant influence on the brand loyalty towards outstanding coffee shop at significant level 0.001 and 0.000, respectively.

Based on the results from Table 3, statistical result indicated that perceive quality has the highest positive impact on brand loyalty among other

this study supported by Su and Chang (2018) who



found that brand's performance in term of perceive quality has positive significant influence on brand loyalty. Moreover, they also found that brand uniqueness is one of the positive factors which strongly influenced the brand to create loyalty among customers

Based on the results of hypothesis two, brand association, perceive quality, and brand loyalty have positive significant influence on brand. Results indicated the significant level of 0.04, 0.00, 0.00 respectively with the highest positive impact from brand loyalty.

Based on the results from Table 3, The researchers found that brand association, perceive quality, and brand loyalty has positive significant effects on brand equity. The results supported by a research from Gil et al. (2007) who implied that customer who have loyalty and known the associations among brands would be able to recognize and support the associated brands.

This study aims to test the influence of brand association, brand personality, brand uniqueness, and perceive quality on brand loyalty. Results indicated that brand uniqueness and perceive quality has positive significant influence on brand loyalty while brand association, perceive quality, and brand loyalty has direct positive influence on brand equity. Population of this study is customers in Café Amazon in Siam Paragon and Central World branches in Bangkok, Thailand. Both branches located in the center of Bangkok metropolis crowded with customer in department store including both Thai and foreigner. Focused sample size equal to 300 respondents. Researchers design to use non-probability sampling procedures including quota sampling and convenience sampling procedure. Multiple linear regression method is applied to test both hypotheses. The result of this study, the researchers found that brand uniqueness and perceive quality were influenced on brand loyalty towards coffee shop, while brand association and brand personality were not significant influenced on brand loyalty. For the second hypothesis, all sub-variables including brand association, perceive quality, and brand loyalty were significant influenced on brand equity.

Recommendation

This study examined the variables which have significant influence on brand loyalty towards Café Amazon coffee shop, which are brand uniqueness, perceive quality, and brand loyalty.

The first recommendation is to focus on the perceive quality and brand uniqueness as both factors influence brand loyalty in this study. As Café Amazon promoted their product and services in such coffee shops all over the country. Quality standard of product and services is one of the most effective to bring

with same industry and both hold the biggest share in the industry in Thailand.

attention and maintain its business outlooks. Quality

standard including shop appearance, product quality and so on has significant effect towards the brand. As Café Amazon has sharp growth within few years, its branches expanded over 300 in 2018 and tends to expand more. Fast expansion could lead some trouble in quality standard, in terms of taste preference, shop appearance, cleanliness, etc. while brand uniqueness also affecting the brand loyalty but not as much as quality because branches of café have limitation such as service area, construction cost and decoration materials. So, each branch could attract consumers as consumers in different area has different needs from brands. One Strategy might not fit for every area that company try to penetrate.

Brand loyalty is the highest influence factor on brand equity. Brand loyalty is mixture of many sub-dimensions. Brand association and perceive quality are included, improvement on specific dimension cannot ensure company to create and maintain its value. From result of studies from Tong and Hawley (2009) and Buil, de Chernatony and Martinez (2013), indicating that having strength in specific factors is not a guarantee of a successful brand. In the other hand, company must maintain and improve all activities involve in each dimension of brand loyalty to strengthen its equity structurally Further Study

This study primarily focused on analyzing the factors influencing brand loyalty and brand equity towards a coffee shop in Bangkok, Thailand. The limitation of this research is the sampling area which located in central Bangkok which might unable to reflect all level of customers since Café Amazon is originally attached with PTT gas station which aims to serve customers with grab and go purpose. The research framework could be used in other food and beverage business which have more consistency in target customers to prove that the framework is reliable or use the same framework in different area of country to observe the differences of customer behaviors towards the brand.

Moreover, because of strong positive significant relationship between perceive quality and brand loyalty, and perceive quality and brand equity, further study could investigate the factors affecting perceive quality of products and services to describe the sub-variables that could support relationship between variables.

The researchers suggest that further studies could compare between Café Amazon and its competitors which is Starbucks as Café Amazon aimed to compete with Starbucks in the global market

Further studies might be more efficient as the researchers could combine more variables from brand



loyalty and brand equity dimensions to support the conceptual model used in analyze and interpret the results.

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THE EFFECT OF ELECTRONIC WORD OF MOUTH ON BRAND IMAGE AND PURCHASE INTENTION FOR BUYING CONDOMINIUM IN BANGKOK

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Abstract

Word of Mouth (WOM) is one of the most powerful influences factor in communicate among consumer to get information support their purchase intention. Traditional WOM have still effect on people decision making, as the digital age introduced online network that develop a new version of WOM to Electronic Word of Mouth (eWOM). The purpose of this paper is to examine the different between gender and the effect of eWOM on brand image and purchase intention for buying condominium in Bangkok. This research was distributed 400 questionnaires for people living in Bangkok. To collect the information in this study using convenience by google forms, apply the snowball technique for the group who has interesting in condominium by using simple linear regression and independent sample T-Test. The paper found that eWOM have effect on brand image and purchase intention and brand image have effect on purchase intention. The different in gender have different perception on brand image, but have no effect on eWOM and purchase intention.

Keyword: Word of Mouth, Electronic Word of Mouth, Online, Brand image, Purchase intention, condominium, Bangkok, Thailand

Introduction

They are many real estate developers in Bangkok property market introduce the product as condominiums which included under construction and ready to move in projects. Since they are many choices for consumer to consider which project is the best choice. Traditional word of mouth is impact to buying decision can deliver a positive or negative attitude toward customers, the customer who are satisfied will repurchase the product, and convincing others about these good products, while customers who are not satisfied will not recommend others and provide the negative information about the product. (Richins, 2009). A new marketing communication via online become much more popular in many past years as most consumers have response to online review product before make the purchase decision (Lee & Hong, 2016). However, gender has significant impact on brand image. The product reviews can be influence consumers' attitudes toward brands (Lin & Xu, 2017). So, the eWOM in consumer who interesting to buy condominium in Bangkok between female and male are communicate show different attitude toward the brand image as a part of decision making process.

Word of Mouth

Consumer passing information on the Website, from advertisements to opinion on blogs or forums. (Hung & Li, 2007). WOM also called E-WOM (Electronic Word of Mouth) which consumer reviews,

blogs, forums, and social networks (Yi-Wen Fan & Yi-Feng Miao 2012). Word of Mouth become a key important factors for buyers before they make purchase any products. Word of mouth have mention in decades as the exchange of marketing information between consumers as fundamental role in shaping their behavior and in changing attitudes toward products and services (Katz & Lazarsfeld, 1966). It is also a powerful communication, as the way of sharing information about product and service to each other which included ideas, believe, and experiences (Balter, 2004). And the word of mouth became as the power of referrals and recommendations from friends, colleagues or other consumers can go beyond everything else (BCG report, 2011). In many year ago, they are many marketing tools been spending and develop to help marketer for advertise product/service but some customers still pay more attention to WOM than other marketing tools as it is more reliable and share information by people who having no self-interest in pushing sales on product (Arndt, 1967; Silverman, 1997). Moreover, they are side effects from word of mouth, the negative word-of-mouth is strong influence consumer about purchase decision than positive or neutral information (Herr et al., 1991). Positive comments from customers can increase sales from new customers while negative comments create the impact to customer change the brand (Ennew & Bannerjee, 2000). Word of mouth can be defined in both positive and negative statement from

customer's experiences about product or company which available on the internet (Hennig, Gwinner, Walsh, and Gremler, 2004). For both negative or positive attitude toward the product or service can influence customer's for future purchase intentions, Word of mouth will allow customer to compare the product or service before make decision (Yang, 2017). The positive word-of-mouth is help people develop perceptions of brand and build a favor brand toward purchase intentions (Bambauer-Sachse and Mangold, 2011; Jalilvand and Samiei, 2012).

Brand and Brand Image

Brand has been explained in many years by sophisticated people who specialize in "Brand" Brand is a name, term, sign, symbol, design, or combination of these which is used to identify the goods or services the differentiate them from competitors (Kotler, Armstrong, Saunders, and Wong, 2002). Brand also mention that it has ability to influence the behavior of consumer to willing pay a premium price for the brand (Aaker, 1991). For brand image, it can be described as "the perceptions of brand can relate to consumer memory toward brand itself (Keller, 1993). Brand image is a kind of beliefs toward consumer decision making process when buyer evaluates alternative brands (Kotler & Armstrong, 1996). Many researchers have the same understanding about Brand management that brand name, brand logo and brand image are important part to differentiate the products or services from their competitors (Aaker, 1996; Kapferer, 1997). A strong brand image encourages consumer willing to pay higher prices, which is become competitive advantages and success to a company (Aranda, Gómez, and Molina, 2015). Brand can be related the Emotional. The emotional to brand may range from customer feelings to brand (Thomson, MacInnis, and Park, 2005). Also, customer-brand engagement is called attention from active customers to participate in new service and product development who are less price sensitive, low switching and keep support brands (Brodie, Ilic, Juric, and Hollebeek, 2013).

Purchase Intention

Customer trust is an important construct in developing customer relationships stronger (Sirdeshmukh, Jagdip, and Barry, 2002). Trust of the customer and satisfaction affect trust in brand and satisfaction on consumer intentions to repurchase (Zboja & Voorhees, 2006). Satisfaction is an important role in their purchase intention (Kuo, Wu, and Deng, 2009). Thus, satisfaction reflects customer' positive emotion and cognition toward social commerce sites (Hsu & Lin, 2016). Moreover, customer who has negative perception can result dissatisfaction and no purchase intention to product or service (Pires, Stanton, and Eckford, 2004).

Conceptual framework

To achieve the research objectives, the conceptual framework of this study (Figure 1) from the theoretical

model of Mohammad Reza Jalil and, Neda Samiei, (2012) who studied the effect of electronic word of mouth on brand image and purchase intention: An empirical study in the automobile industry in Iran. They are three points in this model: eWOM among customers, Brand image, and Purchase Intention.

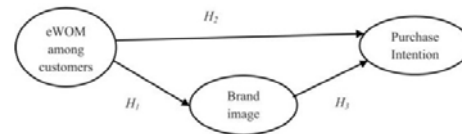


Figure 1: Conceptual Framework

This study consists of six hypotheses, as shown in Table 1, to achieve the research objective by applying the conceptual framework in Figure 1 and developing the conceptual framework as shown in figure 2. The hypotheses are explained to following the conceptual framework as follow:

Table 1: The hypothesis explanation

No.	H	Hypotheses
1	H1	Electronic word of mouth has a significant impact on brand image.
2	H2	Electronic word of mouth has a significant impact on purchase intention.
3	H3	Brand image has a significant impact on purchase intention.
4	H4	There is significant mean difference between gender and electronic word of mouth.
5	H5	There is significant mean difference between gender and brand Image.
6	H6	There is significant mean difference between gender and purchase intention.

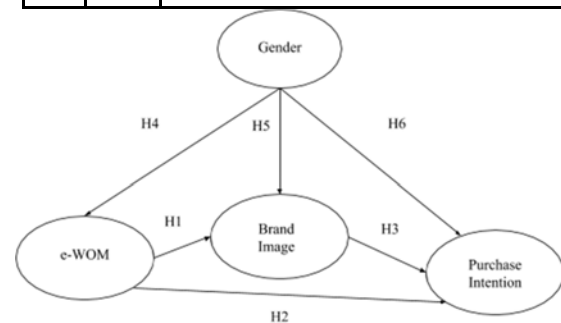


Figure 2: Develop the conceptual framework (additional demographic intention to quota sampling gender)

Research Methodology

To achieve the research objectives, a snowball as the non-probability methodology. The questionnaire developed base on the findings of the literature review. The questionnaire was pre-tested by online distribute google form and apply quota sampling for gender. The research area will focus only on people living in Bangkok.

The questionnaire consisted of 5 parts below:

Part 1 Screening question

Part 2 e-WOM measurement of the variable (Likert scale)

Part 3 Brand image measurement of the variable (Likert scale)

Part 4 Purchase intention measurement of the variable (Likert scale)

Part 5 Demographic measurement of the variable (Nominal/Ordinal)

In the screen part, the research has the intention to screen only people who lived in Bangkok. Five-point Likert scale is used of items. (1 = Very disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree). Moreover, quota sampling was also used to intentionally equal the gender between male and female.

Measurement of variables

This research target group of people live in Bangkok and specifically have the interesting in the condominium.

Population and Sampling

This research was distributed 400 questionnaires for people living in Bangkok. To collect the information in this study using convenience by google forms, apply the snowball technique for the group who has interesting in condominium including experiences for purchase or non-purchase condominium and quota sampling method for gender.

Estimate Sample size technique

$$n = \frac{Z^2}{4e^2}$$

Which: n is the sample size

e is the level of precision = 0.05

Z is the statistic for a level of confidence Z = 1.96

$$\text{So: } n = \frac{(1.96)^2}{4(0.05)^2}$$

$$n = 384.16 = 400$$

Reliability Test

The reliability test was performed by using Cronbach's Alpha with 30 sets of the pilot

questionnaires that distributed to target respondents. The results of the independent variables are meet the required standard as Cronbach's Alpha Coefficient more than 0.6 (Cronbach, 1951). The result is shown in table 2.

Table 2: Consistency of the Scales Test (N=30)

Variables	Cronbach's Alpha	No. of items
Electronic Word of mouth	.907	5
Brand/Brand image	.718	3
Purchase Intention	.685	3

Result and Discussion Data Analysis

This research has only two analyses to find the result. First, single Linear Regression (SLR) are used to finding the effect, relationship, and difference between dependent and independent variable according to defined conceptual framework. Second, independent sample T-Test is applied to distinguish the mean difference between gender according to defined conceptual framework

Descriptive Analysis

Descriptive analysis is used in order to explore the data to see the overall information. All the respondents for the demographics show in Table 3 below, this study using quota sampling technique for gender between male at 50% and female at 50% equally. Age between 31-35 years old is the majorities group of response in the questionnaire at 32% which follow by age between 36-40 years old at 22.8%. Most of the respondents have monthly income over than 80,0001 Baht per month or 28.2% of the total while following 30,001-40,000 Baht per month at 21%. Most of the group in this study at 36.8% been visit for intention buying condominium at sales gallery or complete building without making any purchase decision at the first time visit and follow by 34% of the group been visit for intention of buying condominium at sales gallery or complete building more than one time before paying the reservation fee. 92.8% from total respondents choose Google Search for finding information about condominium and 83.5% from total respondent to choose Property Website respectively.

Table 3: Gender

Table 4: Age

Gender	Frequency	Percentage (%)
Male	200	50
Female	200	50
Total	400	100

Age	Frequency	Percentage (%)
Below 25 years old	14	3.5
26-30 years old	71	17.8
31-35 years old	128	32
36-40 years old	91	22.8
41-45 year old	54	13.5
46-50 years old	20	5
Over than 51 years old	22	5.5
Total	400	100

Table 6: Monthly Income

Monthly Income (Baht/month)	Frequency	Percentage (%)
Under 30,000	61	15.3
30,001-40,000	84	21
40,001-50,000	53	13.3
50,001-60,000	48	12
60,001-70,000	32	8
70,001-80,000	9	2.3
Over than 80,001	113	28.2
Total	400	100

Table 7: Buying Experience

Buying Experiences	Frequency	Percentage (%)
Never visit show unit at the sales gallery or visit the complete building	44	11
Visit and pay the reservation fee for the first time	73	18.3
Visit many time before pay reservation fee	136	34
Visit but not make a reservation fee for the first time	147	36.8
Total	400	100

Table 8: Online media

Media Channels	Yes	%	No	%	Total	Total %
Facebook	296	74	104	26	400	100
Pantip	296	74	104	26	400	100
Property website	334	83.5	66	16.5	400	100
Property Influencer	212	53	188	47	400	100

Celebrity and Blogger	157	39.3	243	60.8	400	100
Google	371	92.8	29	7.2	400	100

Pearson's Correlation

Regarding to the Pearson's Correlation Matrix for the hypothesis in Table 1 (H1-H6) shown in Table 9, the overall value of correlation are greater than 0.01 it can be implied as positive relationship. The only one pair in the matrix shown the strong relationship are Electronic Word of Mouth (eWOM) and Brand Image (BI) at .275 correlations.

Table 9: Pearson's Correlation Matrix for Hypothesis (N=400)

Variables	Mean	SD	PI	BI	eWOM
PI	3.7686	0.62965	1.000		
BI	4.3074	0.54009	.256**	1.000	
eWOM	3.9435	0.87397	.268**	.275**	1.000

Note: ** represents the correlation is significant at 0.01 level (1-tailed).

Inferential Analysis and Multicollinearity Validation

Note: * represents Standardized Coefficient (β) with
Table 10: Simple Linear Regression Result (H1),
Dependent Variable: Brand Image (BI)

Hypothesis	Variable	Standardized Coefficient (β)	Result
H1	eWOM	.275*	Supported
R Square	0.076		
Adjusted R Square	0.073		

Hypothesis	Variable	Standardized Coefficient (β)	Result
H2	eWOM	0.268*	Supported
R Square	0.072		
Adjusted R Square	0.069		

P-value \leq 0.05 level

The result in Table 10 shown Electronic Word of Mouth(eWOM) can explain Brand Image (BI) around 7.6% because R Square at 0.076 at the significant level. H1 is supported since P-Value is less than 0.05,

indicating Electronic Word of Mouth(eWOM) significantly influence Brand image(BI).

Table 11: Simple Linear Regression Result (H2),
Dependent Variable: Purchase Intention (PI)

Note: * represents Standardized Coefficient (β) with
P-value \leq 0.05 level

The result in Table 11 shown Electronic Word of Mouth(eWOM) can explain Purchase Intention (PI) around 7.2% because R Square at 0.072 at the significant level. H2 is supported since P-Value is less than 0.05, indicating Electronic Word of Mouth(eWOM) significantly influence Purchase Intention (PI).

Table 12: Simple Linear Regression Result (H3),
Dependent Variable: Purchase Intention (PI)

Hypothesis	Variable	Standardized Coefficient (β)	Result
H3	BI	.256*	Supported
R Square	0.065		
Adjusted R Square	0.063		

Note: * represents Standardized Coefficient (β) with
P-value \leq 0.05 level

The result in Table 12 shown Brand Image(BI) can explain Purchase Intention (PI) around 6.5% because R Square at 0.056 at the significant level. H3 is supported since P-Value is less than 0.05, indicating Brand

Image(BI) significantly influence Purchase
Intention(PI).

Independent Sample T-Test

The independent sample t-test has applied in the hypothesis of H4-H6, which are testing the significant mean different between male and female on buying condominium shown in Table 13 Group statistics.

Table 13: Group Statistics

Variables	gender	N	Mean	Std. Deviation	Std. Error Mean	t	p
eWOM	Male	200	4.0100	.84085	.05946	1.524	0.128
	Female	200	3.8770	.90308	.06386		
BI	Male	200	4.2298	.56487	.03994	-2.901	0.004
	Female	200	4.3850	.50365	.03561		
PI	Male	200	3.7087	.60570	.04283	-1.910	0.057
	Female	200	3.8285	.64870	.04587		

Table 14: Independent Sample T-Test (H4) Electronic Word of Mouth

Hypothesis	gender	N	Mean	Std. Deviation		Std. Error Mean	
H4	Male	200	4.0100	0.84085		0.05946	
	Female	200	3.8770	0.90308		0.06386	
Hypothesis	Equal Variance	Levene's Test		T-Test			
		F	Sig	t	df	Sig.(2- tailed)	Mean Difference
H4	Assumed	0.273	0.602	1.524	398	0.128	0.13300
	Not Assume			1.524	395.989	0.128	0.13300

The result exhibit in Table 14 shows the mean of Electronic Word of Mouth (eWOM) with 4.0100 on male and 3.8770 on female. The result also indicates that there is no significant difference in Electronic Word of Mouth (eWOM) between male and female with the condition of T (398) = 1.524 and the P-value of independent sample t-test (0.128) that more than 0.05 which means that the hypothesis namely H4 is not supported.

Table 15: Independent Sample T-Test (H5) Brand Image

Hypothesis	gender	N	Mean	Std. Deviation		Std. Error Mean	
H5	Male	200	4.2298	.56487		0.03994	
	Female	200	4.3850	.50365		0.03561	
Hypothesis	Equal Variance	Levene's Test		T-Test			
		F	Sig	t	df	Sig.(2- tailed)	Mean Difference
H5	Assumed	0.462	0.497	-2.901	398	0.004	-1.5525
	Not Assume			-2.901	392.874	0.004	-1.5525

The result exhibit in Table 15 shows the mean of Brand Image (BI) with 4.2298 on male and 4.3850 on female. The result also indicates that there is no significant difference in Brand Image (BI) between male and female with the condition of $T(398) = -2.901$ and the P-value of independent sample t-test (0.004) that less than 0.05 which means that the hypothesis namely H5 is supported.

Table 16: Independent Sample T-Test (H6) Purchase Intention

Hypothesis	gender	N	Mean	Std. Deviation		Std. Error Mean	
H6	Male	200	3.7087	0.60570		0.4283	
	Female	200	3.8285	0.64870		0.4587	
Hypothesis	Equal Variance	Levene's Test		T-Test			
		F	Sig	t	df	Sig.(2- tailed)	Mean Difference
H6	Assumed	3.355	0.068	-1.910	398	0.057	-0.11985
	Not Assume			-1.910	396.142	0.057	-0.11985

The result exhibit in Table 16 shows the mean of Purchase Intention (PI) with 3.7087 on male and 3.8285 on female. The result also indicates that there is no significant difference in Purchase Intention (PI) between male and female with the condition of $T(398) = -1.910$ and the P-value of independent sample t-test (0.057) that more than 0.05 which means that the hypothesis namely H6 is not supported.

Conclusions and recommendation

This research was conducted an empirical study to examine the factors effect of Electronic Word of Mouth on Brand Image and Purchase Intention for condominium in Bangkok. The study was also extended to investigate the mean different between genders of 400 respondents in Bangkok area, which effect Electronic Word of Mouth on Brand Image and Purchase Intention for condominium in Bangkok as the unique contribution of this paper. The conceptual framework was adopted from The effect of electronic word of mouth on brand image and purchase intention: An empirical study in the automobile industry in Iran of Mohammad Reza Jalilvand, Neda Samiei, (2012) to test six hypotheses. The results obtain from Pearson's Correlation, Simple Linear Regression and Independent Sample T-Test analyze to conclusion of this study. As the analyzing result, electronic word of mouth is significant impact on brand image and purchase intention. Brand image is also significant impact on purchase intention. From the respondent lead to concludes that electronic word of mouth have effect to condominium brand image and purchase intention to buy condominium in Bangkok. With reference, the finding exactly aligns with the studied of Mohammad Reza Jalilvand, Neda Samiei, (2012). Moreover, the respondent lead to concludes that brand image effect to purchase intention to buy condominium in Bangkok. With reference, the finding exactly aligns with the studied of Mohammad Reza Jalilvand, Neda Samiei, (2012). In addition, 92.8% of respondents said they using Google search for gathering information, 83.5% go to property website to read review, and 74% of Facebook and Pantip.com said they go for gathering information before make a decision to buy

condominium in Bangkok. The analysis of mean difference between female and male can conclude that both genders have significant impact on brand image of condominium in Bangkok. Moreover, the analysis of mean difference between female and male can conclude that both genders have no significant impact on electronic word of mouth and purchase intention for buying condominium in Bangkok.

Limitations

This research is limited to focus only on the samples who living in Bangkok and interesting in condominium. Therefore, the findings of this study may not be applied to another city or country since culture, social, political, and geographic of people purchasing behavior are different.

Future Researches

Another variable such as target on people who ever purchase and non-purchase experiences in buying condominium in Bangkok or buying reasons, to see the other dimensions from the effect of electronic word of mouth for future study.

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A Study of Factors Influencing Customers' Behavioral Intention towards Myanmar Restaurant in Yangon, Myanmar

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ABSTRACT

The objective of this research is to investigate the factors influencing customers' behavioral intention towards a Myanmar restaurant in Yangon, Myanmar. The researcher applied the survey method by distributing 400 questionnaires at four selected branches of restaurant in Yangon, Myanmar. Then, the researcher applied Five point Likert Scale measuring "strongly disagree" to "strongly agree" to represent the questionnaires and utilized the statistical software. Hypothesis (4) was analyzed by Simple Linear Regression and the rest of the hypotheses were tested by Multiple Linear Regression. For results, the analysis of hypothesis one showed that subjective norms, customer satisfaction, restaurant image and perceived behavioral control have a significant influence on behavioral intention. Then, the hypothesis two showed that key restaurant attributes in terms of food quality attributes, service quality attributes, atmospheric quality attributes and price fairness attributes have a significant influence on behavioral intention. According to hypothesis three, key restaurant attributes in terms of food quality attributes, service quality attributes, atmospheric quality attributes and price fairness attributes have a significant influence on customer satisfaction. According to hypothesis four, restaurant image has a significant influence on customer satisfaction. The findings of this research can support the restaurant industry to develop productive marketing strategies and long term business model not only to Khaing Khaing Kyaw restaurant but also to other local restaurants in Myanmar.

Keywords: key restaurant attributes, restaurant image, customer satisfaction, behavioral intentions, Myanmar Restaurant

Introduction

In the service industry, behavioral intention is one of the important factors to achieve for sustainability and success. Behavioral intention is the desire of a customer to continue visiting to a business (Kim *et al.*, 2009). In addition, behavioral intentions are individual attitudes influenced financial features of the companies as well as return in the economic sector (Anderson and Mittal, 2000). Similarly, behavioral intention is the level of effort of an individual to develop a behavior by spreading word-of-mouth, willingness to visit stores, and continue taking service in future (Yun and Good, 2007). In restaurant industry, there are different relationships between customer opinion and the measurements of customer's behavioral intentions.

Among them, according to Zeithaml *et al.* (1996), service quality is connected to behavioral intentions which can indicate a level of customer satisfaction. Based on the European and American customer satisfaction models, service quality can be regarded as a factor of satisfaction (Fornell *et al.*, 1996). Furthermore, based on various previous studies, food quality also showed connection with the customer satisfaction in Fast Food Restaurants (Kivela *et al.*, 1999; Law *et al.*, 2004; Johns and Howard, 1998). For the restaurant service quality, customers generally evaluated food quality, physical environment and employee services which are the key components of restaurant experience (Chow *et al.*, 2007, Namkung and Jang, 2008; Ryu and Han, 2010). Moreover, perceived price fairness



is another characteristic which also influences customer satisfaction and behavioral intentions (Saad Andaleeb and Conway, 2006).

Research Objectives

To analyze the influences of subjective norms, customer satisfaction, restaurant image and perceived behavioral control towards customer behavioral intention of restaurant in Myanmar.

To evaluate the influences of key restaurant attributes in terms of food quality attributes, service quality attributes, atmospheric quality and price fairness on behavioral intention of restaurant.

To investigate the influences of key restaurant attributes in terms of food quality attributes, service quality attributes, atmospheric quality and price fairness on customer satisfaction of restaurant.

To examine the influence of restaurant image on customer satisfaction

Literature Review

Subjective Norms

Subjective norms are regarded as a persons' perceptions of like and dislike before performing behaviors (Montano and Kasprzyk, 2008). Ajzen (1991) defined that subjective norm is the perceived social pressure to perform or not to perform the behavior. Hill and Lynchehaun (2002) added that subjective norms have progressed forward to purchase a certain product and strongly influence consumers' decisions. Moreover, subjective norm is related to the perception of the family members, friends and colleagues who are important for the individual (Ajzen, 2002, Wu *et al.*, 2016; Menozzi *et al.*, 2015).

Food quality attributes

Brumback (1998), food quality and fresh ingredients have been evaluated as the most important reason why customer revisit to a restaurant. Technology plays a crucial role in for improving the food quality and implementation of the restaurant because customers evaluates the design and variety of the menu (Frable, 1998, Bowen and Morris, 1995). There are a number of components in food quality such as taste, menu variety, availability of healthy options, texture, appearance etc. by Namkung and Jang (2007). Trimigno *et al.* (2015) categorized that food quality into two: physical features (size, shape, color, gloss and consistency) and internal features (microbial feature or bacteria and yeasts), and moreover modifications are included by technological process or storage, nutritional value and safety.

Service quality attributes

Parasuraman *et al.* (1988) provided a scale known as (SERVQUAL) to measure service quality consist of five dimensions : reliability (e.g., ability to perform the service accurately and dependably),

attitudes or ideas toward the restaurant or café, focused on the key attributes such as variety of menu,

responsiveness (e.g., willingness to help customers and provide prompt service), assurance (e.g., manners of employees and ability to create trust and confidence in customers), and empathy (e.g., caring, individual attention to customers), and tangibles (e.g., physical facilities, equipment and appearance of personnel). Bitner and Hubbert (1994) investigated that service quality is a client's general impression towards a relative advantage or disadvantage of the business and its services. Service quality can keep a long-term relationship and trust with the customers for the services provided by the restaurant (Parsons, 2002).

Atmospheric quality attributes

Ryu and Jang (2007) defined that the atmospheric quality, includes music, smell, room temperature and employee that significantly influenced to customer's emotional responses and also successively affected customers' behavioral intention in the restaurant industry. Ryu and Jang (2008), described that the internal design and layout, playing music in the restaurant creates a pleasant environment, customer enjoyment and satisfaction while dining in the restaurant. Kotler (1973) also expressed that atmospherics quality can build the restaurant image in the minds of the consumer. In the hospitality industry, beautiful and attractive environment has found to increase the attention and customer satisfaction (Ryu and Han, 2010; Ali *et al.*, 2013 and Ruiz *et al.*, 2012).

Price Fairness

Namkung and Jang (2010) defined that which can be as a consumer's general judgment or based on an evaluation of the real price to standard amounts determined by both social standards and self. Saad Andaleeb and Conway (2006) defined that price fairness is one of the features to influence customer satisfaction and behavior. According to the customers' perception, price fairness is recognized as the main indicator in creating strategies because it helps the managers to develop the future plans (Shamma and Hassan, 2013). The price fairness evaluation depends on the level of which customers consider that the particular price of a product or service is reasonable (Jacoby and Olson, 1977).

Restaurant Image

Ryu *et al.* (2008), restaurant image can be categorized in many different ways depend on its operational procedure relating to the nature of the image. Baloglu and Brinberg (1997) mentioned that restaurant image is the overall ideas, views and impressions leading toward a goal. Generally, interest over image is growing in the marketing businesses because it influences the person's subjective views following behaviors (Castro *et al.*, 2007). Ryu *et al.* (2008, 2012), restaurant image can be defined as a customer's perceptions, standard

waiting time for order, service quality, internal decoration, cleanness of environment and location.

Similarly, in the restaurant business, the key restaurant attributes in terms of food attributes, service attributes, atmospheric attributes, price attributes, dining design and location have been organized as parts of restaurant image parts (Prendergast and Man, 2002).

Perceived Behavioral Control

Bandura (2001), perceived behavioral control (PBC) is the personal confidence of the measurements which are capability-based and action-related to overcome challenges to perform a behavior. According to Crano and Prislin (2008), Theory of Planning Behavior (TPB) is a method suitable for forecasting behavior related to own decision leading to behavioral intention and real manners. Perceived behavioral control has strong involvements theoretically and practically in behavioral intentions and actual behaviors (Johnson, 1997; Noar *et al.*, 2006; Sheeran and Taylor, 1999).

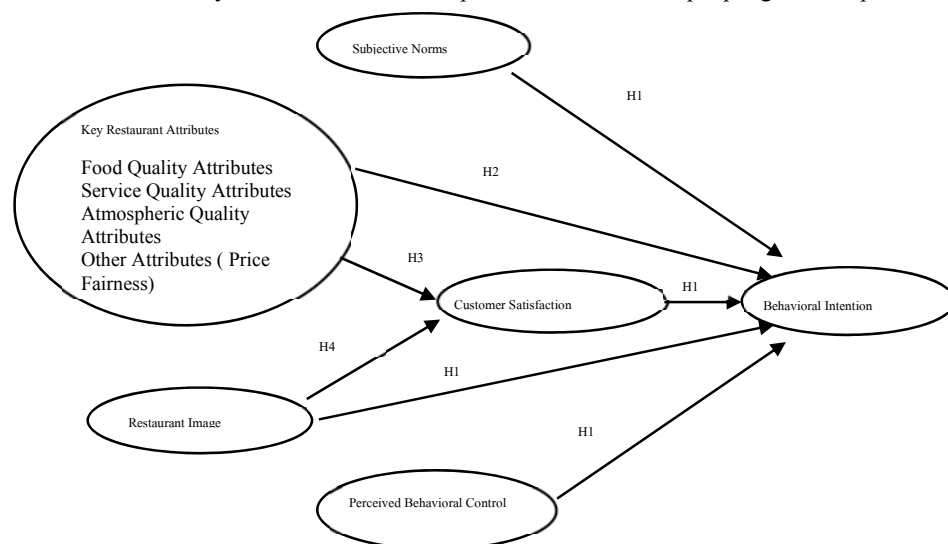
Customer Satisfaction

Customer satisfaction is a key requirement in business that significantly affects customer intentions to revisit (He and Song, 2009). In the marketing literature, customer satisfaction has an important position and its' studies are more theory-impacted and related to many studies (Oh and Kim, 2017). Customer satisfaction based on many factors such as example

perceive service quality, customer's feeling, social influence and experience-specific subjective factors (Rust and Oliver, 1994). Moreover, customer satisfaction is very essential for every business in marketing field because it create to justify the customers' needs and wants (Oliver 1981). In addition, Reynolds and Arnold (2000) stated that customer satisfaction is the fundamental need leading to the customer behavioral intentions towards the product or service. Therefore, customer satisfaction must be focused to creative more and more because it is one of the important parts which management wants to achieve (Veloutsou *et al.*, 2005).

Behavioral Intention

Park *et al.* (2004) stated that behavioral intention consists of repurchase intention, word of mouth intention, recommending to other peers and continue visiting. Ali *et al.* (2013) mentioned that when there is the positive behavioral intentions and positive word-of-mouth, the customer will spend more time with service provides, pay a price premium and remain loyal. However the negative behavioral intention refers to leave the service provider, sharing negative word of mouth and spending less expenditure with the firm. Oliver (1997) mentioned that behavioral intention is a situation where people get either persuade or



discouraged to involve with a service or product. Economic behavioral intention is customer behavior that impacts the financial aspects of the firm such as repurchase behavior (Anderson and Mittal, 2000), prepared to pay more and changing behavior (Zeithaml *et al.*, 1996).

Research Framework

According to pervious theoretical framework, the researcher developed the new conceptual framework with six variables and four hypotheses. In the conceptual framework, the independent variables are subjective norms, key restaurants attributes in terms of

food attributes, service attributes, atmospheric quality and price fairness attributes, restaurant image, perceived behavioral control, and customer satisfaction towards Myanmar Restaurant. The framework is illustrated in Figure 1. There are four hypotheses which are designed based on the framework and they are shown as follow:

H1_o: Subjective norms, customer satisfaction, restaurant image and perceived behavioral control have no influence on customer behavioral intention towards Khaing Khaing Kyaw Restaurant.



H2₀: Key restaurant attributes in terms of food quality attributes, service quality attributes, atmospheric quality attributes and other attributes or price fairness have no influence on behavioral intention towards Khaing Khaing Kyaw Restaurant

H3₀: Key restaurant attributes in terms of food quality attributes, service quality attributes, atmospheric quality attributes and other attributes or price fairness have no influence on customer satisfaction towards Khaing Khaing Kyaw Restaurant.

H4₀: Restaurant image has no influence on customer satisfaction towards Khaing Khaing Kyaw Restaurant.

Methodology

The purpose of this research is to study the factors influencing customers' behavioral intentions towards Myanmar restaurant in Yangon, Myanmar. Descriptive research is to define the features of objective, groups, people, organizations or environments by answering who, what, when, where, and how question (Zikmund *et al*, 2013). The researcher applied self-administered questionnaire using five point Likert scale. The questionnaires consisted of five sections that represent screening question, eight independent variables with part two and three, dependent variable and general information.

Data Collection

The primary data collected into 400 respondents at selected four branches of Khaing Khaing Kyaw

Restaurant in Yangon, Myanmar. The target population is Myanmar people who are 18 years and above both male and female who have dining experience at Khaing Khaing Kyaw Restaurant. The researcher applied non-probability sampling technique which is utilized when the particular number of the population is impossible to know for the researches by Burns and Bush (2014). The sampling method consists convenience sampling, judgment sampling and quota sampling.

Findings

Based on the descriptive analysis, among 400 respondents, the majority of the respondents is with 59.5 % male and female is 40.5%. For the marital status, the highest percentage of the respondents are single with 80.8 % (323). For the age level, 45.0% of respondents are aged between 18-28 years old. For personal income level, the majority has income between 200,001 to 300,000 kyats per month with 32.5 % (130) respondents. For education level, the highest percentage of the respondents have of bachelor degree with 43.5 %. For the occupation, most of the respondents are private company employees with 60.8% (243). For the visiting frequency pre month, the majority visited less than 2 times with 40 %. For spending for food per visit, the majority spends between 10,001 to 20,000 kyats (10\$-20 \$) with 35%. For number of people visiting at one time, the majority visited with 2 to 4 people with 42 % and for the purpose of visiting showed that the majority visited for dining with 56 %

Table 1: Findings of Descriptive Analysis

General Information	Majority Group	Percentage and Numbers
Gender	Male	59.5% (238)
Marital Status	Single	80.8% (323)
Age	18-28 years old	45.0% (180)
Personal Income	200,001-300,000 kyats	32.5 % (130)
Education Level	Bachelor Degree	43.5 % (174)
Occupation	Private Company Employees	60.8 % (243)
Visiting frequency per month	Less than 2 times	40 % (160)
Spending for food per visit	10,001-20,000 kyats (10\$-20 \$)	35 % (140)
How many people for one trip	2 to 4 people	42 % (168)
Purpose of visiting	For dining	56 % (226)

Hypotheses testing

The findings of hypotheses testing analyses, the researcher also applied both Simple Linear Regression and Multiple Linear Regression. After testing all hypotheses, all the null hypotheses were rejected and

the significant level are lower than 0.05 with the confidence level of 95 percent. The testing of hypotheses' summary is explained as follows:

Hypothesis	Level of Significance	Result
H1 ₀ : Subjective norms, customer satisfaction, restaurant image and perceived behavioral control have no influence on customer behavioral intention Subjective Norms	.003	Rejected H1 ₀



Customer Satisfaction	.005	Rejected H1 _o
Restaurant Image	.000	Rejected H1 _o
Perceived Behavioral Control	.000	Rejected H1 _o
H2 _o : Key restaurant attributes in terms of food quality attributes, service quality attributes, atmospheric quality attributes and other attributes or price fairness have no influence on behavioral intention		
Food Quality	.000	Rejected H2 _o
Service Quality	.000	Rejected H2 _o
Atmospheric Quality	.000	Rejected H2 _o
Price Fairness Quality	.000	Rejected H2 _o

Hypothesis	Level of Significance	Result
H3 _o : Key restaurant attributes in terms of food quality attributes, service quality attributes, atmospheric quality attributes and other attributes or price fairness have no influence on customer satisfaction		
Food Quality	.026	Rejected H3 _o
Service Quality	.000	Rejected H3 _o
Atmospheric Quality	.006	Rejected H3 _o
Price Fairness Quality	.088	Failed to reject H3 _o
H4 _o : Restaurant image has no influence on customer satisfaction		
Restaurant Image	.000	Rejected H4 _o

Recommendations

According to all of the findings, this research can support the marketers to understand not only of Myanmar customers' behavioral intention towards Khaing Khaing Kyaw restaurant but also can suggest to other local restaurants in the market. According to the results of hypothesis one and hypothesis four, subjective norms, customer satisfaction, restaurant image and perceived behavioral control have influence on behavioral intention and restaurant image has influence on customer satisfaction. In addition, the beta value of standardized coefficient of subjective norms, customer satisfaction, restaurant image and perceived behavioral control show positive influence on behavioral intention. Moreover, restaurant image has the highest positive influence on behavioral intention and customer satisfaction of Khaing Khaing Kyaw restaurant. Khaing Khaing Kyaw restaurant should sustain service quality, atmospheric quality and price fairness quality. For the service quality, Khaing Khaing Kyaw restaurant should provide service training to the staffs once a year. For the atmospheric quality, Khaing Khaing Kyaw restaurant should create convenience dining environment by using comfortable furnishing. According to hypothesis two and hypothesis three, food quality attributes, service quality attributes, atmospheric quality attributes, and price fairness quality attributes have influence on behavioral intention and customer satisfaction. Based on the value of beta standardized coefficient, food quality, service

quality and atmospheric quality have positive influence on behavioral intention. Among these variables, the service quality attributes has the highest influence on behavioral intention and customer satisfaction followed by food quality attributes and atmospheric quality. Regarding this overall results, the researcher would like to suggest some recommendations, for service quality, Khaing Khaing Kyaw should provide service training to staff in order to be willing to help customers and should give the best employee of the month award to the staff. Based on the finding of price fairness attributes, the researcher would like to recommend that Khaing Khaing Kyaw restaurant should create pricing system based on the portion size of food and special packaged price. That could increase the price fairness quality which may have effect on the behavioral intention. Based on general information of purpose of visiting result, most of the respondents visited for dining with 56.5 % (226 respondents) followed by visited for business is 36.8 % (147) respondents. According to this finding, Khaing Khaing Kyaw should develop membership cards for dining and corporate agreement with businesses visiting for business meeting. By implementing loyalty cards, the loyal customers will develop more satisfaction regarding price fairness. Finally, the customer will enjoy dining and satisfy with Khaing Khaing Kyaw restaurant which will increased customers' behavioral intention.

Further Study



This research focus to understand the factors affecting of customers' behavioral intentions towards Khaing Khaing Kyaw restaurant in Yangon, Myanmar. The researcher would like to provide some recommendations for the future studies to support other researchers to extend or develop better research in the future.

Firstly, the researcher would like to give recommendation regarding research framework. The researcher applies six variables such as subjective norms, key restaurant attributes; food quality, service quality, atmospheric quality and price quality, restaurant image, perceive behavioral control, customer satisfaction towards behavioral intentions of Khaing Khaing Kyaw restaurant in Yangon. The future studies, may add different independent variables which could have influence on customer behavioral intentions such as attitudes, trust, health, emotional and etc.

In addition, this research focused only on selected branches of Khaing Khaing Kyaw restaurant in Yangon, Myanmar. Therefore, the findings of research may not represent for other geographical area. In the future, it would be better to extend this research at different branches of Khaing Khaing Kyaw restaurant throughout the country. That would provide more comprehensive understand towards customer behavioral intentions. Moreover, further studies may adapt this research framework of behavioral intention in other service industry such as education, transportation and travel and tour industries.

Finally, this research focuses only on Myanmar customers in Khaing Khaing Kyaw restaurant. Therefore, all the finding may not represent for foreigner customers. In the future, it would be better to include both foreigner and Myanmar customers in orders to understand customers' behavioral intention towards the restaurant industry of the country. Furthermore, future researchers should focus not only Myanmar restaurant but also different types of restaurants in Yangon such as international and fast-food chained restaurants.

Conclusions

The purpose of this research is to study the factors affecting customers' behavioral intention towards Khaing Khaing Kyaw restaurant in Yangon, Myanmar. In the study, the researcher distributed the survey questionnaires at the four selected branches of Khaing Khaing Kyaw Restaurant which are Khaing Khaing Kyaw Burmese Restaurant, Khaing Khaing Kyaw Bar Street Restaurant, Khaing Khaing Kyaw Traditional Restaurant and Khaing Khaing Kyaw Myanmar Cuisine. The researcher collected 400 survey questionnaires at the four selected branches of restaurant.

The result of the inferential analysis of Hypothesis one showed that subjective norms,

customer satisfaction, restaurant image and perceived behavioral control have significant influence on behavioral intention towards Khaing Khaing Kyaw restaurant. Then, the result of the Hypothesis two presented that key restaurant attributes in terms of food quality attributes, service quality attributes, atmospheric quality attributes, and price fairness quality attributes have significant influence on behavioral intention towards Khaing Khaing Kyaw restaurant. Hypothesis three indicated that food quality attributes, service quality attributes and atmospheric quality attributes have significant influence on customer satisfaction towards Khaing Khaing Kyaw restaurant. However, price fairness quality has no significant influence on customer satisfaction towards Khaing Khaing Kyaw restaurant. Hypothesis four pointed out that restaurant image has influence on customer satisfaction towards Khaing Khaing Kyaw restaurant.

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A STUDY OF FACTORS INFLUENCING EVENT SATISFACTION TOWARDS AN INTERNATIONAL ENERGY EXHIBITION IN BANGKOK, THAILAND

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Abstract

Event marketing plays an important role in many industries as marketing equipment to public relations and those companies who wish to promote their products. This research has shown that event satisfaction is influenced by factors towards an international energy exhibition. This study aims to investigate how the organizer can develop their overall performance for both customers and exhibitors. The researcher studies on targeted increasing event satisfaction, it asks: To identify the influence between event service quality, novelty seeking, event cost, event convenience, and corporate reputation towards an international event satisfaction. In this context, event satisfaction is a total evaluation of participants' received experience while consuming goods or services.

Based on the review of the literature of event satisfaction, a structured questionnaire was distributed to collect data from 400 participants in Grand International Conference & Exposition Asia 2019" (IEEE PES GTD 2019) in Bangkok, Thailand. Respondents were randomly collected around the exhibition hall. Analysis of the responses stated that positive corporate reputation had influenced customers satisfaction. The outcome showed that corporate reputation has a positive effect on event satisfaction. In other words, the organizer should focus on promoting their event through local marketing to the public. Further study is needed to identify other factors that can extend their story of the event.

Keywords: event satisfaction, international exhibition, energy

Introduction

From the recent marketing situation in the world, an organized event is one of the most famous methods to promote products, services or reputation as a marketing process. Additionally, the most important point of event business has been widely listed as one of the most business attraction for investors and tourists around the world (Bauer et al., 2001; Davidson and Cope, 2003). According to people expenditures, this kind of behavior is likely to attend and spend their time not only looking for business opportunity and making a new connection but also for satisfaction. Definitely, one of the several reasons that event tourism attracts interest from academics, governments, and investors stems from the fact that business travelers have a higher revenue yield per trip compared to the other types of tourists (Jago et al., 2003). Since Bangkok is one of the most popular tourist destinations, it would be attractive to many investors and business person to participate and enjoy with tourist attraction in Bangkok. Comparing with the other developing countries, Thailand has also an acceptable price in term

of accommodation and transportation for received services.

For the event organizers, event satisfaction is the main objective for them. However, the economics in the event may be led by variables of customer satisfaction. Pleasant environment makes the participants more comfortable to walk and spending their time longer in the event. Obviously, the positive energy will come from customers' emotion and actions then the economics and reputation of the exhibitors will be increased as well. The successful event can be measured by revenue that flows in the event and signed contracts, at the same time, the connection section is also important for the business in the near future. Hede et al. (2004) implied that satisfaction refers to fulfillment for a positive emotional reaction to the contentment of the demand. Leischnig et al. (2011) identified that event satisfaction is the participants' overall emotional after experiencing the event by an organizer. Wysong et al. (2011) stated that satisfaction was an evaluation of receiving quality experience on the context of customer's perspective and expectations



. Baker and Crompton (2000) discussed that satisfaction is an outcome of both external and internal reaction of the attendees after engaging with event schedule.

Based on many previous research, researchers found that intangible service quality, novelty seeking, event cost, event convenience, and corporate reputation had a significant relationship with event satisfaction. Crompton and Love (1995) described that service quality and satisfaction are conceived separately from marketing industry. Ayob and Said (2010) revealed that satisfaction can fully mediate between performance quality and behavioral intentions at both local and international transactions. On the other hand, Correia et al. (2013) suggested that the overall satisfaction can be applied as an assessment towards push and pull dimensions in tourists' satisfaction towards destination. Additionally, the results declared that satisfaction can be encountered with the cultural and public characteristics of the destination place by evaluating the convenience of the facilities. The researchers also found the relationship between novelty seeking and satisfaction. Jones et al. (2018) showed that the expenditure for attending the event is the important factor that the attendee considered. Most of all, the time limit and limited workforce are the major obstacle for this study. Shahijan et al. (2018) found that attendees' convenience have highly influenced perceived value and revisit motivation. In addition, previous studies examined service convenience as decision convenience, entry convenience, transaction convenience, beneficial convenience, and post-advantage amenity. Peterson (2018) found that company's reputation reduced the negative effect that might happen to the company. Besides, corporate social responses can enhance its reputation and increase customer satisfaction. However, the negative responses such as environmental issues may decrease company reputation as well.

In this study, the researcher aims to study event satisfaction along with future energy topic on international energy exhibition to identify the relationships that intangible service quality, novelty seeking, event cost, event convenience, and corporate reputation have with event satisfaction. In term of finding the event satisfaction, there are some factors that have a relationship with satisfaction. Moreover, event service quality is how people received both inside and outside sensitivity after experiencing an event including intangible service quality, ambient condition, space/function, and sign, symbol, and artifacts. Particularly, intangible service quality happens when customer's perception is matched or beyond their expectation (Zeithaml et al., 2009).

LITERATURE REVIEWS

Event service quality

Besides, the ambient condition is an overall atmosphere since attendee has experienced in front of the event including air flow, light capacity, and clean venue (Dijkstra et al., 2008). Space/function is the layout of the event such as display and decoration, food and beverage section, and sufficient toilet. Along with sign, symbol, and artifacts, there are important for an attendee to walk around and using it as communication tools to be more convenient for everyone (Rosenbaum and Wong, 2010).

Duman and Mattila (2005) showed that customers' emotion motivate satisfaction, and the novelty seeking is also the emotional factor. In addition, the novelty-seeking also has a sub-variable such as thrill, change of routine, boredom alleviation, and surprise. Thrill is providing the participant with more intentions to the event and making more excitement towards their activities. However, change of routine is an odd emotion that people cannot find in their daily basis and somehow they need to release their stress and participate with something new and more interesting for their life to make it more valuable. For boredom alleviation, customer satisfaction can be increased from a sense of adventure to make them feel more enthusiastic and having a motivation to participate in an event more frequently. Last but not the least, a surprise would be an unusual emotion that people may not engage every day in order to increase customer fulfillment by an instance activity. Each variable has a relationship with satisfaction by raising the internal feeling through activities, event display, and communication tools.

In term of an international energy exhibition, it will be a significant event for many companies related with the energy field. According to the suppliers who are related to the energy industry, they can develop a relationship with a massive company in some ways. Therefore, each international energy exhibition can provide an extremely high potential to people who run billion dollars company. However, the common interest of the world is ready to support alternative energy instead of oil&gas and still sufficient for everyone to follow. Alternative energy or clean energy is discussing as future energy for a decade and still updating their information in the energy exhibition. Normally, an international exhibition is arranged in countries who have the potential for generating massive energy. Therefore, this kind of event can be one of the important events that support highly significant information rounds global future energy direction. A few years ago, Thailand had an opportunity to organize some international events which increase every year. Another reason that Thailand is the perfect destination to arrange the exhibition due to its convenient transportation and useful facilities.

Parasuraman et al. (1988) defined that service quality as well as event service quality is the divided



opinion between clients' perception towards organizer's performance and clients' estimation of the services they received and evaluate the quality based on their experience. Vogel et al. (2008) and Zeithaml (1988) implied that event service quality is the quality that developed by organizer or group of people to execute marketing which customer action, related to perception and perceived the value in terms of the benefit received and sacrifice provided of the quality of the event. Many researchers have investigated service quality and the related meaning of customer satisfaction (Oliver, 1980; Tse and Wilton, 1988). Crosby (1984) stated that quality was implied as "conforming to requirements" (Crosby, 1984).

Intangible service quality

Intangible service quality is an emotion or feeling of participants after experiencing service quality that service provider has served the customer. The academic holds intangibility as one of the fundamental characteristics of services (Wolak et al., 1998). Cowell (1984) stated that services are hard to sense any feeling before they are purchased. This is a controversial issue that intangibility is one of the most significant differences between products and services. According to Oberoi and Hales (1990) and Zeithaml and Bitner (1996), the broad meaning of service explains intangibility as a major factor of a variable either providing a service or not.

Ambient conditions

The ambient condition can be the overall atmosphere including air quality around location that will make direct impact both mentally and physically on the respondent. Dijkstra et al. (2008) implied that ambient conditions include upbringing environmental inducements such as air flow, clean place, and clear atmosphere (Grayson and McNeill, 2009), including optical, for example, flashes, colors, and designs. Charles et al., (2004), Davis (1984), and Steele (1973) described that perspectives such as ambient conditions and displays have a great influence on behavior, awareness, and also on the performance of participants (Sundstrom and Sundstrom, 1986).

Space/Function

Rosenbaum and Wong (2010) implied that event area has offered sufficient facility, set an impressive decoration and other services for a customer such as sufficient food and beverage, clean toilet and enough seat for relaxing and comfortable chair around the event destination. Beyes and Steyaert (2012); Lefebvre (1991); Tyler and Cohen (2010) implied that space is similar to an energetic, dynamic and effective force that interferes customer intention. Arja Ropo and Höykinpuro (2017) implied that being performative in people behavior, the narratives are processual and changing. They also defined that the specific space may communicate a different story at different periods.

Sign, Symbols, Artifacts

Rosenbaum and Wong (2010) implied that signs symbols and artifacts are used as communication equipments or tools in which a good sign of explanation can describe the functions in the venue. Peter (1984) stated that a sign is a group of specific words or pictures showing the location. These definitions can be organized to state, show, acknowledge, adjust, caution, recognize or forbid. Signs stay persistent, mostly in illustrate design, colors, materials, and location. Hostetler (1964) examined that a symbol is a "visible object" which presents an idea. White (1949) had defined that symbols can represent the overall scenery of a social or cultural group and also can be presented in an illustration form; for instance, by architecture. Leonte'v, (1978); Vygotski, (1978) showed that artifacts have feedback with how many people are together and organized. Buskirk and McGrath, (1999); Hatch et al., (2005) stated that the general meaning of an artifact is an object reminder of people movement. This is verified by having both explicit and implicit values.

Novelty seeking

Novelty seeking can be defined as a new experience that people are searching to receive an enjoyment, an excitement, and an inspiration which cannot be find in routine life (Cheng et al., 2015). From previous research, Zott and Amit (2010) stated that novelty is the selection of new experience and/or new design of the related experience. Peng et al., (2013) stated that the publication of the advantages of novelty shows that novelty has the power to develop customers swapping cost, guard against enlarging churn and continuously develop more reputation for the exhibition.

Thrill

Cheng et al., (2015) implied that thrill is an emotion of overwhelming on feeling which individually direct to customers, in terms of exciting activities and enjoying in adventures. Jones and Lynam (2009) and Marcus (2004) investigated that the key objective of thrill and its position in decision making, departing from the recent emotion control, consist beyond the boundary of personal subconscious for the long term activities.

Change of routine

Cheng et al., (2015) implied that change of routine is an enjoyment and excitement when customer experiences new activities or different cultures. Generally, routines refer to the real experience that has learned from each personal life, and it is mostly seeking to a new

entertainment that will make individual feeling better in term of development, enhancement,



adjustment, and interference of daily basis (Espedal, 2006). Cohen and Bacdayan (1996) examined that routines are formatted series of studied behavior involving multiple activities which are related to both communication and/or authority. This explanation divides two perspectives. Firstly, a perspective examines that a routine is the same activity of personal basis that is basically remembered and behaved. The second perspective examines that a routine is generated and shifted as a result of a personal experience depending on the reaction toward multiple activities.

Boredom alleviation

Boredom alleviation is obviously related to be an adventure seeker, and who finding new things (Hyde et al, 2012). By gathering emotions, human-being, excitement, and sensible theories of boredom alleviation, some studies defined that boredom is universally conceived as the unpleasant feeling, and no opportunity, to seek a pleasant action (Eastwood et al. 2012). Lipps (1903) defined boredom that boredom is a state of unhappy in the current situation and lacking excitement, or incompetence to be aroused (Fenichel, 1953).

Surprise

Valenzuela et al., (2010) implied surprise as a wonder, fear, or confuse that grows from the unexpected feeling or unplanned activity in the exhibition. Rosenbaum and Wong (2010) implied that surprise is an activity which is not plan in the event. Surprising is to encounter unexpected activity and consequence of this situation, due to its appearance, or a unplanned situation happened (Lempert et al. 2002). The authors also stated that a result of surprise can be positive or negative emotion that comes out with the customers' expression. A surprise can be affected by the characteristic of the event, and previous experiences which may not related to the event at all (Cheal and Rutherford, 2012).

Event Cost

Event cost defines as each expense, that actually exist, which is related to the event both before and after the event, for instant, transportation cost, ticket price, and food price around exhibition venue. Cost refers to the respondent's perceptions of the expenditure on the specific exhibition and also including the cost of transportation which is related to the exhibition (Rosenbaum, et al., 2010). A cost target is everything in an event where a divided service of costs is needed (Herbert Snyder, Elisabeth Davenport, 1997). Wen-Hsien Tsai, (1998) examined that costs have a relationship between the organizer's and client's evaluation of purchased goods, services and

intermediates to ensure conformity with the particular order.

Event Convenience

Event convenience is one of the factors that makes people feeling more comfortable to engage the event and rise their intention to participate. Convenience increase a tourist's mindset of the comfort of going to an exhibition venue which includes entrance/exit areas, easily reached event location, sufficient local public transportations, and easily reached venue (Rosenbaum, et al., 2010). Convenience objective is mostly aimed at convenience products or services (Brown, 1990). The same author also implied that convenience defines as "everything that provides to somebody's support or saves time: helpful, convenient or assisted tool, or service, etc."

Corporate Reputation

Peterson (2018) stated that corporate reputation is a perceptual representation of a firm's previous activities, in order to be successful and well-establish to organize the previous event. Also, forthcoming stakeholders may highly regard to the whole corporations and attract to all of the main function when compared with competitors. The author also stated that the presupposition which corporate reputation can make different from a number of viewpoints, for instance, treatment of customers, service quality and security, connection, and atmospheric concentration.

Event satisfaction

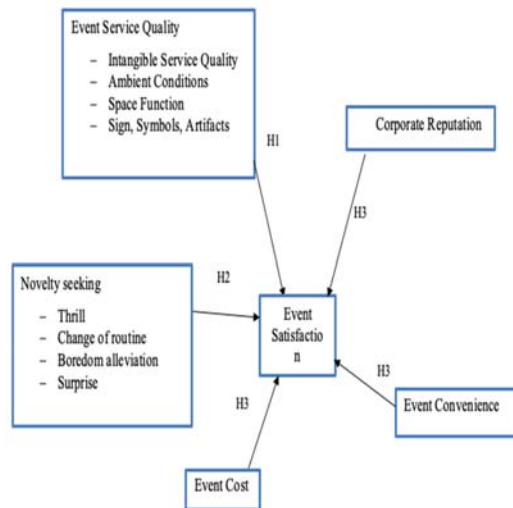
Fornell (1992) implied that satisfaction or event satisfaction is a total evaluation of participants' received experience while consuming goods or services. Baker and Crompton (2000) implied that satisfaction is an evaluation of tourists' reaction to both external and internal after involving with activity. Also, this is started when customers have participated by themselves with the destination. Leischnig et al. (2011) examined event satisfaction as the customers' overall feeling of the event by a service provider. What is more, Ayob et al. (2013) illustrated visitors' experiences react to an event satisfaction, that comes out with a result on spectators' decision toward coming events. On the one hand, satisfaction was discovered to be as a middle person between the event experience and purpose.

Related Review Literature

Research Framework

Conceptual Framework of The Study of the Factors Influencing Event Satisfaction towards an International Energy Exhibition in Bangkok, Thailand

Figure 1: Conceptual Framework



RESEARCH HYPOTHESIS

H1o: Event service quality in terms of intangible service quality, ambient condition, space function, and sign, symbols, and artifacts are not influenced on event satisfaction.

H1a: Event service quality in terms of intangible service quality, ambient condition, space function, and sign, symbols, and artifacts are influenced on event satisfaction.

H2o: Novelty seeking in term of thrill, change of routine, boredom alleviation, and surprise are not influenced on event satisfaction.

H2a: Novelty seeking in term of thrill, change of routine, boredom alleviation, and surprise are influenced on event satisfaction.

H3o: Event service quality, novelty seeking, event cost, event convenience, and corporate reputation are not influenced in event satisfaction.

H3a: Event service quality, novelty seeking, event cost, event convenience, and corporate reputation are influenced in event satisfaction.

Methodology

Methods of research used

This study used descriptive research to identify the rate of event satisfaction. In addition, the conceptual framework is developed to identify the independent variables and the dependent variable to reveal how they are related. In addition, descriptive research takes charge of explaining results based on the questions of customer behavior (Burns and Bush, 2014). Cooper et al, (2014) stated that descriptive research is a formalized study with regularly structured and distinctly mentioned hypotheses or examined questions. Also, a dependent variable is customer satisfaction. Independent variables are event service quality, novelty seeking, event cost, event

convenience, and corporate reputation. Thus, the researcher applied multiple regression line in order to calculate hypothesis testing.

Target Population

First and foremost, Sekran (1992) stated that the target population is a specific complete group which was important for the research project. On the other hand, Blackwell (1999) also mentioned that the target population can be any group of people who share a common set of behaviors concerned with the researcher. Cooper and Schindler (2014) stated that the target respondent is the primary designated cluster of respondent and fountainhead from the entire population gathered by the researcher. The target population in this study is the people or customers who participated in the exhibition. Moreover, the researcher aims to collect the data from the customers who walked around the event. Then, there is one screening question to make this questionnaire becoming more relevant with target when the researcher collects the data. As, the customers should have an experience or walked around an exhibition.

Sampling Unit

From an overall picture, sampling unit involves choosing a comparatively small amount of component from large group of components to forecast that the data collected from the small group will be able to represent the larger group (Joseph, 2013). Malhotra (2007) stated that the sampling unit is a component, or subgroup of a component, which meet the requirement of the sampling procedure. Zikmund (2003) defined that sampling unit is an individual component or collective of component variables to recruitment in the sample.

In this study, the sampling unit is a guest and an exhibitor who come to visit this exhibition of “Future Energy” during a limited time period. Also, the researcher will collect the data from both male and female and the researcher decided to collect the data from the participants who are above 20 years old. Because many academicians from antecedent researches found out 20 years and above are mature enough to answer the question (Malhotra and Birks, 2007). In every sampling unit, the specified group has an accurate number of participants for collecting the data. The exact probability of participant of every sampling unit may be even or not based on the format of nonprobability sampling design.

Sample Size

Aaker et al. (2000) stated that the sample size is the number to collect the data; the amount of surveys identified by the expected diversity of the participant, the importance of limited error and the trustable rate. Altman (1991) showed that sample size should be appropriate to analyze the results of the research. If the sample size is not enough, it will



be difficult to identify the result. Maholtra (2007) implied that the sample size refers to the amount of component that contains in the research. As, Zikmund et al. (2013) implied that the sample size of previous research can be used to identify the size of this research. As, Rosembuam and Wong (2010) studied about "Value equity in event planning: a case study of Macau" which is focused on customer satisfaction. The researchers applied the sample size equals 321 respondents. Also, Cheng et al., (2015) studied about "The mediating effect of situation involvement of novelty seeking and satisfaction for Yanshuei Fireworks Festival in Taiwan" and collected data from 302 respondents. Finally, Yang and Tan, (2017) studied about "Event innovation induced corporate branding" and collected data from 280 respondents. However, Malhotra (2007) implied that a bigger sample size is better to represent the population. Therefore, the researcher adjusted to collect 400 samples as a sample size to be more reliable for this study.

Sampling Procedures

Non-probability sampling by using judgement sampling and convenience sampling are applied to find the sampling unit for this study. As, Zikmund et al. (2013) implied that non-probability sampling is implemented as the method that most researchers chose on the foundation of personal judgment or convenience. Also, the authors stated that non-probability sampling is the probability of a specified group with an unidentified number. In this research, the researcher applied two sampling methods, which are judgment sampling and convenience sampling since the probability of selecting each sampling unit is unknown. There are some participants who have experienced or under experience in the international exhibition. The explanations of sampling methods are as follows;

Step1: Judgement sampling

Cooper and Schindler (2014) defined that judgment sampling is used when the sample group complies with the standard which has set by the researcher. Zikmund et al. (2013) stated that judgment sampling is a nonprobability sampling technique where a personal judgment designs group based on previous experience about the qualification of the sample group. Judgment sampling (Purposive sampling) is a widely used method in qualitative research for the identification and choosing from data-rich cases for the most efficient with limited resources (Patton, 2002). Judgment sampling or purposive sampling is one of the non-probability sampling methods that occurs from the decision of the researcher. Literally, this sampling technique is based on the personal judgment of the researcher. In this study, the researcher selects the group of sample that reaches the qualification and

relevant to the target population of this topic. As, researcher designed to collect the data from "Future Energy Asia 2018" that organized by the Ministry of Energy in front of hall EH 98 at the main entrance on the second floor of the event venue at the BITEC.

Step2: Convenience sampling

Convenience sampling is normally the least reliable method but it is the most convenient and less expensive to collect the data (Cooper and Schindler, 2014). Zikmund (2013) referred convenience sampling as a method to collect the data at the exit entrance or based on conveniently accessible to intercept consumers. This convenience sample used to survey based on the convenience of the investigator (Burns and Bush, 2014). Convenience sampling is a non-probability sampling method where topics are selected due to their convenient accessibility and proximity to the researcher and which samples are drawn at the convenience of the researcher. The researcher has provided this sampling technique to receive appropriate data in a short period. For this research, the researcher will stand in front of an exhibition gate and conveniently intercept the participants to collect the data in a limited period. Therefore, the convenience sampling technique will be useful for focusing on the target conveniently under limited conditions.

Research instrument/Questionnaires

In this research, the questionnaire is used as the research instrument to gather information from a respondent who participates in the "IEEE-PES GTD Grand International Conference & Exposition Asia 2019", Bangkok, Thailand between 21 to 23 March 2019. The researcher has developed the questionnaire based on the conceptual framework and antecedent studies. There are three sections in the questionnaire. 5-point likert scale is widely applied in many different types of research as one of the concluded rating scale (Cooper and Schindler, 2014). The 5-point likert scale has been applied to this research to analyze the 6 variables from the conceptual framework. Those variables contain customer satisfaction, event service quality, novelty seeking, event cost, event convenience, and corporate reputation.

Conclusion

This study is to find the factors influencing event satisfaction towards an international energy exhibition in Bangkok, Thailand. There are 5 different independent variables that the researcher applies to analyze, namely, event service quality in terms of intangible service quality, ambient condition, space function, and sign, symbols, and artifacts, novelty seeking in term of thrill, change of



routine, boredom alleviation, and surprise, event cost, event convenience, and corporate reputation. Thus, the three hypotheses are analyzed by the statistical analysis software. In addition, the researcher also distributed structured questionnaire by using Five-point Likert scale and analyzed by Multiple Linear Regression analysis. The questionnaire is used to collect the data from a total of 400 participants. The event called “IEEE-PES GTD Grand International Conference & Exposition Asia 2019” or IEEE-PES GTD Asia 2019 from 19-23 March 2019 in Bangkok, Thailand. The researcher applied convenience sampling to collect data. Then, Multiple Linear Regression for analysis via SPSS program. According to the analysis, the general information showed that most of the respondents were male (67%) with the age between 21 to 30 years old (44.5%) and the majority graduated from a bachelor degree. In addition, majority of income is around 501 to 1,000 US Dollar (37.8%), and most of them are single with 62.3%. Due to the energy event, the participants are mainly employees (54.3%). However, there are 3 additional questions. Firstly, a major purpose to attend the exhibition is for business purpose (39.5%). Secondly, most people came to this exhibition with Colleague (49.3%) and lastly, most of them came to the exhibition for the first time (40.5%).

According to the results of Hypothesis 1, 2, and 3, all the null hypotheses are rejected. Thus, the conclusion is that event service quality in terms of intangible service quality, ambient condition, space function, and sign, symbols, and artifacts, novelty seeking in terms of thrill, change of routine, boredom alleviation, and surprise are not influenced on event satisfaction.

Table 1: Summary of the results from Hypothesis Testing

Hypothesis	Level of Significance	Standardized Beta Coefficient Value	Result
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H1o: Event service quality in terms of intangible service quality, ambient condition, space function, and sign, symbols, and artifacts are not influenced on event satisfaction.			
Intangible Service Quality	.000	.370	Reject H1o
Ambient Condition	.000	.207	Reject H1o
Space/Function	.001	.161	Reject H1o
Sign, Symbols, and Artifacts	.000	.173	Reject H1o
H2o: The novelty seeking in term of thrill, change of routine, boredom alleviation, and surprise are not influenced on event satisfaction.			
Thrill	.000	.329	Reject H2o
Change of routine	.000	.378	Failed to Reject H2o
Boredom alleviation	.078	-.079	Reject H2o
Surprise	.004	.156	Reject H2o



H3o: The event service quality, novelty seeking, event cost, event convenience, and corporate reputation are not influenced on event satisfaction.			
Event service quality	.000	.281	Reject H3o
Novelty seeking	.000	.174	Reject H3o
Event cost	.289	.029	Failed to Reject H3o
Event convenience	.554	.020	Failed to Reject H3o
Corporate reputation	.000	.491	Reject H3o

Recommendation

Event service quality in terms of intangible service quality, ambient condition, space function, and sign, symbols, and artifacts

According to hypothesis 1, the result showed that intangible service quality has a significant influence on event satisfaction. With the strongest beta value which is equal to .370. followed by ambient condition which beta value is equal to .207. In addition, the lowest two variables are Sign, symbol, and artifacts which beta value is equal to .173, and space/function which beta value is equal to .161. Thus, the organizer should continue developing the services of personnel and focusing to solve the personal request of each customer. In addition, organizer can manage the CRM (Customer Relationship Management) training session for their personnel in order to enhance their knowledge to understand customer needs. The researcher would like to provide some recommendations to provide sufficient food and beverage to customers attending the conference which also asks specific requirement in advance. Based on comments of the respondents, the organizer should create a handheld brochure for visitors to search event details conveniently. Also, the Abdelazim T. S., & Alajlani A. A., (2016). Towards developing a model to assess the experience of visitors

event venue should be always clean venue, comfortable, and sufficient for facilities that includes offering air condition service by the time of exhibitor set their decorations in order to raise event satisfaction.

Novelty seeking in terms of thrill, change of routine, boredom alleviation, and surprise

According to hypothesis 2, the result showed that the change of routine has a significant influence on event satisfaction. With the strongest beta value is equal to .378 followed by thrill which the beta value is equal to .329 and surprise which is equal to .156. However, boredom alleviation has no significant influence on event satisfaction. Thus, the organizer should continue developing the activities to create an exceptional experience for visitors by providing a unique show with a remarkable scene come up with extra ordinary decoration. The researcher would like to give some recommendations to provide interactive booths and traditional performance to enhance customer engagement and some opportunity to provide useful information about company' product all day long. Based on the results, the organizer should organize an academic conference with an entertainment section along with the event such as lucky draw, activities, and cultural performance.

Event service quality, novelty seeking, event cost, event convenience, and corporate reputation on event satisfaction

According to hypothesis 3, the result showed that corporate reputation has a significant influence on event satisfaction. With the strongest beta value is equal to .491 followed by event service quality which beta value is equal to .281 and novelty seeking which is equal to .174. However, event cost and event convenience have no significant influence on event satisfaction. Thus, the organizer should do more marketing to promote a reputation through social media and traditional advertisements. The researcher would like to give some recommendations to spread the news of the event through well-known social media channel and develop the company profile to become one of national figures along with the local marketing trends by spreading short video clip and keyword's poster. Based on the results, the organizer should co-operate with the Ministry of Energy to convince the related organizations including international and local major energy companies, universities, and other energy related organizations to participate in this exhibition.

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Determining the Appealing Factors of Thailand's chef-table Restaurant in Bangkok and their effect upon Diner's Behavioral Intention.

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Apichart Intravisit

Abstract

The purpose of this research is to identify the relationship between the appealing factor of Thailand's chef-table restaurant, its customer satisfaction and customers' behavioral intentions. Data were collected from a sample of 120 customers who experienced dining at chef table restaurant. Analyzed through Multiple Linear Regression., the study finds that the appealing factors of Thailand's chef-table restaurant have a significant effect on customers' satisfaction. The finding also shows the relationship between customers' satisfaction and their behavioral intention. The result indicates that food quality attributes and service quality attributes constitute the most important factors that effect chef-table restaurant's customers in Bangkok.

Keywords: Chef-table restaurant, Bangkok, Food Quality, Service Quality, Customer Satisfaction, Behavioral Intention

Background of the Study

"We live to eat or eat to live?" This has been a discussion for long. The changing dynamics throughout the world has changed the shape of this question as eating has become more of a social commitment or a social pleasure due to increasing dining out opportunities. Given that satisfaction trend and behavior of different countries might not be the same, we need to dig deeper into understanding customer behavior within Thailand and more specifically for people in Bangkok.

Thailand aim to become World's kitchen. Thailand well known about the variety of food from street food (kiosk) to luxury restaurant. This is the Tourism Destination for many tourists. Currently value of restaurant business in Thailand is about 420,000 Million Thai baht and growth at least 5%, From restaurant registration statistics in year 2560 (Mitkaserm., 2018) And also increase number of new graduated student from food academy that make restaurant business even grow faster due to all these people would work in this business or even more they might open another restaurant. In Bangkok so many new open restaurants at the same time some restaurant disappear there are some reason or something behind to make them success or fail.

Chef-table is a new player in restaurant business and now is a trends that upcoming. Chef-table is unique restaurant. Customer cannot choose much they have to follow what is the ingredient that chef got at that time and want to cook for them. The factor that we consider as their selling point is food quality, service quality,

atmosphere, convenience, or other attribute. Chef-table begins with the millionaires who were bored with normal fine dining restaurant, so they hire the chefs to cook at their house and so it soon becomes a private dining. Private dining creates the customer-chef-interaction, as customers see the chef's activity in the kitchen, talks to the chef during his/her cooking and smells the food on the stove. Later on, many independent chefs create their own restaurant buy using the same concept, thereby making a chef-table restaurant. Nowadays, chef-table restaurants' main customers are corporate executives, politicians, socialites, and well-to-do people who enjoy exclusive dining in special menus with meticulous decoration and rare and creative ingredients.

Generally found in western dining style setting, chef-table is served on long table by kitchen or in a bar-type seating. Regular table can also be located in the open-kitchen in a chef's house or any place to chef's preference or own creative design and expertise. Service style design includes the ingredients, menu, food decoration, and infrastructure of the venue. Cost of dining varies. The customers need to specify and agree upon the budget, or sometime chef is the one who sets the price per person. Upon serving, chef tells the story, background, and inspiration of each dish. Chef-table restaurant generally prepares wine pairing for each item in the menu to enhance the dishes.

Statement of the Problem

As restaurant business in Thailand has grown extensively, a niche and affluent business of chef-table in an up-coming attraction in the culinary scene in major cities in Thailand market. Direction



and development of chef-table business seem exclusive, perhaps they depend very much on the operator's, financial capability and the chef reputation as well as readiness of the local and international dinner. Revenue from each visit of a chef-table business is substantial, yet the volume of visit maybe scarce, or any rate, this niche business indeed places in Thailand in the world destination of food tourisms, which includes fine dining and chef-table experience. Therefore, a study particularly on chef-table business in Thailand is vital to development of food tourisms of the country. This study is hoped to be useful for owners and management of any chef-table restaurant business for their better direction to respond to the customers' needs and to achieve customers' satisfaction. Also, this study wish to help the chef-table business to create competitive advantages within its industry.

Research Question

What characterizes the elements of chef-table business in Thailand in views of Thai diners?

To what extent these elements are influential to Thai diner's behavioral intention toward chef-table visits?

Research Objectives

To describe the characteristics of chef-table business in Thailand in views of Thai diners.

To analyze the elements that are influential to Thai diner's behavioral intention toward chef-table visits.

Food Quality

In the restaurant, food quality is one of the most important attribute that a customer considers. For Ramanathan et al. (2016), The most important factor that influence customer satisfaction is food. Then price, ambience and service, respectively In addition, it is generally accepted that it is an important factor that influences customer satisfaction and behavioral intentions after meals. (Sulek and Hensley, 2004). There is positive relationship between food quality and both consumer investment and willingness-to-pay in restaurants (Njite et al., 2015). The quality of food consists of many complex factors such as physical properties, compositional and microbial features, modifications arising from technological processes or preservation of nutrition and safety (Trimigno et al., 2015). Giving to Micheal et al. (2015), Normally customers have experience with seeing before have dinner. Diner's satisfaction can be increase or decrease by the same quality of all attribute by simply switching the visual lay out of the food components of the dish. Most well-known measurements of food quality are: satisfaction in the hospitality industry (Han and Ryu, (2009).

Convenience Attribute

food freshness, portion size, food presentation, menu variety, food taste and food temperature. Food presentation, taste and temperature are the important factors of customer satisfaction where as food presentation, taste and healthy options are the significant factors of behavioral intention (Namkung and Jang, 2008). Besides these six individual attributes, "food safety" is also an important cue for evaluation of food quality as consumers tend to have more positive attitudes and higher likeliness to pay more for the restaurants with higher food safety standards (Lin and Wu, 2016).

Service Quality

Only the term of quality is not the full measurement of how customers respond toward their servers' actions but a manner of delivering service that is specifically identifiable on some aspects other than quality is also the dominants of assessing the customer satisfaction in a specific restaurant context (Giebelhausen et al., 2016). For instance, service quality dimensions are important factors of customer satisfaction and loyalty Izogo, E. E., & Ogba, I. E. (2015) The perceived service quality has impact on customer satisfaction through both positive and negative emotions (Ladhari et al., 2008). The key dimensions in increasing or decreasing customer perspectives of service quality relate to the employee involvement climate, a construct consist of power, information, rewards and knowledge and supervisor undermining (Mathe, K., & Slevitch,(2013). Njite et al. (2015) have confirmed the positive effect of service quality on consumer intentions in upscale dining among all dimensions.

Atmospherics Quality

According to Horng et al. (2013), the improvement of only food quality cannot satisfy the customers. For instance, Barber et al. (2011) suggested that the predictors associated with cleanliness significantly affect restaurant quality perception while Sester et al. (2013) stressed on the importance of overall ambience perception. For Njite et al. (2015), ambience has a positive influence on consumer intentions in upscale dining and increase in ambience tends to increase patronage and willing to pay by a significant amount. For Ryu and Jang, (2007), customers' emotional responses are most significantly affected by the music, aroma, temperature and employee appearance that successively affect the behavioral intentions of customers in restaurants. Among scholars and hospitality managers, the situation to formulate an attractive and pleasure physical environment has gained growing attention as it is a key predictor for customer's attraction and

Convenience aspects are composed of convenient location, free parking space, and short walking distance (Klassen et al., 2005). The convenience aspect is not



significantly directly related to customer satisfaction (Liu and Tse, (2018). Woo et al. discover that location convenience and a small walking distance are important factors of revisit intentions in university dining facilities. However, since most customers visit full-service restaurants by using their own transportation, location convenience and a major walking distance may not be a majority of concern.

Other Attributes

In this research conduct with price fairness and authenticity. For another aspect was customer satisfaction and behavioral by intentions will influence by perceived reasonable price Saad Andaleeb, S., & Conway, (2006). Perceive as a reasonable price will conduct the price that customer will pay (Bolton et al., 2003). In the restaurant section, the experiences of the consumers will not the same standard for service or food quality so that making the price perception depend on behavior of consumer the most important factor. Malik et al. (2012), found that to determine the value of service provider was influence by two factor which is price and better quality. The key indicator of making strategies will consider from reasonable price will support the managers to develop the plans from the customers' perception (Shamma and Hassan, (2013). For years, the marketing strategy in the hospitality industry will apply the concept of authenticity also. (Sedmak and Mihalic, 2008) as a brand-positioning and a product appeal strategy (Robinson et al 2012). Authenticity was defined as the ethnic origin of the actual and culture of food and environment. Consumers will perceive their authentic experience only if they know that the settings have been purposely schemed (Mkono, 2012). Moreover, consumers' authenticity perceptions toward an authentic restaurant are based on overall evaluations of the ethnic cuisine served, indoor and outdoor settings of the restaurant, ambiance, feeling and attendants they interact with Lu, A. C., Gursoy and Lu, (2015). In this sense, a more authentic restaurant can easily have recognized by potential customers and be correctly associated and satisfied with the authentic ethnic cuisine.

Customer Satisfaction

Customer satisfaction refers to the process of evaluation that the customer compares his or her previous expectation to the perceived service experience (Gilbert et al., 2004). The comparison between service expectation and perceived service

experience can be defined as the disconfirmation model (Gilbert et al., 2004). Customer satisfaction depends on both customers 'thinking responses and their affective responses to service encounters (Edvardsson, 2005). New development represents a change of paradigm, from customers' perspectives as solely economic-rational decision makers to combine the point of view which integrate affect and emotions (Holbroo and Hirschman, (1982). The process of evaluation, which leads to satisfaction levels, is now represented to both cognition and affective responses to service encounters (Burns and Neisner, 2006). The current study indicates that this new paradigm when conceptualizing customer satisfaction in a full-service restaurant setting.

Behavioral Intentions

The term of behavioral Intentions can be defined as the individual plan whether they perform some particular behavior in the near future or not (Ajzen and Fishbein, 1980). For Ali et al. (2013), the favorable behavioral intentions are derived from the positive word-of-mouth, more spending on the service provider, more paying a premium price and remaining loyalty. On the hand, the unfavorable behavioral intentions are derived from negative word of mouth and leaving the service provider, less spending with the company. Jani and Han, (2011) classify behavioral intentions as revisit and word-of-mouth intentions. Therefore, a consumer intention to repurchase and recommend potential customers result in the creation an attitude toward the service provider based on the prior experiences toward the product or service (Han and Kim, 2009). Therefore, the study of behavioral intention can be defined in the term of revisiting the same restaurant in future, recommendations toward others and positive word-of-mouth communications.

Conceptual Framework

The conceptual framework was developed from previous two research models (Shahzadi, Malik, Ahmad, & Shabbir, and Liu & Tse,) by selecting the variables that were important and had affected on behavior intention for chef-table's business. Researcher aimed to find the five factor (Food Quality Attributes, Service Quality Attributes, Atmospheric Quality Attributes, Convenience Attributes and Other Attributes) that effect on customer satisfaction. And to find relationship between customer satisfaction and behavioral intention.

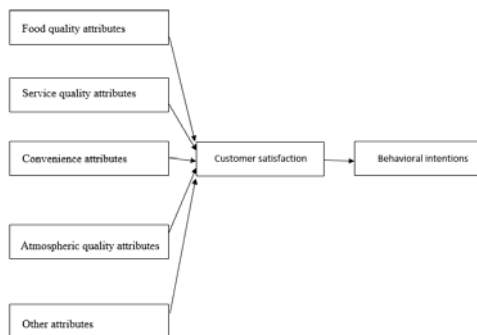


Figure 1: Conceptual Framework of factors that affect customer satisfaction and behavioral intentions.

Research Hypotheses

There were 6 hypotheses that formulated based on the developed conceptual framework above.

H1₀: Food quality attributes has no effect on customer satisfaction.

H1_a: Food quality attributes has an effect on customer satisfaction.

H2₀: Service quality attributes has no effect on customer satisfaction.

H2_a: Service quality attributes has an effect on customer satisfaction.

H3₀: Convenience attributes has no effect on customer satisfaction.

H3_a: Convenience attributes an effect on customer satisfaction.

H4₀: Atmospheric quality attributes has no effect on customer satisfaction.

H4_a: Atmospheric quality attributes has an effect on customer satisfaction.

H5₀: Other attributes has no effect on customer satisfaction.

H5_a: Other attributes has an effect on customer satisfaction.

H6₀: Customer satisfaction has no effect on behavioral intention

H6_a: Customer satisfaction has an effect on behavioral intention

Target Population and Sample Size

Target population is focusing on Thai people who mainly live in Bangkok and experienced at least one time dining at a chef table restaurant. As chef-table restaurant is a new product and a niche business in food and restaurant industry, identifying or approaching the seasoned chef-table diners are not easy due to their care for privacy and unapproachable posture. Nevertheless, about 122 respondents—both on face-to-face communication and online communication—agree to respond to this study from 23rd February to 30th March 2019.

quality attributes have significant effect on customer satisfaction. Njite et al. (2015) have

Summary of the Finding

There are only four demographic factors which including gender, age, income and education level. Rendering to the analysis of demographic factors of this research, the most population of the respondents were female (56.6%). And the most age of the respondents were 25-35 years old (38.5%). Most of them had master degree or higher (51.6%). The biggest group of respondents gain 90,001 or more Thai baht per month (45.9%). From the demographic we can see that the biggest group of respondent were new generation that has high level of education and gain high income level.

Table 1 Summary of Hypothesis

Hypothesis	Coefficient	Level of significance	Testing result
Hypothesis 1	.342	.000	rejected H1 ₀
Hypothesis 2	.306	.001	rejected H2 ₀
Hypothesis 3	.061	.320	failed to reject H3 ₀
Hypothesis 4	-.005	.955	failed to reject H4 ₀
Hypothesis 5	.061	.000	rejected H5 ₀
Hypothesis 6	0.62	.000	rejected H6 ₀

The result of this research after analyze first five hypotheses, the outcome shown that three out of five null hypotheses were reject, meaning that three variables were significant which is Food quality, service quality and other attribute have relationship with customer satisfaction. And also shown the sixth hypothesis null was rejected meaning that customer satisfaction has relationship with behavioral intention.

Discussion and conclusion

The discussion and implication of six hypotheses are shown as follows;

The first hypothesis is food quality attribute. Result of this research shows that food quality attribute has significant effect on customer satisfaction. Ramanathan et al. (2016) found that food is the most significant factor influencing customer satisfaction, followed by price, ambience and service, respectively. (Njite et al., 2015) also found food quality has a positive relationship with both consumer patronage and willingness-to-pay in restaurants.

The second hypothesis is service quality attribute. Result of this research shows that service

confirmed the positive effect of service quality on consumer's intention toward upscale dining among all



dimensions. For instance, Izogo and Ogba, (2015) also found that service quality dimensions are significant predictors of customer satisfaction and loyalty.

The third hypothesis is convenience attribute. Woo et al. found that location convenience and a short walking distance were significant predictors of revisit intentions in university dining facilities. However, since most consumers visit full-service restaurants using their own transportation, location convenience and a short walking distance may not be a major concern. But The convenience dimension was not significantly directly related to customer satisfaction (Liu and Tse, 2018). And this research also shows that convenience attribute has no significant effect on customer satisfaction. According to demography, one can identify the main group of respondents or we can say that main group of chef-table restaurant customer were high income level so they might have their own car or might have a driver. That might be the main reason why convenience attribute has no significant effect.

The forth hypothesis is atmosphere attribute. For Njiteet al. (2015) found that ambience has a positive effect on consumer intentions in upscale dining and increase in ambience tends to increase patronage and willingness-to-pay by a significant amount. According to Ryu and Jang, (2007), customers' emotional responses are most significantly effected by the music, aroma, temperature and employee appearance that successively affect the behavioral intention of customers in restaurants. But result for this research shows that atmosphere attributes have no significant on customer satisfaction. From researcher's point of view, atmosphere has no significant due to the style of chef-table restaurant which is to eat on the table in front of the kitchen or at the area very close to the kitchen. The sound and aroma would be the sound of kitchen work and aroma would be the smell of food that is being cooked on the stove. That would be the main reason that atmosphere attribute has no significant effect on customer satisfaction.

The fifth hypothesis is other attribute. Saad and Conway, (2006) found that another aspect that effects customer satisfaction and behavioral intentions is perceived price fairness. Lu et al., (2015) also said that Authenticity is considered as a critical marketing tool for the creation of competitive advantage and for the promotion of business success. Result of this research shows that other attributes have significant effect on customer satisfaction.

The sixth hypothesis is behavioral intention. From Jani and Han, (2011) classified behavioral intention as revisit and word-of-mouth intentions. Therefore, a consumer intention to repurchase and recommend customers is the result of formation of an attitude towards provider based on the previous experiences with a product or service. Result of this

research shows that customer satisfaction has significant effect on behavioral intention.

In conclusion, the result of this research shows that three out of five quality attributes have significant effect on customer satisfaction which are food quality attribute, service quality attribute and other attribute. The strongest relationship was with food quality attribute followed by service quality attribute and the weakest relationship among these three was with other attribute. Food quality attribute and service quality attribute is very important attribute for all kinds of restaurants especially Chef-table restaurant, which is a lot more exclusive than a normal restaurant. And the result also shows that customer satisfaction has significant effect on behavioral intention. When customers are satisfied there will be word of mouth and when customers have a chance they might come back and turns into behavior.

Recommendation

This research focus on the factor that effect on customer satisfaction and to find how customer satisfaction has relationship with behavioral intention in Chef-table restaurant business mainly in Bangkok. The result shown that three of five quality attribute (food quality attribute, service quality attribute and other attribute) has significant effect on customer satisfaction while two attribute has no significant effect on customer satisfaction and also shown that customer satisfaction has significant effect on behavioral intention.

Food quality attribute is the strongest effect on customer satisfaction. In the Chef-table restaurant Food quality is most important. Food quality is the selling point so all the Chef-table restaurant should keep their food standard in term of freshness of the ingredient, food taste, food decoration along with food temperature.

Service quality attribute is one of the important part for hospitality business. For Chef-table restaurant if only good food quality would not enough to make customer satisfy. Chef-table restaurant should give a good service to make customer happy. Good service consists of Friendly and helpful employee, Attentive employees, Employees have the knowledge of menu, and Prompt and quick service. To keep good service, they need to train their employee quite often, give employee the knowledge, and give some motivation.

Other quality attribute that consists of price fairness, food authenticity, and atmosphere authenticity. This is the weakest relationship however it has significant effect on customer satisfaction. Chef-table restaurant is high standard food quality and high price, so in term of price fairness is doesn't mean low price but it about what do customer get. So, price fairness refers to food quality and service quality that customer get. And customer have to answer them self "Dose it worth this amount of money" if yes mean



customer satisfies in price fairness term. Food authenticity and atmosphere authenticity is not that important for some customer due to a lot of chef-table restaurant they do in fusion style so that not going to be authentic both food and atmosphere. Authenticity will important for the customer that like the authentic style. So Chef-table restaurant management need to know themselves which style are they in and keep that as their standard.

Finally, customer satisfaction has significant effect on behavioral intention. Which mean when customer satisfy it will turn to customer behavior. To keep customer satisfy, Chef-table restaurant will need to maintain and improve at least three attribute as result that shown in this research such as food quality attribute, service quality attribute and other attribute. Then from customer satisfaction can turn to be behavioral intention and that going to turn from one-time customers to regular customers. It will be the best result for Chef-table restaurant.

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IS GOLD A HEDGE OR SAFE HAVEN IN THAILAND?

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Abstract

This research is test whether return of gold bar price in Thailand is safe haven or has significant negative relationship or insignificant relationship with major stock market, Thai bond market, and some selected macro-economic indicators or not. This research uses the monthly-time series data from January 2014 to December 2018. Ln return and first difference was used to convert all of the non-stationary data to stationary data; and the time series multiple linear regression model is used to test the relationships. The definition of safe haven is an asset that is uncorrelated or negatively correlated with other assets in times of market stress or turmoil (Baur and Lucey, 2010).

The result shows that Gold is a safe haven for some assets in this research which are Nikkei 225 Index, T-Bill & Government Bond Yield of Thailand for 10 Years, and Land Price Index. There are many insignificant relationship between gold bar price which are exchange rate of THB/US Dollar, oil price, SET Index, DAX Index, FTSE 100 Index, S&P 500 Index, T-Bill & Government Bond Yield of Thailand for 1 month and 1 year, and Town House Price Index Those insignificant relationship also implied that gold is a safe haven asset. There are some assets move in the same direction with gold which are Consumer Price Index, Hang Seng Index, and Condominium Price Index.

Introduction

1.1 Introduction of the research

During the financial crisis, investors sought to invest in safe haven assets in order to reduce the risk from investment losses when values of other assets decreased. One of the assets that could be considered for safe haven asset is gold. Gold is always considered as a safe asset. For centuries, gold has been used as a medium of exchange at all times and all places. There are many precious metals used as investment tools, but the most popular alternative for investors is gold. Gold is an outstanding more than other precious metals. Gold performed well occasionally, for examples; during the financial crisis, the stock market declined, currency depreciated, inflation increased, and war. Gold is also used as an investment tool in order to protect inflation, financial crisis; and unstable of government situation, institutions and people around the world (Wang, 2011; and Thanh, 2015). Gold is more attractive than other commodities for investors. Gold remains durable, transportable, and acceptable (Worthington and Pahlavani, 2007).

Beckmann (2015) stated that during the unstable of the global financial markets, diversified portfolio through hedging became important. Since the global financial and economic crisis took place in 2007, the market prices, especially stock prices and other financial asset prices decreased, while the price of gold increased. Arguments about whether the gold is a hedge or a haven are questionable. A hedge is an investment in asset that have no relationship or negative relationship

with other assets (Baur and Lucey, 2010). During the period of financial crisis, investors were facing the uncertainty and the risk. In order to reduce risks from huge losses, investors try to diversify their portfolios of financial assets (Tseng, 2011). Froot (1995) stated that in general, investors try to invest in assets that generate average returns, and also have negative relationship with stock and bond portfolios.

The purpose of this research is to examine relationship of gold bar price in Thailand with some selected macro-economic indicators, major stock markets, Thai bond market, and real estate index.

1.2 Research objectives

The objective of this study is to test whether the return of gold bar price in Thailand is safe haven or has significant negative relationship, or insignificant relationship with some selected macro-economic indicators, major stock market, Thai bond market, and real estate index or not. The time series multiple linear regression was used to test the relationship of gold bar price in Thailand.

1.3 Scope of the research

This research uses the monthly-time series data from January 2014 to December 2018. There are 15 independent variables which are consumer price index, exchange rate of THB/US Dollar, oil price, SET Index, DAX Index, FTSE 100 Index, Hang Seng Index, Nikkei 225 Index, S&P 500 Index, T-Bill & Government Bond Yield of Thailand for 1 month, T-Bill & Government Bond Yield of Thailand for 1 year, T-Bill & Government Bond Yield of Thailand for 10



years, town house price index, condominium price index, and land price index were selected to test the relationship with gold bar price in Thailand. Log return and first difference were used to convert all of the non-stationary data to stationary data; and the time series multiple linear regression model was used to test the relationships.

benefit investors who would like to have a safe haven asset in their portfolios. Thirdly, investors could decide on what should be invested when the economic is unstable. Fourthly, this research could be used as a support for the related studies of the researchers. Lastly, this research will benefit people who are interested in similar topic to gain knowledge about gold investment.

1.5 Definition of terms

1.6.1 Hedge

A hedge is an asset that have no relationship or negative relationship with other assets (Baur and Lucey, 2010).

1.6.2 Safe haven

Safe haven is an asset that is uncorrelated or negatively correlated with other assets in the periods of market stress or turmoil (Baur and Lucey, 2010).

Literature review

Hiller (2006) studied about “the role and effect of gold and other commodities in the equity markets”. The researcher used the data between 1976 and 2004. The researcher found that gold had low negative correlation with the S&P 500 Index. Furthermore, the portion of portfolio with gold performed better than the portfolio that without gold. Ghazali (2013) examined “whether gold is a hedging tool or a safe port, especially in financial crises”. The researcher collected the data during July 2001 to February 2013 in Malaysia. The outcome of this research showed that gold had been an important hedging role. The role of gold is short term in nature. During the financial stress, gold was considered as a weak safe port for investors. Adrangi (2003) stated that there was a positive correlation between gold prices and expected inflation, and the research concluded that investing in gold could be a reliable hedge against inflation in both short run and long run. Ghosh (2004) improved a theoretical model and recommended that under certain conditions, rising of gold price at the same rate of inflation level made gold act as a hedge against inflation. Ghosh (2016) informed that the higher inflation, the higher demand of gold in the USA. Baur and Lucey (2010) examined comparative study on daily data during the period of 1995 until 2005 in three countries, the United States, the United Kingdom, and Germany. The result of this research showed that gold had been a hedge for stocks in two countries, which were the United States and United Kingdom, but gold had not been a hedge for stocks in Germany.

1.4 Contribution of the research

There are many people deriving benefit from this study. Firstly, this research could help investors to invest in gold in order to protect their losses when other assets decreased. Secondly, this research could

On the other hand, Basher and Sadorsky (2016) used the data from 23 emerging economies. The researchers of this study found that in most of emerging economies, there was a positive relationship between gold and stocks. Hoangh (2011) examined “changes in returns for gold trading in the Paris stock market”. Researcher collected the data during 1950 to 2003, and the result of this research showed that gold had lower returns than some financial assets, such as stocks and bonds.

Research Methodology

3.1 Research Model

This study is to test the relationship between independent variables with gold bar price in Thailand. Independent variables are some selected macro-economic indicators, major stock markets, Thai bond market, and real estate index. The research uses time series multiple linear regression on monthly-time series data from January 2014 to December 2018.

The research model is given by:

$$\text{GOLD}_t = \beta_0 + \beta_1 \text{CPI}_t + \beta_2 \text{EXUSD}_t + \beta_3 \text{OIL}_t + \beta_4 \text{STSET}_t + \beta_5 \text{STDAX}_t + \beta_6 \text{STFTSE}_t + \beta_7 \text{STHS}_t + \beta_8 \text{STNIK}_t + \beta_9 \text{STSP}_t + \beta_{10} \text{GY1M}_t + \beta_{11} \text{GY1Y}_t + \beta_{12} \text{GY10Y}_t + \beta_{13} \text{HTOWN}_t + \beta_{14} \text{HCOND}_t + \beta_{15} \text{HLAND}_t + \mu_t$$

where; Dependent variable is GOLD = Gold bar price; Independent variables are CPI = Consumer Price Index (CPI), EXUSD = Exchange rate of THB/US Dollar, OIL = Brent Oil price (US Dollars/Barrel), STSET = SET Index, STDAX = DAX Index, STFTSE = FTSE 100 Index, STHS = Hang Seng Index, STNIK = Nikkei 225 Index, STSP = S&P 500 Index, GY1M = T-Bill & Government Bond Yield 1 Month, GM1Y = T-Bill & Government Bond Yield 1 Year, GM10Y = T-Bill & Government Bond Yield 10 Years, HTOWN = Town House (including land) Price Index, HCOND = Condominium Price Index, and HLAND = Land Price Index.

3.2 Research Hypotheses

Fifteen null hypotheses of this research are stated as follow;

- H1₀: There is no significant relationship between consumer price index and gold bar price.
- H2₀: There is no significant relationship between exchange rate of THB/US Dollar and gold bar price.
- H3₀: There is no significant relationship between oil price and gold bar price.
- H4₀: There is no significant relationship between SET Index and gold bar price.



H5₀: There is no significant relationship between DAX Index and gold bar price.

H6₀: There is no significant relationship between FTSE 100 Index and gold bar price.

H7₀: There is no significant relationship between Hang Seng Index and gold bar price.

H8₀: There is no significant relationship between Nikkei 225 Index and gold bar price.

H9₀: There is no significant relationship between S&P 500 Index and gold bar price.

H10₀: There is no significant relationship between T-Bill & Government Bond Yield of Thailand for 1 Month and gold bar price.

H11₀: There is no significant relationship between T-Bill & Government Bond Yield of Thailand for 1 Years and gold bar price.

H12₀: There is no significant relationship between T-Bill & Government Bond Yield of Thailand for 10 Years and gold bar price.

H13₀: There is no significant relationship between town house price index and gold bar price.

H14₀: There is no significant relationship between condominium price index and gold bar price.

H15₀: There is no significant relationship between land price index and gold bar price.

The alternative hypothesis for each null hypothesis refers to the condition of having significant relationship between the selected independent variable and gold bar price.

Research Result

4.1 Unit Root Test Result

In this research, the researcher used the augmented Dickey-Fuller model to test for the stationarity condition of the data. First of all, the researcher used In difference and first difference method to convert the raw data to returns or percentage changes. Note that the first difference method is used only for GY1M = T-Bill & Government Bond Yield 1 Month, GM1Y = T-Bill & Government Bond Yield 1 Year, and GM10Y = T-Bill & Government Bond Yield 10 Years. The test results are showed in table 1.

Table 1: Unit Root Test Result

Variable	Prob. of Test Statistic	Result
GOLD	0.0000	Stationary
CPI	0.0000	Stationary
EXUSD	0.0000	Stationary
OIL	0.0000	Stationary
STSET	0.0000	Stationary
STDAX	0.0000	Stationary
STFTSE	0.0000	Stationary
STHS	0.0000	Stationary
STNIK	0.0000	Stationary
STSP	0.0000	Stationary
GY1M	0.0000	Stationary
GY1Y	0.0000	Stationary

GY10Y	0.0000	Stationary
HTOWN	0.0476	Stationary
HCOND	0.0001	Stationary
H LAND	0.0000	Stationary

The researcher found that the p-value of the ADF test statistic of every converted variable is less than 0.05. The researcher can conclude that all of the tested data are stationary data, and the researcher can these stationary data to conduct the research by using the regression model.

4.2 Multiple Linear Regression Results

This study tests the relationship between gold bar price in Thailand and independent variables; some selected macro-economic indicators, major stock markets, Thai bond market, and real estate index. The regression result is showed in table 2.

Table 2: Multiple Linear Regression Results

Dependent Variable: GOLD Method: Least Squares				
Variabl es	Coeffici ent	Std. Error	t- Statist ic	Prob.
C	- 0.000981	0.003191	- 0.30733	0.7601
CPI	0.748946	0.436417	1.716123	0.0933*
EXUS D	0.437298	0.340864	1.282913	0.2064
OIL	- 0.014575	0.046016	- 0.316745	0.753
STSET	0.120274	0.118979	1.010887	0.3177
STDA X	0.074403	0.139942	0.531673	0.5977
STFTS E	- 0.076513	0.183502	- 0.416957	0.6788
STHS	0.170286	0.076651	2.221584	0.0316* *
STNIK	-0.33087	0.110312	- 2.9994	0.0045* **
STSP	- 0.025464	0.148407	- 0.171584	0.8646
GY1M	- 0.070217	0.054845	- 1.280281	0.2073
GY1Y	0.024759	0.076006	0.325752	0.7462
GY10Y	- 0.056103	0.025116	- 2.233795	0.0307* *



HTOW N	0.11582 7	0.5037 57	0.2299 27	0.8192
HCON D	0.4231	0.1983 64	2.1329 47	0.0387* *
HLAN D	- 0.64489 7	0.1899 8	- 3.3945 48	0.0015* **

Note: *, **, *** refer to significance at 10%, 5%, and 1% respectively.

The result of this study showed that there are negative significant relationships between some selected variables and gold bar price in Thailand, which are Nikkei 225 Index, T-Bill & Government Bond Yield of Thailand for 10 Years, and land price index. This means that gold is a safe haven asset against those assets. Similarly, the previous study of Ziaei (2012) showed the same result of a negative and significant relationship between these stock exchange markets and gold prices.

Moreover, there is no significant relationship between selected variables and gold bar price in Thailand. These are exchange rate of THB/US Dollar, oil price, SET Index, DAX Index, FTSE 100 Index, S&P 500 Index, T-Bill & Government Bond Yield of Thailand for 1 month and 1 year, and town house price index. The results are also considered that gold is also a safe haven asset.

Also, there are positive significant relationships between some selected variables and gold bar price in Thailand. These factors are Consumer Price Index, Hang Seng Index, and condominium price index. This shows that gold price moves in the same direction with those selected variables. Supported study of M.S.M. Khair-Afham (2017) showed that Malaysian inflation rate and gold return had a positive relationship. When the inflation rate increased, it will cause positive changes in gold price. Based on the result, this would be a good sign for households, investors, firms, or the government because people could expect the price of gold to be higher when the inflation rate increased.

Conclusion

The result of this study, under the time series multiple linear regression model, shows that gold is a safe haven asset, because gold has significant negative relationship or no significant relationship with other assets. Assets or factors having negative significant relationship with gold bar price in Thailand are Nikkei 225 Index, T-Bill & Government Bond Yield of Thailand for 10 Years, and land price index. Factors having no significant relationship with gold bar price in Thailand are exchange rate of THB/US Dollar, oil price, SET Index, DAX Index, FTSE 100 Index, S&P 500 Index, T-Bill & Government Bond Yield of Thailand for 1 month and 1 year, and town house price index. This study can benefit for people who would like to invest in financial assets in Thailand. Investors can

invest in a safe haven asset, which has negative relationship or no relationship with other assets. Investors have more alternatives to protect their portfolios from losses. Investors can invest in gold to diversify their portfolios. Gold can easily convert into currency because gold is accepted around the world. Also, researchers can use this study to support for further research.

In the future, the researcher could search more variables that would be financial assets that investors like to invest such as stock markets in other countries, and exchange rate of other foreign currencies. For the data that had been used in this future research can use daily data or weekly data to make it more precise. The researcher can expand the range of time of research period for the future study. Also, the researcher could use other methodologies for future study.

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Determinants of Intention to Purchase Organic Food among Healthy Consumer: An Empirical Evidence towards an Organic Restaurant in Bangkok, Thailand

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ABSTRACT

The purpose of this research is to examine the factors influencing intention to purchase organic food of at an organic food restaurant in Bangkok, Thailand. Based on the variables of subjective norms, behavioral belief, health consciousness, attitude toward buying organic food and intention to purchase an organic food. The survey method was utilized and 300 self-administered questionnaires were distributed at an organic food restaurant in Bangkok, Thailand. In this study, the researchers applied non-probability sampling method including judgement, quota and convenience sampling techniques. Additionally, the researchers applied descriptive research and Multiple Regression analysis in order to analyze the data. According to the findings of this research, subjective norms, behavioral belief, health consciousness, attitude toward buying an organic food have a significant influence on intention to purchase organic food. The finding of this research will be beneficial for the organic food businesses in Thailand to increase their market share and revenue.

Keywords: Subjective norms, behavioral belief, health consciousness, attitude toward buying, intention to purchase

Introduction

In recent year, people are more aware of health and the increasing demand to consume an organic food even in the developing country like Thailand. Von Alvensleben, (1997) also stated that consumers interested more in buying organic food. Furthermore, consumers have a positive attitude and interest to consume organic food (Wandel and Bugge, 1997; Magnusson et al., 2001). Organic food has been recognized as a healthy food without containing harmful chemical and having more nutrients than conventional food. According to the research from Ham et. al, (2018), the authors showed that behavioral belief, subjective norms, health consciousness and attitude toward buying organic food have a significant influence on intention to purchase organic food. Moreover, Kim and Chung (2011); DiPietro et al. (2016); Jin et al. (2017) demonstrated that there is a positive relationship between health consciousness and intention to purchase organic food.

Additionally, Ajzen (1991) stated that one of the best predictors (in the Theory of Planed Behavior) is intention in decision making for buying. Fishbein and Ajzen (1975); Bagozzi (1983) implied that the purchase intention can be one of the predictors.

In Thailand, there are many safe organic food labels. In order to meet the customer's demand, Thai government introduced a food safety label as "Q mark" which helps customers to recognize the high level of food safety assurance. This quality and safety certification logo has been applied to agricultural commodities and food products that are in conformity with the standards established by the National Bureau of Agricultural Commodity and Food Standards. Besides, there is a major certificate which accredited by IFOAM called "Organic Agriculture Certification Thailand". This certification will develop the trust among consumers to buy an organic food product of Thailand. Furthermore, Thailand is one of the first countries in the world introducing organic farming. After developing the standardization of organic food in Thailand, the demand of organic products among Thai people is increasing continuously. Furthermore, the growth rate of organic restaurant in Thailand is increasing since people aware more for their health and willing to pay more.

In this study, the researchers focus the customers who consume an organic food at Ohkhajhu restaurant in Bangkok, Thailand. An increased in the growth rate of this restaurant is very extremely high. Their revenue increased more than 30 million within one year. This

can imply that Thai people are more concerned about food safety, food quality and health awareness. Additionally, their branches expand from only one branch into four branches. Furthermore, their farm is no chemical agricultural. Thus, the researchers choose this organic restaurant to study an intention to purchase organic food in Bangkok, Thailand. Lastly, the researcher hopes that this research will help to understand more about an intention to purchase an organic food and will help organic restaurant industry of Thailand to create an opportunity for increasing their market share and revenue in their business.

Research Objective

The objective of this study is to find the factors influencing intention to purchase organic food towards an organic restaurant in Bangkok, Thailand

The specific objectives of the study are

To analyze the influence of subjective norms, behavioral belief, health consciousness on attitude towards buying organic food

To analyze the influence of subjective norms, behavioral belief and health consciousness on intention to purchase an organic food

Literature Review

Intention to purchase organic food

Ajzen (1991) stated that intention refers to the willingness of person to perform a given behavior. Fishbein and Ajzen (1975); Bagozzi (1983) implied that the purchase intention can be defined as the predictor of buying decisions in the future. Chadon et al. (2005) stated that purchase intention could be defined as the consumer's demand to purchase the particular product in the future. Durham and Andrade (2005) also stated that the taste of organic food and healthiness is the most important reason to purchase an organic product. Moreover, the previous research showed that there are a positive effect on attitude towards organic food and purchase intention (Michaelidou and Hassan, 2008; Kim and Chung, 2011; Pino et al., 2012).

Attitude toward buying organic food

Jung (1971) stated that an attitude is a psychological mindset towards the particular object in an aspect of thought, belief and emotions (Hoyer et al. 2004; Dossey et al. 2008). Engle et al. (1995) also implied that an attitude is the way of thinking by evaluating some degree of favor and disfavor toward particular object. Loureiro et al. (2001) stated that a consumer purchases an organic food because of his or her attitude towards organic food as a safe food. According to Ajzen (1991), the author stated that the individual behavior to perform is stronger when a person has a favorable attitude towards that behavior.

The related literature of subjective norms and attitude toward buying organic food

Furthermore, behavioral belief refers to an individual's belief related to health, environmental friendly and social responsibility (Han et al., 2010).

Behavioral belief

Ajzen (1991) stated that behavioral belief is the belief towards outcome of a behaviorist evaluation. In other words, behavioral belief refers to a favorable or unfavorable attitude towards the behavior and the deliberate guide of positive and negative outcomes. Al-Swidi et al. (2014) also implied that behavioral belief was a direct influenced on intention to purchase organic food. Thøgersen (2009); Michaelidou et al. (2008) also stated that the factor that leading consumers towards in consumption of organic food is the belief about the taste, environmental friendly and healthier.

Health consciousness

Health consciousness can be defined as the integration of the person's activities in daily life and the degree of concerning their health, (Jayanti et al.1998). Fagerli et al. (1999); Rozin et al. (1999) also stated that it is an expression relevant to food quality and food safety due to health concern. Health consciousness can be implied as the perception of consumers that an organic food is healthy. Davis et al. (1995); Zanolli and Naspetti (2002) stated that the higher the motivation the higher level of the consciousness towards healthy actions. Health consciousness also refers to the consumers' understanding related to the change of health status and the requirement of healthiness (Hsu et al. 2016). Hill et al. (2002) stated that consumer believes that the higher level of nutrients can be found in an organic food. Some studies have showed that consumers, who are more concerned for their health and food safety, will buy an organic food, (Van Loo et al. 2010; Sirieix et al 2011; Huber et al. 2011).

Subjective norms

Ajzen, (1991); O'Neal, (2007) stated that subjective norms refer to the perception of people in the society which is important for them to think they should or should not perform a given behavior. Subjective norms also defined as the social pressure for a person to join or avoid that behavior. Chang (1998) also indicated that subjective norms could reflect an individual's beliefs about the expectation of people around them; such as family, friends, colleagues and partners. Ajzen (2002) implied that subjective norm can be defined as the set of belief relevant to the expectation of an important group of people and individual's concerned. Furthermore, subjective norms are the crucial factors that impact on social influence related to the intention of behavior (Fishbein and Ajzen, 1980; Ha, 1998).

Related Literature Review

Chang (1998) implied that there is a significant relationship between subjective norms and attitude towards behavior as well as defined linkages between

subjective norms and attitude. In addition, Chang (1998) stated that the influence of environment or society is a reason to influence attitude of a person. According to the research of Al-Swidi et al. (2014), it stated that the subjective norms has significant relationship with attitude towards buying an organic food

The related literature of behavioral belief and attitude toward buying organic food

According to the research from Han et al. (2010); Michaelidou and Hassan (2008); Salleh et al. 2010, behavioral belief has direct positive effect on attitudes towards buying organic food. If the people who are important for a person think that the organic food is better than conventional food, it will influence him or her to buy an organic food (Nilsson et al., 2004). In addition, most of the organic food consumers believed that organic food has higher nutrients than ordinary food (Hill and Lynchehaun, 2002).

The related literature of health consciousness and attitude toward buying organic food

Van Loo et al. (2010); Sirieix et al. (2011); Huber et al. (2011) stated that there are two main reasons relevant to why consumers buy an organic food are health concern and food safety. According to the researches of Davies et al. (1995); Hutchins and Greenhalgh, (1997); Squires et al. (2001); Chinnici et al. (2002); Zanolli and Naspetti, (2002), for the consumer's perception related to an organic food, health consciousness is the main factor that lead an attitude towards in buying organic food. Hence, health consciousness has a positive influence on attitude towards buying an organic food. Additionally, Hill and Lynchehaun (2002) implied that the consumers who would like to stay healthy will choose an organic food as their first option.

The related literature of subjective norms and intention to purchase organic food

Al-Swidi et al. (2014) stated that subjective norms had a moderately significant relationship with intention to purchase an organic food. According to the research from Ruiz de Maya et al. (2011) subjective norms are main influencing factors for an intention to purchase organic food rather than perceived behavioral control. In different countries, the impact of subjective norms and intention to purchase organic food are different; for instance, in Sweden and Denmark, people are more aware to consume organic food more than in Spain (Ruiz de Maya et al., 2011).

The related literature of health consciousness and intention to purchase organic food

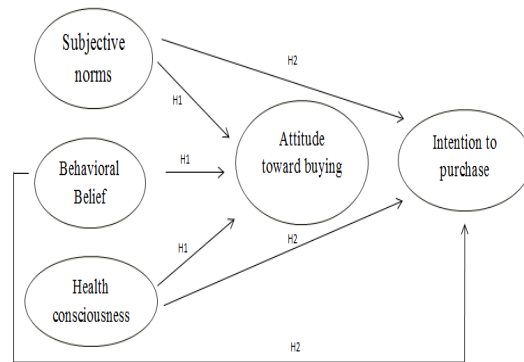
Arvanitoyannis et al., (2004) stated that the number of consumers who concern for the quality of food and safety are increasing continuously. Hence, the organic food becomes major choice among the group of consumer who concerned their health (Chen, 2009). According to the research from Jayanti and Burns

(1998), the behavior of health care prevention could be reflected as health consciousness and lead to purchasing of organic food or green product. Steptoe et al. (1995) also emphasized that one of the most crucial indicators of the choice of food for consumer is health. Therefore, health consciousness is a main factor that has positive impact on an intention to purchase an organic food (Lockie et al., 2002; Paul and Rana, 2012; Botonaki et al., 2006).

The related literature of behavioral belief and intention to purchase organic food

Ham et al., (2018) stated that behavioral belief can be reflected on the belief of individual towards health, social responsibility and the environment which lead to an intention to purchase organic food. Therefore, behavioral belief had a positive influence on intention to purchase organic food. Scanlon (1999) stated that One belief affects not only that belief, but also other beliefs and the status of other reasons. Thus, the belief is one of the reasons for action, intention to purchase and other attitudes exhibit a similarly complex structure.

Conceptual Framework



Hypothesis

H10: Subjective norms, behavioral belief and health consciousness are not influenced attitude toward buying

H1a: Subjective norms, behavioral belief and health consciousness are influenced attitude toward buying

H20: Subjective norms, behavioral belief and health consciousness are not influenced an intention to purchase organic food

H2a: Subjective norms, behavioral belief and health consciousness are influenced an intention to purchase organic food

Methodology

The researchers adopted the descriptive research. According to the Cooper and Schindler (2014), the definition of descriptive research can be implied that descriptive research is a one of research that seeks to determine the answers to what, where and how of



phenomenon. In addition, descriptive research can be enabled to find a larger population.

The researchers adopted self-administered questionnaire as a research instrument in this study. Zikmund (2013) stated the respondent completes the self-administered questionnaire without any intervention from interviewer. In addition, the researchers distribute the questionnaires to collect the data from respondents in order to know the consequences and apply in the related area. Additionally, the researchers adopted the descriptive analysis and Multiple Regressions to analyze the factors that influencing intention to purchase organic food at Ohkajhu restaurant. The researchers used judgement sampling. Judgement sampling is based on the selected of an individual's experienced of his or her judgement for some of appropriate characteristics that required of the sample member (Zikmund, 2013). The researcher decided to collect data from all of those four branches as Siam Square branch, Siam Square one branch, the Circle Ratchapruk Branch and Dadfa Lasalle 33 Sukhumvit 105. Additionally, the researchers use quota sampling which refers to the variety of population in the subgroup is represented the sample characteristics. For quota sampling, the researchers collected the data by distributed 75 questionnaires to each branch of this restaurant. Lastly, the researchers use the convenience sampling as Zikmund (2013) stated that convenience sampling is the procedure to approach the people or unit that the most convenient availability. In this study, the

The findings of the descriptive analysis showed, that the highest percentage of respondent's gender is female with was 57.7% (173). For the age's level, the highest percentage of respondent's age is between 26-30 years' old which is equal to 39.7% (119) of the total respondent. For the frequency of eating at Ohkajhu restaurant, the highest percentage of respondent is 1-2 times which equals 52.3% (157). Moreover, the salary level more than 50,000 baht has a highest percentage which equals 109 (36.3%) of total respondent.

Table: Summary of Overall Majority of all respondents

researcher applied the sample size by using references base on previous research as Comfrey and Lee (1992) suggested that "the adequacy of sample size might be evaluated very roughly on the following scale: 50-very poor, 100-poor, 200-fair, and 300-good, 500-very good; 1000 or more-excellent". Therefore, the researchers applied 300 respondents who are the customer of Ohkajhu restaurant in Bangkok as the sample size in this study. Moreover, the sample size is divided into 4 branches as Siam Center, Siam Square One, The Circle Ratchapruk and Dadfa Lasalle 33 Sukhumvit 105. All of 4 branches are located in Bangkok, Thailand. The researcher instrument in this study is the research design 5 point Likert Scale for the questions, which are 1 = strongly disagree, 2 = disagree, 3 = agree nor disagree, 4 = agree, and 5 = strongly agree.

Data Collection

This study conducted questionnaire to collected the data by distributing 300 questionnaires at an organic restaurant in Bangkok namely "Ohkajhu" since this restaurant is positioning them as selling an organic food. The researchers collected the data at all four branches of this restaurant in Bangkok in Siam Square branch, Siam Square one, the Circle Ratchapru and Dadfa Lasalle 33 Sukhumvit 105. In additional, the researchers decided to collect the data from Ohkhajhu's consumers who are convenient to answer the questions. The data collection period is within four weeks from 18th January 2019 to 17th February 2019.

Findings

Variables	Major Group	Frequency of total respondents	Percentage of total respondents
Gender	Female	173	57.7%
Age level	26-30 year old	119	39.7%
Frequency of eating at Ohkhajhu restaurant	1-2 times	157	52.3%
Income level	More than 50,000	109	36.3%

Hypothesis testing analysis

Hypothesis testing uses statistics to determine the probability that a given hypothesis is true. In this study,



there are two hypotheses constructed based on the conceptual framework. In this section, the researchers find the factors that influencing attitude toward organic food and intention to purchase organic food by using Multiple Regression Line.

Table: Summary of Hypothesis Testing Result

Hypothesis	Standardized Coefficient (β)	Level of Significant	Testing result
H1 _a : Subjective norms, behavioral belief and health are not influence on attitude toward buying organic food			
-Subjective norms	.175	.000	Rejected Ho
-Behavioral belief	.567	.000	Rejected Ho
-Health consciousness	.159	.001	Rejected Ho
H2 _a : Subjective norms, behavioral belief and health consciousness are not influenced on an intention to purchase organic food			
-Subjective norms	.238	.000	Rejected Ho
-Behavioral belief	.293	.000	Rejected Ho
-Health consciousness	.456	.000	Rejected Ho

According to the results, the hypothesis one has been tested by Multiple Regression analysis and the null hypothesis is rejected. Hence, it showed that subjective norms (.000<.05), behavioral belief (.000<.05) and health consciousness (.001<.05) have a significant influence on attitude towards buying organic food. The behavioral belief is the strongest factor to influence attitude towards buying an organic food since it has the highest beta value of .567 followed by subjective norms .175 and .159 for health consciousness, respectively.

Additionally, hypothesis two has been tested by Multiple Regression analysis and null of the hypothesis is rejected. Therefore, it showed that subjective norm (.000<.05), behavioral belief .000<.05) and health consciousness (.000<.05) have a significant influence on intention to purchase organic food. The strongest factor to influence intention to purchase organic food is health consciousness, which has the highest beta value of .456 followed by .293, for behavioral belief, and .238 for subjective norms, respectively.

Conclusion and discussion

The aim of this research is to study the influence of factors between dependent variable (intention to purchase organic food) and independent variables; such as subjective norms, behavioral belief and health consciousness. Data was collected from 300 respondents who had experience buying organic food from Ohkhajhu restaurant in Bangkok area by distributing the questionnaires.

Based on the result, the majority of the respondents are female, aged between 25 – 30 years old, with monthly income more than 50,000 THB. All of the two hypotheses were analyzed by using Multiple Regression analysis and null of hypothesis one and two is rejected.

Therefore, hypothesis one showed that subjective norms (.000<.05), behavioral belief (.000<.05) and health consciousness (.001<.05) have a significant influence on attitude toward buying organic food. This supported by Choo et al. (2004), who studied that behavioral belief had a positive impact on attitude toward buying organic food. Al-Swidi et al. (2014) also studied that subjective norms has a significantly influence on attitude toward buying organic food. Davies et al. (1995); Hutchins and Greenhalgh, (1997); Squires et al. (2001); Chinnici et al. (2002); Zanolli and Naspetti, (2002), the authors stated that the consumer's perception related to an organic food, health concerned is the main factor the lead an attitude toward in buying organic food. Hence, the results in this study are similar to the previous studies.

Additionally, hypothesis two showed that subjective norm (.000<.05), behavioral belief .000<.05) and health consciousness (.000<.05) have a significant influence on intention to purchase organic food. Ruiz de Maya et al. (2011) explained that subjective norms are main influenced factor for an intention to purchase organic food rather than perceived behavioral control. The finding from Magnusson et al., (2001), who studied that health consciousness, is one of the motivation factions buying decision for organic food. According to the study from Ham et al., (2018), the authors stated that behavioral belief had a positive influence on purchasing intention of organic food. From the findings, researchers can concluded that subjective norms, behavioral belief and health consciousness has a positive influence on intention to purchase organic food.

Recommendation

According to the findings of this research, the researchers would like to suggest some recommendations, which can be useful for organic food industry and help the marketer to understand more about the consumers' needs and expectation in order to improve the intention of consumers in the future.

Based on the findings, the respondents have strong influence on behavioral belief for attitude toward buying organic food in hypothesis one and



followed by health consciousness for intention to purchase organic food in hypothesis two. This result can indicate that the motive factor than lead an intention in purchasing organic food is health concerned. According to the findings, the researchers can concluded that the trend of organic industry should be focus in the trend of consumer's health and make consumer to believe that buying organic food is better for their health. Besides, organic food enables to contribute a health life. The consumers who are concerned about the health willing to consume choose the product without chemical or non-toxic in producing process. Additionally, a subjective norm is a factor that gets lowest value of beta for both intention to purchase organic food and attitude toward buying. Marketer should generate the marketing campaign by choose the influencer who can influence consumer to gain more intention to purchase organic food. The findings of this study can provide the useful information for the organic food marketer and producers in order to improve their market share, which can expand their business and generate more revenue in the near future. According to the results of hypothesis one, the researchers found that there is a positive influence of subjective norms, behavioral belief, and health consciousness on attitude towards buying organic food. This can indicate that the optimistic attitude towards organic food will lead the positive attitude for buying organic food. Consumers concerned about their health

a lot of useful information for the organic restaurant business in order to create more opportunity in this industry. Additionally, future research can extend to other study in differences geographic or region in Thailand to understand more about the attitude and determinants of intention to purchase an organic food.

Additionally, the researchers would like to suggested that this may expand to study other organic food from other restaurant by applied the same conceptual framework for to test other restaurant as well. Furthermore, the other research may applied to the differences independent variables that may affected attitude and intention to purchase an organic food based on Fishbein and Ajzen (1980) suggested this variables.

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believe that organic food is better for their health. This finding is useful for better understanding the attitude of consumer buying organic food. In addition, this can help the marketer in organic food industry to improve campaigns to promote and educate the benefits of organic food to consumers.

Based on the result of hypothesis two, the researchers found that there is a positive influence of subjective norms, behavioral belief, and health consciousness toward intention to purchase organic food. When the consumers believe that organic food is better for their health, this can lead to an intention to purchase organic food. Since the consumers would like to be healthy, they will choose the food carefully; especially the food that processed without chemical. Thus, organic food will become the first choice in their mind. An intention to purchase organic food will be increased if more people around them consume organic food. This finding is useful for better understanding of the factors that lead to purchase intention of organic food which can help the marketers to improve their promotion campaign in order to generate more revenue and market share in this industry.

Further study

The researchers conducted the study on intention to purchase organic food for Thai consumers in Bangkok areas, which provided

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Effect of Perceptual Differences on Bangkok Consumers' Purchase Intention of Hydroponic Vegetables

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Abstract

Vegetables are one of the products that give the body its required daily nutrition for a healthy diet physique and which answers to the trend of balanced diet and healthy life style. Therefore, a group of farmers and startup investors have turned their interest towards hydroponic farming which gives a faster growth rate of vegetables in time to meet the demands of the market at a slightly higher margin compared to other vegetables that are grown traditionally in soil. However, there are still few researches conducted that aims to study an in-depth knowledge in terms of consumers' aspect on their motivation to buy hydroponically-grown vegetables despite previous research studies that semi-concluded that hydroponic vegetables are not notably different in taste and nutrition facts comparing to soil-growth vegetable. This research would like to focus only on the consumers' reasoning towards their purchasing behavior of hydroponic vegetables to help the current and future hydroponic farmers understand Bangkok consumers and conduct the right marketing activities towards them. The study targeted the respondents who work in Bangkok, Thailand and have had an experience of eating or purchasing hydroponic vegetables. The total number of respondents was 392 respondents whom qualified for this research topic. Simple Linear Regression, Multiple Linear Regression, and One-Way ANOVA were used to analyze the data. The finding reveals that Perceived Benefits is the most influential factor of attitude and purchase intention, and attitude has a direct positive influence to purchasing intention. However, there is no weighty effect of each consumers' monthly income levels to their intention to purchase according to One-Way ANOVA result. The findings of this research are expected to benefit hydroponic farming industry in order to sustainably expand its market size.

Keywords: Hydroponic Vegetables, Attitude, Perceived Susceptibility, Perceived Barriers, Perceived Benefits, Subjective norms, Purchase intention, Hydroponic Farming

Introduction

Today, the advancement of technology provides further discovery of the required nutrition for body development, growth, and maintenance of good health and physique. The healthy trend or healthy lifestyle is the key driver to developed dietary recommendations and food guidance (De Barcellos & Lionello, 2011). As the middle class is growing, especially across the Middle East and Asia, there has been an increase in lifestyle related to healthy consumption (International Medical Travel Journal, 2017). Bangkok, Thailand is one of the cities that its population becomes more conscious about eating right as observable from mainstream and online media. Due to the fact that most of vegetables are low in calories and fat and has none of the harmful cholesterol, moreover, they are also the important sources of many nutrients, such as potassium, dietary fiber, folate or folic acid, and

vitamin C (United States Department of Agriculture, 2016), the demand for vegetable arises.

Hydroponic is a method of growing plants by dissolving mineral nutrient solutions in water instead of growing by planting in the soil. The nutrients used in the solution can come from different sources, such as byproduct from fist waste, duck manure, or chemical fertilizers (Santos, 2013), which means that the hydroponic vegetables could be both organic or has some exposure to chemicals but at a controlled level and environment. The advantages of hydroponic method are that it is highly productivity and eco-friendlier. The farmer does not require a lot of space for growing crops; therefore, there are possibilities of growing hydroponic vegetables in urban areas where the space is limited (Agri Farming, n.d.). In Thailand, most of the crop plantations are conducted outside of urban area where the empty lands are still abundant and cheap. The vegetables that sell outside of Bangkok are usually cheaper. As a consequently of the advantages

of hydroponics method, the farmers can grow and sell the product within the city that they aim to sell and save the transportation cost. However, hydroponics method requires high set up and maintenance costs. The system is vulnerable to constant of power, nutrient, and pH level (Agri Farming, n.d.). Nonetheless, in long term the fixed cost could spread out to high productivity of the products which are retailed at a slightly higher price than the soil-growth vegetables, and lastly the farmers learning curve could steepen along the time.

a small circle of people. From observation, some of the consumers do not realize that they are consuming hydroponic vegetables. There are still few detailed analyses of the supportive reason of consumers' action towards buying the hydroponic vegetables. The researcher is assuming that it could be the result of a limited awareness of hydroponic vegetables in Bangkok, Thailand.

Therefore, this study aims to reveal the underlying motivation of the consumers on their purchase intention of hydroponic vegetables in order to support the new business or the existing business in the

Literature Review

Perceived Susceptibility

Perceived susceptibility is a person's belief or perception of the possibility or risk of getting contracted with a health disease or condition (Witte, 1992). It also describes that the people who believe that they are vulnerable to negative health consequence are motivated to act in healthy ways. I (Rosenstock, 1966) t can include an estimation of susceptibility to illness in general (Rosenstock, Strecher, & Becker, 1994). Abraham and Sheeran (2005) has discovered that personal perception of vulnerability to health disease or condition is an important factor of adopting healthier behaviors.

Perceived Barriers

An individual may not perform an action if the barrier outweighs the benefit of that action (Rosenstock, 1966). Therefore, perceived barrier can be referred to a personal evaluation of the level of difficulties related to the target behavior. As a matter of fact, people shall only adopt new healthy behavior once they have believed that the benefits outweigh the results of continuing their old behavior (Centers for Disease Control and Prevention, 2004; Rosenstock, 1974). The message that people received from media could affect each individual's perceived barrier as well.

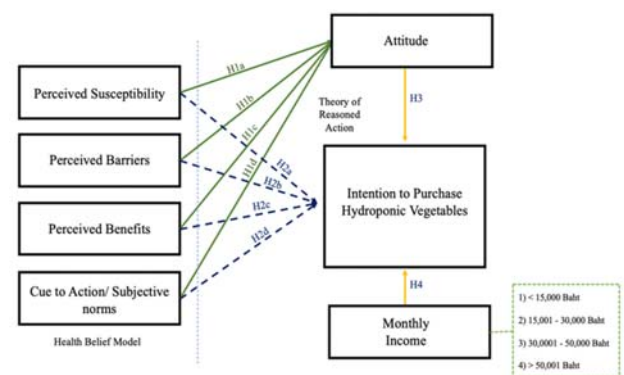
Perceived Benefits

Perceived benefits can be described as belief of a positive outcome resulted from a behavior that response to threat or perceived threat (Chandon, Wansink, & Laurent, 2000). It is specific to each person's perception of the benefits that can be accumulated over time from engaging in a specific action (Champion, 2008).

Cue to Action/Subjective Norms

Moreover, according to Statista (2018), eCommerce market in Thailand has exceeded 3.7 Billion USD, and is projected to grow by 12.8% at constant rate until the year of 2022. Given this data, more consumers have been engaged in online shopping and created an opportunity for new business startup to become one of the players in the market at a very low set up cost as the physical stores are no longer the main requirement. However, the marketing of hydroponic vegetable is only limited to marketing direction towards the target consumers. In addition, the research also aims to analyze the income factor of consumers towards the purchase intention of hydroponic vegetables. Expectantly that the result will shows that the spending capability is the influential factor of consumers' buying decision or not. The result could generate idea for the business and farmer on the consumers' motivation behind the purchase decision in combination with other factors proposed in this research framework.

Cue to action is a stimulus that can trigger the health-promoting behavior (Janz & Becker, 1984; Rosenstock, 1974). This stimulus is also needed to begin the decision-making process in order to undertake a recommended health advise. It could be both internal, which a first-experienced, or external, which comes from surrounding (LaMorte, 2018). Subjective norm is the perceived pressure from social or surrounding to perform or not to perform a certain behavior (Ajzen, 1991). It can be defined more precisely as an opinion from other people, whom significantly important to the subject, believes that the subject should perform (Finlay, Trafimow, & Moroi).



Attitude

Allport (1935), a prominent psychologist, described attitude as the most unique and essential concept in contemporary social psychology. It is a state of mind that become activated regarding a value, then influenced each person's thought and action through responsive expression towards the attitude objects. Attitude can be formed through past and present



experience of individual. Fishbein and Ajzen (1975)'s theory of reasoned action also explained that attitude and subjective norms as the direct influencer of behavioral intention. Furthermore, attitude was found to be more predictive of behavioral intention than the subjective norms (Trafimow & Fishbein, 1994).

Purchase Intention

Purchase intention is the consumer's willingness to buy a certain product or services when the particular product or services meets the need of an individual (Fishbein & Ajzen, 1975). In other words, consumer will evaluate a product before they purchase. There are many factors that affect consumer's purchase intention while selecting the product. Their final purchase decision normally effected by many external factors (Keller, 2001).

Research framework and Methodology

Research framework

The conceptual framework of this research (Figure 1) is adopted from a conceptual framework of

the research on the Effect of perceptual differences on consumer purchase intention of natural functional food (Rezai, Teng, Shamsudin, Mohamed, & Stanton 2017). The framework is a combination of the health belief model (HBM) and the theory of reasoned action (TRA) which is a modified model from Hochbaum (1958) and Ajzen (1991). The modified models propose five conceptually independent determinants of consumers' purchase intention of hydroponic vegetables, which are perceived susceptibility, perceived benefits, perceived barriers, attitude and cue to action or subjective norms.

Figure 1: Conceptual Framework

Research hypotheses

The aim of this study is to investigate the relationship between the factors in the conceptual framework that influences consumers' purchase intention towards hydroponic vegetables. There are nine proposed hypotheses to identify the relationship in different aspects as shown in Table 1.

Table 1: Defined hypotheses

No.	H	Hypotheses
1	H1	Perceived susceptibility (H1a), perceived barriers (H1b), perceived benefits (H1c), subjective norms (H1d) have significant influence on consumers' attitude toward hydroponic vegetables.
2	H2	Perceived susceptibility (H2a), perceived barriers (H2b), perceived benefits (H2c), subjective norms (H2d) have significant influence on consumers' intention to purchase hydroponic vegetables.
3	H3	The consumers' attitude will have a positive influence on intention to purchase hydroponic vegetables.
4	H4	People with different monthly income level will have a different intention to purchase hydroponic vegetables.

Research methodology

This research paper was conducted based on quantitative approach using non-probability sampling method to examine the nine hypotheses. The online questionnaires were conducted into nine sections in which consisted of the statements that measured the consumers' purchase intention towards hydroponic vegetables via seven-point Likert scales from "Strongly Disagree" to "Strongly Agree", screening questions, and demographic information. The convenience, judgement, and snowball samplings techniques were used to distribute the questionnaires to the targeted respondents in online Google form that can be distributed through Line contacts and Facebook contacts and completed through web browsers. In addition, the quota sampling was also applied to find impact on income level on purchase intention of hydroponic vegetables.

Accordingly, single linear regression, multiple linear regression, and one-way ANOVA were used to analyze the influence of the independent variables to dependent variables.

Measurement of variables

This research paper aims to study the targeted respondents who work in Bangkok, Thailand. The conceptual framework was developed based on the literature review in which to ensure that the model is appropriated

Population and sample

The people who work in Bangkok, Thailand were the targeted respondents of this study. To total number of respondents who participated in the online survey was 486 people. However, the questionnaire provided screening questions to filter the qualified respondents. With this regard, there were only 392 respondents out of 486 respondents qualified for this research.



According to Krejcie and Morgan (1970), the minimum of 384 respondents are required at 95% confident level in order to represent the population size of 10 million people.

Reliability test

Reliability test is performed at the pilot stage, where the numbers of respondents has reached 30, by using Cronbach's Alpha Coefficient to examine

reliability level of each group of items in the questionnaire. Theatrically, the result must meet the standard level of Cronbach's Alpha Coefficient which is 0.6 or above (Cronbach, 1951). The result in Table 2 has shown the Cronbach's Alpha Coefficients that fall between range of 0.759 – 0.932; therefore, the questionnaire developed for this study has achieved the standard required for reliability test.

Table 2: Reliability statistics

Variable	Cronbach's Alpha	No. of Items
Perceived susceptibility (PST)	0.759	2
Perceived barriers (BAR)	0.809	3
Attitude (ATT)	0.932	3
Subjective norms (SJN)	0.834	3
Intention to purchase (INP)	0.930	5
Perceived benefits (PBF)	0.878	3

Result and Discussion

Demographic Profile Summary

The demographic characteristics of the respondents who have been living in Bangkok longer than 6 months and have eaten or purchased hydroponic vegetables were totaled of 392 samples in which are summarized as shown in table 3. By utilizing convenience sampling, quota sampling, judgement sampling, and snowball method, the data shows that the majority of respondents were female at 66.6% and follow by male at 33.4%. The majority age of

respondents was around 18 – 30 years old at 43.9% and most of them have graduated a bachelors' degree (62.8%). The 52% of the respondents are employee, following by business owner at 23.7%. Lastly, the monthly income levels of the respondents are at a close percentage of each other as the quota technique sampling method was intentionally applied. The income ranges were collected at below 15,000 Baht/ month, 15,001 - 30,000 Baht/ month, 30,001 - 50,000 Baht/month, and more than 50,001/ month at 27%, 24.5%, 24.2%, and 24.2% respectively.

Table 3: Demographic Profile



Demographic Data		Frequency	Percent
Gender	Female	261	66.6%
	Male	131	33.4%
Age	< 18 years old	15	3.8%
	18 - 30 years old	172	43.9%
	31 - 45 years old	119	30.4%
	> 45 years old	86	21.9%
Monthly income	< 15,000 Baht	106	27.0%
	15,001 - 30,000 Baht	96	24.5%
	30,001 - 50,000 Baht	95	24.2%
	> 50,001 Baht	95	24.2%
Education level	Lower than Bachelor's degree	26	6.6%
	Bachelor's degree	246	62.8%
	Master's degree	115	29.3%
	Doctorate degree	5	1.3%
Occupation	Employee	204	52.0%
	Business Owner	93	23.7%
	Freelance	17	4.3%
	Government Officer/ State Enterpriser	31	7.9%
	Student	31	7.9%
	Unemployed	16	4.1%



Pearson's Correlation

Table 4: Correlation Matrix

Variable	Mean	SD	INP	BAR	ATT	SJN	PBF	PST
INP	3.0270	.99687	1.000					
BAR	2.7364	.96872	-.004	1.000				
ATT	3.5026	1.06775	.665*	-.031	1.000			
SJN	2.8894	1.01867	.604*	.003	.666*	1.000		
PBF	3.3900	.95674	.765*	.041	.728*	.555*	1.000	
PST	3.8291	.82798	.312*	-.021	.334*	.387*	.289*	1.000

Note: * represents the correlation which is significant at 0.05 levels (1-tailed).

According to Pearson's correlation matrix exhibited in Table 4, most variables in H1-H3 have positive correlations with P-value less than 0.05, except Perceived Barriers (BAR) with Attitude (ATT), Subjective Norms (SJN), Perceived Benefits (PBF), and Perceived Susceptibility (PST) that have P-value more than 0.05. Regarding to Political Science Department at Quinnipiac University (Statistic how to, n.d.) on the strength of correlations, the correlation coefficients that are between the range of 0.595- 0.688 are to have strong relationship between the variables. Therefore, six pairs of the variables shown in Table 4 have a strong relationship starting with Intention to Purchase (INP) and Perceived Benefit (PBF) at 0.765 correlation, Attitude (ATT) and Perceived Benefit (PBF) at 0.728 correlation, ATT to Subjective Norms (SJN) at 0.666 correlations, INP and ATT at 0.665 correlation, INP and PBF at 0.604 correlation, and SJN to PBF at 0.555 correlation.

Inferential Analysis and Multicollinearity Validation

Multiple Linear Regression (MLR) was applied to study the effect and significant mean different of the

2 hypotheses according to the defined conceptual framework. First hypothesis is H1 in which is consisted of 4 independent variables namely Perceived Susceptibility (PST), Perceived Barriers (BAR), Perceived Benefits (PBF), and Cue to Action/ Subjective Norms (SJN), and 1 dependent variable namely Attitude (ATT); Second hypothesis is H2 in which is consisted of 4 identical independent variables as H1, and 1 different dependent variable which is the Intention to Purchase (INP) of hydroponic vegetables. Secondly, Simple Linear regression (SLR) was used to test the third hypothesis or H3 that comprise of 1 independent variable called Attitude (ATT) towards 1 dependent variable called Intention to Purchases (INP).

Lastly, One-Way ANOVA was applied to determine scores of mean differences of Intention to Purchase (INP) of hydroponic vegetables among the monthly income level of the respondents that are grouped within the fourth hypothesis or H4.

In addition, the Variance Inflation Factor or VIF was applied in this research to identify a critical multicollinearity problem at $VIF > 5$ (Ringle, Wende & Becker, 2015)

Table 5. Multiple Linear Regression (H1), Dependent Variable: Attitude

Hypothesis	Variables	Standardized (β)	Coefficient	Sig.	VIF	Result
H1a	PST → ATT	0.043		0.198	1.188	Not supported
H1b	BAR → ATT	-0.053		0.087	1.003	Not supported
H1c	PBF → ATT	0.515*		0.000	1.463	Supported
H1d	SJN → ATT	0.364*		0.000	1.572	Supported
R Square				0.633		
Adjusted R Square				0.630		

Note: * represents standardized coefficient (β) with P-value ≤ 0.05

Table 5 above shows the R Square result at 0.633 which means that 63.3% of the 4 independent variables in H1 can well explain the consumers' attitude (ATT) towards hydroponic vegetables at 0.05 significant level or 95% of confident level; the independent variables in H1 hypothesis are Perceived Susceptibility (PST),

Perceived Barriers (BAR), Perceived Benefits (PBF), and Subjective Norms (SJN). The P-values of the independent variables PBF and SJN are less than 0.05 which indicate that H1c and H1d are supported whereas H1a and H1b with independent variables PST



and BAR are not supported due to the result of P-values that are greater than 0.05.

Correspondingly, PBF and SJN have statistically significant positive influences on ATT at the Standardized Coefficients (Beta) of 0.515 and 0.364 respectively. PBF has the most statistically significant positive influence on ATT with Standardized

Coefficient 0.515 whereas PST and BAR have no statistically significant effect on consumers' attitude (ATT) towards hydroponic vegetables.

The variance inflation factors (VIFs) were used to verify the validity of the multicollinearity problem. All VIFs in this hypothesis were less than 5.00 which implies that there are no critical issues within this research

Table 6. Multiple Linear Regression (H2), Dependent Variable: Intension to Purchase

Hypothesis	Variables	Standardized Coefficient (β)	Sig.	VIF	Result
H2a	PST → INP	0.037	0.268	1.188	Not supported
H2b	BAR → INP	-0.029	0.343	1.003	Not supported
H2c	PBF → INP	0.619*	0.000	1.463	Supported
H2d	SJN → INP	0.246*	0.000	1.572	Supported
R Square			0.634		
Adjusted R Square			0.630		

Note: * represents standardized coefficient (β) with P-value ≤ 0.05

Table 6 above shows the R Square result at 0.634 which means that 63.4% of the 4 independent variables in H2 can well explain the consumers' Intention to Purchase (INP) of hydroponic vegetables at 0.05 significant level or 95% of confident level; the independent variables in H2 hypothesis are Perceived Susceptibility (PST), Perceived Barriers (BAR), Perceived Benefits (PBF), and Subjective Norms (SJN). The P-values of the independent variables PBF and SJN are less than 0.05 which indicate that H2c and H2d are supported whereas H2a and H2b with independent variables PST and BAR are not supported due to the result of P-values that are greater than 0.05.

Correspondingly, PBF and SJN have statistically significant positive influences on INP at the Standardized Coefficients (Beta) of 0.619 and 0.246 respectively. PBF has the most statistically significant positive influence on INP with Standardized Coefficient 0.619 whereas PST and BAR have no statistically significant effect on consumers' Intention to Purchase (INP) towards hydroponic vegetables.

The variance inflation factors (VIFs) were used to verify the validity of the multicollinearity problem. All VIFs in this hypothesis were less than 5.00 which implies that there are no critical issues within this research.

Table 7. Simple Linear Regression Result (H3), Dependent Variable: Intension to Purchase

Hypothesis	Variables	Standardized Coefficient (β)	Sig.	VIF	Result
H3	ATT → INP	0.035*	0.000	1.000	Supported
R Square			0.442		
Adjusted R Square			0.441		

Note: * represents standardized coefficient (β) with P-value ≤ 0.05

Table 7 exhibits the R Square result of 0.442 which means that the consumers' Intention to Purchase (INP) can be explained by Attitude (ATT) by 44.2%. The P-value of less than 0.05 significant level indicates that the H3 is supported. Attitude (ATT) has positive statistically significant effect on Intension to Purchase

of hydroponic vegetables with Standard Coefficient (Beta) at 0.035. The variance inflation factor (VIF) of this hypothesis was 1.000 which implies that there is no critical issue within this research study.

Table 8. One-way ANOVA

ANOVA					
Intention to Purchase (INP)					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.088	3	.696	.699	.553
Within Groups	386.465	388	.996		



Total	388.553	391
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The research has applied the variance analysis to interpret the mean difference of consumers' Monthly Income Levels on Intention to Purchase (INP). Table 8 above shows that the result of P-value is more than 0.05; therefore, there is no significant difference between Monthly Income Levels to the consumers' Intention to Purchase. This implies that the H4 is not supported.

Conclusion, Limitation, and Recommendations

Discussion and Conclusion

This research was conducted an empirical study to examine the effect of perceptual differences on Bangkok consumers' purchase intention of hydroponic vegetables. The research was additionally extended to investigate the mean differences of the respondents' monthly income levels that could have influenced the purchase intention. The conceptual framework was adopted from Rezai, Teng, Shamsudin, Mohamed, and Stanton (2012), which proposed the effect of perceptual differences on consumer purchase intention of natural functional food, to test 4 hypotheses. The results were obtained from Pearson's Correlation, Multiple Linear Regression (MLR), Single Linear Regression (SLR), and One-Way ANOVA to lead to a conclusion of this research. There were 486 respondents in total, with only 392 respondents qualified to represent the population samples. Regarding to the result analysis, on H1 hypothesis, the Perceived Benefits and Subjective Norms were the only 2 variables that have significant positive influence on the consumers' attitude whereas the Perceived Benefits was the most influential factor, followed by the Subjective Norms. Similarly with H2 hypothesis, where the research aimed to study whether there was a significant influences of Perceived Benefits, Subjective Norms, Perceived Barriers, and Perceived Susceptibility on consumers' Intention to Purchase hydroponic vegetables or not, the only 2 factors with positive influence on the consumers' intention to purchase hydroponic vegetables were Perceived Benefits and Subjective Norms where the Perceived Benefits has the most influential effect on intention to purchase. The results were aligned with the findings of Verbeke (2005) and Rezai et al. (2012) which have stated that Perceived Benefits of functional food was the key factor that influence the consumers' purchase intention which mean that the consumers focus on the benefit that they believe to receive from the product they purchase as priority. The perceived benefits have positive relationship with both consumers' attitude and intention to purchase; therefore, in order to stimulate the purchasing decision, the information of the benefits

of hydroponic vegetables should be available to consumers.

In addition, H3 hypothesis revealed that the consumers' attitude also has significant positive influence on consumers' purchase intention which was consistent with the study done by Patch, Tapsell, and Williams (2005) that indicated a strong influence of attitude on purchase intention. Hence, the purchasing decision is the result of consumers' positive attitude towards hydroponic vegetables. Aside from supplying sufficient information of product benefits, the subjective norms also have an effect to both attitude and intention to purchase, although not as significantly as the consumers' perceived benefits. As a consequence, the location to place the product should be under consideration by seller of hydroponic vegetables. Furthermore, the research also investigated the mean differences of consumers' intention to purchase among monthly income levels; however, the result revealed that there were no significant differences among groups.

In conclusion, the consumers' perceived benefits are the most critical factor that provides high positive influence towards attitude and intention to purchase, followed by consumers' subjective norms. Moreover, the attitude also has positive relationship with the purchasing intention, but on the contrary, the consumers' monthly income levels have no correlation with the intention to purchase according to this study results.

Recommendation

Hydroponic vegetables farmers and sellers should consider the knowledge of consumers towards the product (hydroponic vegetables). As the realization of the product's benefits can lead to positive attitude and intention to purchase, with reference to the states of buyer decision process (Dewey, 2007), the marketers of the product or the government sector who want to promote the product consumption could supply the information of the product's benefits to public. The information search is one of the critical stages prior to consumers' purchasing decision and action; therefore, the information of the product's benefit could be supplied via many medium of communications. Nonetheless, the sellers should be aware that the subjective norms is one of the influential factors on attitude and purchase intention; therefore, the medium of communication should be selected with regards to the one that could reach to the demographic location in Bangkok area that has a norm of consuming hydroponic vegetables. The online fan page could be optimized to communicate with customers while generating insight information and brand loyalty. Online mediums are very well recommended as it is the



fastest way to browse for information.

Limitation

This research focuses on the Bangkokians who has consumed hydroponic vegetables only. Thus, the finding of this study may not be obtained to represent other geographical areas due to the varied factors of culture, environment, trend, and social norms. In addition, this research is restricted to conduct under integrated model under the theory of reasoned action (TRA) and health belief model (HBM) that were adopted and modified by Rezai et al. (2012). As a result, the constructions of new models and other independent variables that could postulate significant

influence on purchase intention of hydroponic vegetables were limited. The study encourages future research to expend the geographical areas; therefore, the study would be able to represent the wider area or the wider market. Finally, this research only applied the quota sampling method to investigate the mean differences of consumers' monthly income level towards intention to purchase hydroponic vegetables. However, it is recommended for future research to use the quota sampling method for other demographic factors as well as it is possibly to reveal and represent a clearer mean differences of each consumers' profile groups.

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FACTORS AFFECTING GEN Y'S PERCEPTION TOWARDS MOBILE WALLET: A CASE STUDY OF BANGKOK METROPOLITAN

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Abstract

According to Thailand internet user profile in 2018, GEN Y has been identified as the age group spent the longest number on hours on-line. Apart from spending time on social media platform, online shopping, performing financial transaction accounted for 49% of on-line activities. As Thailand aims towards cashless society in Thailand 4.0, the study investigates factors affecting GEN Y's perception towards mobile wallet in Metropolitan Bangkok, based on the framework of Technology Acceptance Model (TAM). It is hypothesized that users' perception towards mobile wallet is influenced by benefits, trust, self-efficacy, ease of use, and security. The on-line survey questionnaires were conducted during August – October 2018 among users of mobile wallet in Bangkok Metropolitan area, receiving 400 responses. Multiple Regression Analysis revealed that the perception towards mobile wallet of GEN Y users were influenced by Benefit, Trust, Self-Efficacy and Ease of Use with R-square of 58% at 95 % confidence level. It should be noted that security does not show any statistical significance towards GEN Y's perception of mobile wallet, and that there is no significant mean differences among sub-age group of GEN Y on the hypothesized relationship. For future research, it is recommended that comparative studies among different age group be conducted to deepen understanding of the influencing factors towards mobile wallet among users in Thailand.

Keywords: Mobile Wallet, GEN Y, Technology Acceptance Model, Benefit, Trust, Self-Efficacy, Ease of Use, Security, Cashless Society.

Introduction

According to the world payment report 2018, non-cash transaction worldwide recorded USD 482.6 billion in 2016 and was projected to increase at the rate of 12.6% per year until 2021 (Capgemini, 2018). The growth forecast is fueled by strong momentum observed in Emerging Markets, particularly in Asia Pacific with growth in 2016 recording 25.2%.

In Thailand, on-line transaction has been expanding at a skyrocketing pace during the past few years. From banking perspectives, consumers had been migrating towards on-line channels, with transaction volume through mobile banking in Q2'2018 recorded THB 3,641 billion, representing 84% and 197% increases, compared with those of Q2'2017 and Q2'2016 respectively.

Apart from mobile banking, electronic payment, particularly e-wallets has also demonstrated significant growth in both value and volume of transactions. During 2010 – 2017, the average growth of transaction volume via mobile wallet recorded an average growth rate of 26% per year, with the total transaction volumes of 1,510, 836 as of end 2018. Transaction value of e-wallet transactions, on the other hand, experienced the average growth of 37% per year during 2010 – 2018,

with the total transaction value of THB 209 billion as of 2018.

Despite impressive statistics, analysis of transaction volume and value revealed that Thai people used e-wallet for low-value transactions. More specifically, e-wallet transaction volume accounted for 25% of total e-payment transaction, while its transaction value shared only 0.056% of the total e-payment in Thailand during 2018 (Bank of Thailand, 2018).

As the Thai Government has spearheaded several initiatives to push "Cashless" society agenda, deeper level of understanding on various types of digital payment transactions are required. For Thailand, there have been a number empirical research works on users' adoption and usage on internet and mobile banking (Sripalawat, Thongmak & Ngramyarn, 2011; Bhatiasavi 2015; Boonsiritomachai & Pitchayadejanant, 2017). There have been a few published researches with particular focus on mobile wallet. The work of Simakhajornboon and Silpapunin (2018) focused on users' intention to use True Money Wallet application to pay for goods and services among 129 users. They found that perceived ease of use had a positive influence on perceived usefulness, which in turn had a positive effect on intention to use.



The research work with broader scope was conducted by Kitisithichai (2018) with the aim to understand usage behavior and technology adoption model on e-wallet usage among 400 users in Bangkok Metropolitan area. He found that perceived usefulness, perceived ease of use, system trust, perceived risk had an impact on attitude and intention to use e-wallet.

To deepen the level of understanding of e-wallet usage in Thailand, this paper contributes to the existing literature by studying influencing factors of GEN Y's perception towards e-wallet in Bangkok Metropolitan area. Gen Y is considered as technologically savvy and constitute the largest segment of modern technology users (Davis, 1989; Hanafizadeh, Behboudi, Koshksaray, & Tabar, 2014).

Understanding GEN Y and sub-age group may provide additional information to support design of features and marketing activities. According to EDTA internet user profile report in 2018, GEN Y came first as the users' group, spending the longer hour on-line, averaging 8 hours per days. Understanding of GEN Y's perception & usage behavior of e-wallet could allow researchers and business practitioners to develop product features and marketing campaign for this user group (Kitisithichai, 2018).

In view of the preceding observation, this research proposes to apply the technology acceptance model (TAM) to explore the influence of Benefits, Trust, Self-Efficacy, Ease of Use and Security towards GEN Y's perception of E-Wallet in Bangkok Metropolitan area. The study further reviews whether there is any significant mean difference among sub-age groups on GEN Y on the hypothesized conceptual model. The subsequent section reviews the literature of the hypothesized variables.

Literature Review

Definitions of mobile wallet

Mobile wallet is a term, used interchangeably with e-wallet or digital wallet. It could be broadly defined as "a transfer of funds in return for a good or service, where the mobile phone is involved in both the initiation and confirmation of the payment" De Bel and Gâza (2011, p.12). More specifically, mobile wallet refers to the payment system through which payment transactions occurred through applications or electronic solutions by using mobile devices (Nucharoen, 2016). For the purpose of this study, mobile wallet is an application on mobile devices that support payment transactions instead of cash usage.

Perception toward mobile wallet

User's perception has been one of the critical factors in various types of consumers' research. With respect to capability to complete an assigned task (Dory et al., 2009). As such, Bandura (1986, 1997) suggests that if people beliefs that they have capabilities to accomplish a task, the likelihood of achievement will be higher.

technology adoption, Davis (1989) proposed a model that explored how users' perception of specific attributes of the technology could lead to higher acceptance and usage of technology, widely known as the technology acceptance model (TAM). TAM has been used extensively which focus on perceived usefulness, perceived ease of use and attitude toward using effect on behavioral intention to adopt new technology (Slade, Williams, Dwivedi & Piercy, 2015).

In view of the above, this research adopts the framework of Technology Acceptance Model (TAM) on the factors that have an impact on GEN Y's perception of e-wallet.

Benefits

Benefit is a significant driver for e-payment system adoption (Chou, Lee & Chung, 2004). Likewise, Eastin (2002) who studied four e-commerce activities (online shopping, banking, investing, and e-payment systems) found that perceived convenience and financial benefits effect technology acceptance. Users may perceive promotions such as cash rewards, discount code, loyalty points and other freebies, offered by service providers as benefits of signing up for mobile wallet (Madan & Yadav, 2016).

Trust

Mobile phones usually store crucial personal information, which security and privacy risks are involved in making digital transaction through a mobile wallet. Trust plays significant role to mitigate perceived risk and helps to contribute customer loyalty and lead to positive intention toward mobile wallet. Trust refer to customer's perception in regard to mobile wallet application providers to be trustworthy with respect to the security and privacy policies followed by them.

Previous studies on mobile wallet adoption have recognized trust as an important factor for users' intention to adopt mobile wallet (Dahlberg, Mallat & Öörni, 2003; Shin, 2009; Xin, 2013). Therefore, trust is hypothesized as one of the key influencing factors towards GEN Y's perception of mobile wallet.

Self-efficacy

According to Bandura (1986), self-efficacy in oneself is formed through the happening experience. Such self-efficacy beliefs are developed through four major sources of influence. They are mastery experiences (success and failure), vicarious experience (social models or modeling influences), Social persuasion, and physiological or psychological arousal. Self-efficacy represents a person's understanding and beliefs in their skills and

In the context of mobile wallet, self-efficacy refers to the customer's beliefs of their capabilities to use mobile wallet systems. It has been a crucial factor of users' perception toward mobile wallet, and therefore

is proposed as one of the key influencing factors for this study.

Ease of use

From the customer's point of view, ease of use may be viewed as free from effort and easy enough to learn. Many researches have state that ease of use is positively related to the intention to use digital wallet (Masinge, 2010; Thakur, 2013; Rathore, 2016; Patel 2016). Ease of use may be related to users' interactivity of the digital wallet, contents, designs, graphics or colors, nagivtaion (Jayawardhena & Foley, 2000; Pikkarainen, Pikkarainen, Karjaluoto & Pahnla 2004), download speed (Hoffman & Novak, 1996). Ease of use has also been identified as one of the key influencing factors among existing studies in Thailand. Therefore, it is hypothesized that ease of use is positively related to perception of mobile wallet.

Security

System security is one of the key determinants of technology adoption, particularly in financial sector. Prior studies found that perception of risk and security levels were associated with obstacles for internet banking adoption (Sathye, 1999). Service providers need to place top emphasis and priority on payment security to ensure that customers' privacy and confidential information, while performing financial transactions remain safe and secure

Research Methodology

Measurement of conceptual Framework and Variables

The survey questionnaire based on uses four-point Likert scale, ranging from strongly disagree =1 to strongly agree = 4 with no neutral is used in this study. Eliminating the midpoint may force respondents to provide a definite answer (Kroh, 2005) and might help to reduce the impact of social desirability bias (Garland, 1991).

Population and Sample

The target respondents for this study focuses on the Generation Y (18-37 years old) in Bangkok Metropolitan area, with residency of at least 6 months with internet-enabled smartphone.

Convenience sampling and snowball techniques were used. The online questionnaire was conducted during August – October 2018 by sending the questionnaires online randomly from the list in researcher's contact on each platform such as Facebook, Line, E-mail, and asks the respondent to forward the questionnaires to whom they know.

Questionnaire consists of two parts. Part A comprised twenty questions relating to the independent and dependent variables. Part B consist of five questions relevant to demographic information. The questionnaires were in line with the research

The work of hypothesized the relationship between security and users' perception of mobile wallet and found positive relationship between security and users' adoption of mobile wallets among the users' group. In regards, it is hypothesized that security is one of the key influencing factors towards GEN Y's perception of mobile wallet.

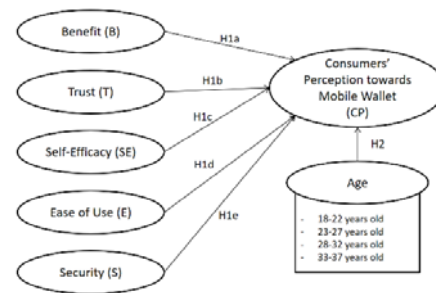
Research Framework and Methodology

Based on the literature review, this study proposes to apply the framework of technology acceptance model to identify the influence of Benefit, Trust, Self-Efficacy, Ease of Use and Security towards GEN Y's users' perception of mobile wallet in Bangkok Metropolitan. The conceptual framework is presented in Figure 1. All hypotheses are summarized in Table 1.

No.	H	Hypothesis
1	H1	Benefit (B), Trust (T), Self-Efficacy (SE), Ease of Use (E), and Security (S) have significant affected on Consumers' perception (CP) toward mobile wallet.
2.	H2	There is a significant mean difference among different sub-groups of Generation Y.

Table 1: Defined Hypothesis

Conceptual Framework



framework of (Davis, 1989; Kim et al., 2009; Luarn & Lin, 2005; Bandura, 1986, 1997).

The total number of respondents who participated in the survey were 436 from various demographic background profile, meeting with age criteria. This study required at least 415 respondents with 95% confident level to represent 67 million Thai population sizes (Krejcie & Morgan, 1970). After screening all the responses, 400 sets were qualified for data analysis.

Reliability Test

A pilot questionnaire was administered to 30 respondents. In examining the level of reliability in each group of items included in the questionnaire,



Cronbach's Alpha Coefficient was used (Cronbach, 1951). Table 2 shows that Cronbach's Alpha for all items was above 0.6.

Variables	Cronbach's Alpha	Number of Items
Benefit	0.807	5
Trust	0.788	4
Self-Efficacy	0.829	3
Ease of use	0.896	2
Security	0.689	2

Inferential Analysis

Multiple Linear Regression (MLR) was used to test the hypothesized relationship. The T-test on mean difference was performed to test H2.

Results & Discussion

Demographic Profile Summary

The majority of the respondents was female (66%), graduated with bachelor degree (73.5%), single (92%) with the average monthly income below THB 20,000.- per month.

Demographical & Behavior Data (N = 400)		N	%
Gender	Male	136	34.0
	Female	264	66.0
Age	Below 18	0	-
	18-22 years old	140	35.0
	23-27 years old	75	18.8
	28-32 years old	136	34.0
	33-37 years old	49	12.2
	Above 37 years old	0	-
Education	< Bachelor Degree	31	7.8
	Bachelor Degree	294	73.5
	Master Degree or above	75	18.8
Marital Status	Single	368	92.0
	Married	32	8.0
Monthly Income	Below 20,000 Baht	128	32.0
	20,001-45,000 Baht	119	29.8

	CP	B	T	SE	E	S
CP	1.000					
B	.635	1.000				
T	.629	.452	1.000			
SE	.563	.436	.585	1.000		
E	.557	.572	.458	.452	1.000	
S	.319	.327	.238	.278	.376	1.000
Consumer's Perception		0.656			4	

Table 2: Reliability Test

Table 4: Pearson's Correlation Matrix

Pearson's Correlation

Pearson's Correlation Matrix in Table 4 shows that P-values of all variables are positively correlated with confidence level of 0.05.

	45,001-70,000 Baht	107	26.8
	70,001-100,000 Baht	43	10.8
	100,001-150,000 Baht	1	0.3
	More than 150,000 Baht	2	0.5

Table 3: Demographic profile

Inferential Analysis and Multicollinearity Validation

Hypothesis	Standardized Coefficients (β)	VIF	Result
H1a B → CP	0.332*	1.649	Supported
H1b T → CP	0.311*	1.687	Supported
H1c SE → CP	0.164*	1.672	Supported
H1d E → CP	0.135*	1.727	Supported
H1e S → CP	0.040	1.202	Not Supported
R square	0.587		
Adjusted R Square	0.582		

Note: * represents the correlation which is significant at 0.05 level (1-tailed).

Table 5: Multiple Linear Regression (MLR) and result of H1a – H1e

The Multiple Linear Regression (MLR) results in Table 5 shows that Benefit (B), Trust (T), Self-Efficacy

(SE) and Ease of Use (E) explain Consumer's Perception (CP) with R square of 58.7% at the significant level of 0.05 or the 95% of confident level. The P-values of four independent variables are less than 0.05 which confirm that the hypotheses namely H1a, H1b, H1c and H1d are supported. However, P-values of H1e more than 0.05 which means H1e is not supported. Standardized Coefficients (β) in the Table 5 is shown the positive impacts of all variables to Consumer's Perception (CP) and Benefit (B) shows strongest positive impacts to Consumer's Perception (CP) at 0.332. Validation of multicollinearity confirmed that there was no issue, since the variance inflation factors (VIFs) are less than 5.

One-Way ANOVA

ANOVA					
AVG_CP					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.371	3	.790	2.296	.077
Within Groups	136.297	396	.344		
Total	138.669	399			

Table 6: One-Way ANOVA result of H2

The result in Table 6 reports the results of the analysis of the mean difference between sub-age group of generation Y. The hypothesized differences among sub-age group of Generation Y was not supported. Therefore, there was no differences among influencing factors towards GEN Y's perception of mobile wallet among different GEN Y sub-group.

Discussion

The findings of this study supported existing empirical evidence of Mobile Wallet usage in Thailand. Multiple regression analysis confirmed the positive influence of Benefits (Kitisithichai, 2018), Trust (Kaewtan, 2014; Kitisithichai, 2018), Self-Efficacy and Ease of Use (Simakhajornboon & Sipapinun, 2018; Kitisithichai, 2018) towards GEN Y's perception towards Mobile Wallet.

Surprisingly, our result showed that security did not have any statistical significance in the model. This finding may be consistent with recent report by ACI Worldwide and Aite Group that consumers in Asia Pacific were more comfortable with data protection provided by service providers on mobile platform. According to its Global Survey on Consumer Trust and Security Perception, consumers in India and Thailand reported that they trusted the merchant to protect their personal data, with the score of 60% and 51% respectively (Enterprise Innovation, 2017).

reported that GEN Y was less concerned with protecting their data privacy or system security when using on-line social media platform. They were often sharing private information publicly such as sharing

location real-time or disclosing other private information publicly.

With GEN Y as early adopter of technology, it might be possible that they had been accustomed to digital lifestyles including online financial transaction that security was no longer the top of their worries when it came to perception towards mobile wallet.

Conclusion

This research explored factors affecting generation Y's perception of Mobile Wallet in Thailand, as well as attempted to identify whether there had been any differences in sub-age group of GEN Y's target respondents.

Based on 400 users of mobile wallet, aged between 18 – 37 years old in Bangkok Metropolitan, Multiple Linear Regression (MLR) reviewed that Benefit, Trust, Self-efficacy, and Ease of use have an effect on GEN Y's perception while security had no impact on GEN Y's perception. Benefit was regarded that the factor with the highest degree of influence towards GEN Y's perception towards mobile wallet.

The study further found that there was no difference among the sub-age group of GEN Y.

Contribution & Recommendation

This study added empirical evidence to the existing literature of mobile wallet in Thailand by focusing on GEN Y age group. Results of the study supported the importance of benefits, ease of use and trust towards GEN Y's perception of mobile wallet. The statistical significance of self-efficacy suggested users felt comfortable with the mobile wallet upon having direct experience. This factor should be investigated in future study among other users' groups whether its impact was valid.

Furthermore, this finding of this study raised the question on the influence of Security towards users' perception of mobile wallet. This observation warranted further study on the underlying reasons that GEN Y felt comfortable with the security of mobile wallet, whether it stemmed from shifting consumers' behaviors, greater level of system security implemented by the service providers, or actual users' behavior to perform low-risk transaction through mobile wallet. These factors could lead to better understanding of catalysts for mass adoption of mobile wallet as Thailand gears towards cashless society.

To increase usage of mobile wallet among GEN Y, service providers should focus on benefits of the application. To understand the elements of benefits, future research is recommended to define the benefit more precisely, whether it refers to time and cost saving benefits of mobile wallet or promotional benefits such as discount with on-line store or other promotional offers. Secondly, service providers should continue to strengthen trust on the application. Further study should break down the sub-element of trust whether it refers to GEN Y's trust on the reputation of



the service provider or the stability of the mobile wallet application. In terms of self-efficacy and ease of use, service providers should plan activities to allow GEN Y to experience usage of the application in an effortless manner.

Limitations and Future Research

Although this research focuses on GEN Y's perception of mobile wallet, the study is subject to the following limitations. Firstly, the sample was GEN Y's user in Bangkok Metropolitan area. The results of the study could not be generalized, nor be used to represent GEN Y's population in Thailand. Future research is recommended to deepen usage behavior of GEN Y across various type of electronic payment solutions, as well as conduct cross-comparison with other age groups such as GEN X and Baby Boomers.

Secondly, the conceptual model focused on GEN Y's perception towards mobile wallet. Additional elements such as intention for continual usage or inclination to switch to other service providers should be explored. Thirdly, deeper level of understanding on security should be investigated in relation to the purpose of usage of mobile wallet and breakdown of security into sub-elements such as reputation of service providers, security mechanism such as prevention of phone being hacked, security measures to protect the mobile transactions or data privacy in the event of lost phones (Santos, et al., 2017).

Finally, future research may expand sampling to other metropolitan areas to develop understanding on similarities and differences in users' behaviors of mobile wallet.

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Identification of Secondary Tourist Sites' destination image and impact from government's tax incentive

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Abstract

The purpose of this research is to identify the factors that have an impact on destination image of secondary tourist sites and their intention to visit during the period of government's tax incentive policy. This study also examines the impact of government's tax policy in the secondary tourist sites. The study uses a quantitative research through Multiple Linear Regression and Pearson Correlation which are used to analyze the hypotheses. The survey is conducted on 300 Thai respondents who have experience of traveling and paying tax. The questionnaire is distributed through online channels. Questions comprise of topics on culture, history and art, tourist infrastructure, natural environment, general infrastructure, tourist leisure and recreation, natural resources, and atmosphere of the place (independent variables) and visit intention (dependent variable). Questions on tax incentive are included. The findings show that there are four independent variables which have influence on visit intention which are culture, history and art, natural environment, tourist leisure and recreation, and natural resources. Moreover, there are three independent variables which have no influence on visit intention which are tourist infrastructure, general infrastructure, and atmosphere of the place. However, the findings show that there are seven independent variables which are associated with tax incentive which are culture, history and art, tourist infrastructure, natural environment, general infrastructure, tourist leisure and recreation, natural resources, and atmosphere of the place. Last, the findings also show tax incentive is associated with visit intention.

Introduction

Tourism industry is one of the most important factor for every country to develop its economy. The government from all those countries support their competitive advantages in order to gain more market share from tourism. In addition, some countries such as ASEAN countries, launch the market strategy to attract world- wide tourists to visit their landmarks. Therefore, defining the strategy to develop each country is an important factor for tourism industry and it can develop the economy as well. The determinants to push country have competitive advantages and developing tourism industry to be stable by having a strong infrastructure, full human resource, and a strong economy. (Tourism Authority of Thailand, 2018)

Thailand has realized the importance of tourism industry because tourism industry can drive the economy better. Although, Thailand has the critical problems regarding the tourism's image but it can pass through this situation and the tourists will come back to visit country again. This shows the trust of tourists' perception regarding Thailand. Moreover, the image of Thailand is having cheap price for traveling. The country also has problems for long time such as old places, crowding of tourists in one place, inconvenience, and unsafe. Therefore, Thailand should develop the tourism's image in order to gain more

revenue for a better economy and to become better traveling landmark for long term.

With influx of tourists in popular destination like Bangkok, Chonburi (Pattaya), Phuket, Krabi, and Chiang Mai, problems emerge at these cities and cause imbalance on both socio-economic-cultural aspect and environmental aspect. As such, Thai government came up with promotion for Thai residents to visit other provinces within the Kingdom, especially at the provinces or cities equipped with tourist infrastructure and readiness to render the Thai tourists with unique hospitality. Apart from promotional activities, local travelers can ask for official receipts for their personal income tax deduction. To begin with, 55 provinces are labeled as secondary tourist sites and it is divided into 4 sectors. (Tourism Authority of Thailand, 2018)

Northern Thailand: 16 provinces

- | | |
|----------------|-----------------|
| 1. Chiangrai | 9. Lampang |
| 2. Phitsanulok | 10. Maehongsorn |
| 3. Tak | 11. Phichit |
| 4. Petchabun | 12. Phrae |
| 5. Nakhonsawan | 13. Nan |
| 6. Sukhothai | 14. |
| Kamphaengpet | |
| 7. Lampoon | 15. Uthaitхани |
| 8. Uttaradit | 16. Phayao |

Northeastern Thailand: 18 provinces



- | | |
|--------------------|------------------|
| 1. Udonthani | 10. Sakhonnakorn |
| 2. Ubonratchathani | 11. Nakhonphanom |
| 3. Nongkhai | 12. Roi-et |
| 4. Loei | 13. |
| Maharakham | |
| 5. Mukdahan | 14. Buengkan |
| 6. Buriram | 15. Kalasin |
| 7. Chaiyaphum | 16. Yasothon |
| 8. Sisaket | 17. |
| Nongbualamphu | |
| 9. Surin | 18. Amnatcharoen |

Central Thailand, Eastern Thailand, and Western Thailand: 12 provinces

- | | |
|----------------|-------------------|
| 1. Lopburi | 7. Ratchaburi |
| 2. Suphanburi | 8. Samutsongkhram |
| 3. Nakhonnayok | 9. Prachinburi |
| 4. Srakao | 10. Chainat |
| 5. Trad | 11. Ang Thong |
| 6. Chanthaburi | 12. Singburi |

Southern Thailand: 9 provinces

- | | |
|----------------------|---------------|
| 1. Nakhonsithummarat | 6. Ranong |
| 2. Patthalung | 7. Narathiwat |
| 3. Trang | 8. Yala |
| 4. Satun | 9. Pattani |
| 5. Chumphon | |

Secondary sites are less visited areas but there are several attractive places to explore and get new experiences. Most of the beautiful temples and historical buildings are in the secondary sites and the ways of people lives are very attractiveness. There is also a uniqueness in product of those areas which are produced by local people. (Tourism Authority of Thailand, 2018)

To apply for the tax incentive, tourists should acquire official receipts from their travel expenses in the secondary tourist sites. Tax deduction allows as much as 15,000 baht on the travelers' annual income tax of the year BE 2561. This tax incentive's policy is to promote the secondary sites to become popular visiting area and to encourage people to travel in domestic. Moreover, the policy is very important to the country because this can increase more tourists, not only in the primary sites but also in the secondary sites. For this policy, tourists or visitors will have more choices for their destinations instead of passage ways and it can also give an opportunity to those cities to increase community's revenue. There are several attractive areas of secondary sites to worth to visit. Nowadays, Thai people prefer travel abroad more than inbound traveling because they might think that they already have been to all main places within the country. Therefore, promoting the secondary sites can attract tourists to visit and explore those places, also this policy can be changed local tourist's attitudes to travel in domestic areas. However, this policy can make more awareness to Thai people about the beauty of scenery in the secondary sites.

Destination image is one of the important things that have power to gain many tourists to the visiting areas. When people change their mind and their behavior of traveling, it depends on the image of destinations. Moreover, the destination can get advantages by having good images such as appealing, distinctive, believable, and should be reality. Therefore, the study of this case is to identify the secondary sites' destination image and impact from government's tax incentive. (Qu et al., 2011)

Statement of the problems

Nowadays, Thailand tourism industry's trend and the number of tourists, both are growing continuously. Most of the popular places where the tourists go and visit is in primary sites of the country. Moreover, it is not worth to travel the secondary sites because there is less traveling advertisement of those places on social media. So, the tourists do not know much detail in those areas. Also, there are no attractions of the secondary sites even though the government promotes the tax incentive's policy in those areas. However, there is no study about traveling in the secondary sites with the tax incentive in Thailand and the visitors' attitude of the secondary sites' destination image.

Research Questions

RQ1 What constitutes the factors that attract tourists to visit the secondary tourist sites?

RQ2 To what extent tax incentive policy for the secondary tourist sites have influence on tourists' visit

Research Objectives

To describe the factors which can attract tourists to visit the secondary tourist sites.

To investigate that the tax incentive for the secondary tourist sites have influence on tourists' visit.

Destination image

Destination image can be represented as the sum of attitudes and good impressions that people have on a destination for secondary sites (Kotler et al., 1993). Moreover, it is one important topic of discussion in tourism research. Destination image is the image of secondary sites that people have on the destination. There are several components that make the destination image becomes more effective. For tourism, the concept of destination image was applied by many researchers to investigate tourists' image towards tourism destination (Qu et al., 2011). For tourist destinations, assessing the destination's image was important to the design of place marketing strategies more efficient (Faullant et al., 2008). Also, Destination image can be defined as people perceptions of a specific destination (Fakeye and Crompton, 1991). Tourism destination provide various types which can cause the attributes received as destination image variable measurement to be more specific and hardly to be generalized. Moreover, tourists' image for tourism destination could be measured by four variables which

are infrastructure, attractions, value for money, and enjoyment (Byon and Zhang, 2010).

Culture, history, and art

Culture is the set of values, beliefs, ideas, norms, art, morals, and customs that are transmitted and shared in a given society. Normally people go to a museum to see the cultural elements of a given country or society. Also, about lifestyle of ancient civilization, customs, and human beliefs. Several past studies supported the significant influence of cultural factor on museum visit behavior (Rajesh, 2013).

Tourist infrastructure

Tourism infrastructure is the standard of tourism development and use of existing destination resources. Tourism infrastructure can be defined many services which is necessary to meet the tourists' desire and enhance satisfaction during the period of destination (Jovanovic, 2016). Moreover, tourism infrastructure can be defined as the physical components that are designed and increase to serve for visitors. The strong correlation between tourism development and infrastructure has been theoretically established by a number of authors (Adebayo, Iweka, 2014). The destination is also appreciated for its effective tourist infrastructure with related to the quality of restaurants and hotels. Also, that places should provide the tourist center in order to serve the information to tourists.

Natural environment

Environment means a key factor of tourism fundamentally involved in all aspects of tourism. So natural environment should be conserved which can help tourism through its natural feature (Ryan, 2003). For the decisions in tourism, environment can be the quality of the natural resources. For example, landscape, air, sea water, fresh water, plants life, animal and human life. Nowadays, natural environment can be attracted many tourists to visit the areas and take several advantages for the tourism industry.

General infrastructure

The destination's general infrastructure services become one of the most important factors. The tourism depends on public utilities and infrastructural support. Roads, airports, harbors, electricity, sewage, and potable water can support tourism development. The infrastructural dimension is an element for tourism development and the above factors are all basic elements for attracting visitors to a destination. In general, infrastructure has excluded in empirical works because it is expected to be available at a destination and has not been promoted as an attraction factor (Subadar et al., 2011).

Tourist leisure and recreation

Leisure refers to a free time which provides well experience. Free time mean that people spend more time away from business, work, domestic chores and education. Also, it has no including time spent on

necessary activities such as eating and sleeping. From a research perspective, this approach has the advantages of being quantifiable and comparable over time and place. Recreation is an activity of leisure. The need to do activity for recreation is an essential element of human physical and psychological health refreshment. Recreational activities are comprised for enjoyment, amusement, or pleasure and considered to be fun (Faridi, 2017).

Natural resources

Tourism development have influence on natural resources when it enhances consumption in specific areas where resources are already scarce. There are two features of natural resources. Firstly, fresh water is the water resource and it is one of the natural resources. The tourism industry overconsumes water resources for hotels, swimming pools, golf courses and personal use of water and these factors are used by tourists. This can result in lack of water supplies, and generating more volume of waste water. However, in dry and hot regions such as the Mediterranean, the issue of water shortage is of specific concern. Because of the hot temperature, it is to consume more water than other continents when on holiday than they do at home, the number used can run up to 440 liters a day. Secondly, local resources and tourism can provide a great pressure on local resources such as energy, food, and raw materials which shall already with short supply. More extraction and transport of these resources provoke physical influence related to their exploitation. Additionally, high demand for these resources meets more expectations tourists have in terms of heating and hot water (Camarda and Grassini, 2003).

Atmosphere of the place

Atmosphere is an important concern in assessing any service delivery from point of view of tourists. Also, atmosphere is very important for secondary sites since it impact on repurchase behavior for tourist including the attitude, emotional and mental status of the customer (Lin, 2004). Atmosphere refers to the effort which can buy environments to produce specific emotional effects in the buyer that enhance the chance of purchase (Kotler, 1973). Moreover, Atmosphere can be applied as the marketing tools by using sight, sound, scent and touch to make tourists have new experiences. Additionally, atmosphere can be defined as combination of tangible and intangible environmental features such as music, color, brightness, and furnishings (Bitner and M. J, 1992).

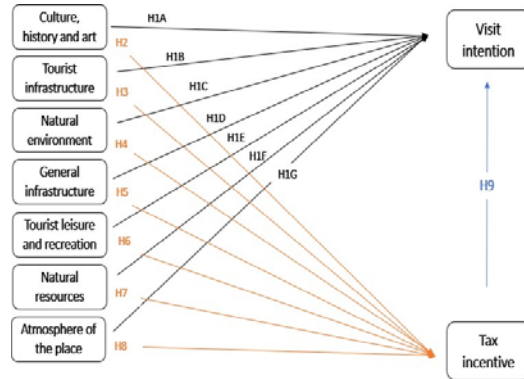
Conceptual Framework

Regarding to the two studies of (Authors' names of the theoretical FW), this study proposes the independent variables being: culture, history and art, tourist infrastructure, natural environment, general infrastructure, tourist leisure and recreation, natural resources, and atmosphere of the place. Questions on

tax incentive are added as another independent variable. Dependent variable is the tourists' visit intention.

Figure 3.3 The Research Hypotheses conceptual framework of tourists' visit intention

H1A₀: Culture, history and art have no influence on visit intention.



H1A_a: Culture, history and art have influence on visit intention.

H1B₀: Tourist infrastructure has no influence on visit intention.

H1B_a: Tourist infrastructure has influence on visit intention.

H1C₀: Natural environment has no influence on visit intention.

H1C_a: Natural environment has influence on visit intention.

H1D₀: General infrastructure has no influence on visit intention.

H1D_a: General infrastructure has influence on visit intention.

H1E₀: Tourist leisure and recreation have no influence on visit intention.

H1E_a: Tourist leisure and recreation have influence on visit intention.

H1F₀: Natural resources have no influence on visit intention.

H1F_a: Natural resources have influence on visit intention.

H1G₀: Atmosphere of the place has no influence on visit intention.

H1G_a: Atmosphere of the place has influence on visit intention.

H2₀: Culture, history and art are not associated with tax incentive.

H2_a: Culture, history and art are associated with tax incentive.

H3₀: Tourist infrastructure is not associated with tax incentive.

H3_a: Tourist infrastructure is associated with tax incentive.

H4₀: Natural environment is not associated with tax incentive.

H4_a: Natural environment is associated with tax incentive.

H5₀: General infrastructure is not associated with tax incentive.

H5_a: General infrastructure is associated with tax incentive.

H6₀: Tourist leisure and recreation are not associated with tax incentive.

H6_a: Tourist leisure and recreation are associated with tax incentive.

H7₀: Natural resources are not associated with tax incentive.

H7_a: Natural resources are associated with tax incentive.

H8₀: Atmosphere of the place is not associated with tax incentive.

H8_a: Atmosphere of the place is associated with tax incentive.

H9₀: Tax incentive is not associated with visit intention.

H9_a: Tax incentive is associated with visit intention

Research Method Used

Employing quantitative method, this study examines the target respondents of Thai people who have experience of traveling at any of the secondary tourist sites. These population must pay tax and experience tax deduction on their submission of annual income tax. About 300 respondents are approached with both online and one-on-one contact for the questionnaire execution. The period of data collection was from March 1 to 22, 2019. Then the data underwent statistical treatment using Multiple Linear Regression and Pearson's correlation coefficient.

Summary of findings.

In the study, the hypotheses were tested by using Multiple Linear Regression and Pearson's Correlation Coefficient. Additionally, the results showed that four null hypotheses were rejected with statistical significance including H1A, H1C, H1E and H1F. Since, this can be concluded that culture, history and art, natural environment, tourist leisure and recreation and natural resources have an influence on visit intention.

For the correlation analysis, all independent variables (culture, history and art, tourist infrastructure, natural environment, general infrastructure, tourist leisure and recreation, natural resources, and atmosphere of the place) are associated with tax incentive. In addition, it also shows that the tax incentive is associated with visit intention. Therefore, the results of each hypothesis are presented in Table 6.1

Table 6.1: Summarize of the results of each hypothesis (H1)

Hypotheses 1	Significant value	Standardized Coefficient (Beta)	Status
H1A ₀ : Cultural, history and art have no significant influence on visit intention.	0.000	0.252	Rejected
H1B ₀ : Tourist infrastructure has no significant influence on visit intention.	0.446	0.054	Failed to reject
H1C ₀ : Natural environment has no significant influence on visit intention.	0.000	0.211	Rejected
H1D ₀ : General infrastructure has no significant influence on visit intention.	0.168	-0.093	Failed to reject
H1E ₀ : Tourist leisure and recreation have no significant influence on visit intention.	0.000	0.264	Rejected
H1F ₀ : Natural resources has no significant influence on visit intention.	0.050	0.121	Rejected
H1G ₀ : Atmosphere of the place has no significant influence on visit intention.	0.929	-0.005	Failed to reject

Table 6.2: Summarize of the results of each hypothesis (H2-H9)

Hypotheses 2	Significant value	Result of hypotheses testing
H2 ₀ : Cultural, history and art are not associated with incentive.	0.000	Rejected
H3 ₀ : Tourist infrastructure is not associated with tax incentive.	0.000	Rejected
H4 ₀ : Natural environment is not associated with tax incentive.	0.000	Rejected
H5 ₀ : General infrastructure is not associated with tax incentive.	0.000	Rejected
H6 ₀ : Tourist leisure and recreation are not associated with tax incentive.	0.000	Rejected
H7 ₀ : Natural resources are not associated with tax incentive.	0.001	Rejected
H8 ₀ : Atmosphere of the place is not associated with tax incentive.	0.000	Rejected
H9 ₀ : Tax incentive is not associated with visit intention.	0.000	Rejected

Discussions and conclusions

According to the analysis of demographic factors of this research, the most common profile of the respondents was female (58.7%). Moreover, the age of most respondents are around 21-35 years old (77.7%). Most of respondents are single (70.3%). For the education, most of respondents are people who have a bachelor degree or below (70%). However, most of respondents are business owner (41%). And their mainly income is 30,001-60,000 THB per month (31%).

For the analysis of hypothesis testing, the researcher found that hypothesis 1A that cultural, history and art have influence on visit intention. From the previous study, the researcher (Alrawadieh, Dincer, Dincer, & Mammadova, 2018) stated that cultural, history and art have an efficient on revisit intention and it's generally positive.

For the hypothesis 1G, the researcher found that atmosphere of the place has no significant influence on visit intention. From the previous study, the researcher (Alrawadieh, Dincer, Dincer, & Mammadova, 2018)



stated that atmosphere of the place has an efficient on revisit intention. Moreover, the reason why atmosphere of the place has no significant on visit intention because the place with good reputation is not the factor that attract them to go visit the secondary sites. People may love to visit the private area but beautiful environment.

For the hypotheses 2 to hypotheses 9, the researcher found that culture, history and art, tourist infrastructure, natural environment, general infrastructure, tourist leisure and recreation, natural resources and atmosphere of the place are associated with tax incentive. Also, the correlation value of tourist infrastructure and tax incentive is 0.546 which is the highest value. Follow by the correlation value of general infrastructure which is 0.488 and tourist leisure and recreation with the value of 0.408. It shows that tourist infrastructure, general infrastructure, and tourist leisure and recreation are strongly associated with tax incentive. According to this factor, it can conclude that the quality of hotels and restaurant, the ease of access to destination, new excursions at the destination, tourist centers and network of tourist information are the important factors that should be improve in order to attract tourists to go visit with the tax incentive. Moreover, the development of roads, airports and ports, transportation facilities, and development of buildings are also the dimensions that can attract more tourists to visit the destination. However, natural environment, atmosphere of the place, and culture, history and art with the value 0.338, 0.319, and 0.307 respectively. This can conclude that natural environment, atmosphere of the place, and culture, history and art are average associated with tax incentive. Lastly, natural resources are weakly associated with tax incentive with the correlation value of 0.186. Therefore, the weather and quality of seawater cannot be controlled so it might not attract the tourists to visit those places with the tax incentive.

Recommendations

This research focuses on determining the factors that influence on visit intention toward secondary sites. The results of this study showed that culture, history and art, natural environment, tourist leisure and recreation, and natural resources have an effect on visit intention.

Culture, history and art is the factor that influences on visit intention. Most of the museums, historical buildings, and monuments are very popular in the secondary sites. Also, people will feel that it is very good to know the history of those places and they can use the information to tell others about the country's history. Also, it is very nice for tourists to see the customs and ways of life of people in the secondary sites.

Natural environment is the factor that influences on visit intention. As the secondary sites are not popular for people to go visit. But it will be more attractiveness when there are beauty of the scenery,

cities and towns. Moreover, those cities need to be cleanliness in order to make a good image of each province.

Tourist leisure and recreation is the factor that influences on visit intention. Nowadays, tourists are more interested in the places where have an activity to do when they go to visit. For example, when tourists go to the sea they always love to surfing. Moreover, the shopping center is one of the popular places that attract tourists due to Thailand is well known of cheap price. On the other hand, there are several dimensions that are associated with tax incentive. Although cultural, history and art, tourist infrastructure, natural environment, general infrastructure, tourist leisure and recreation, natural resources, and atmosphere of the place are associated with tax incentive, but these factors are weakly attracted tourists to have visit intention due to the weak value of Pearson's Correlation.

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Pramanik, S. K., Azam, M., & Hossain, M. (2016). The Impacts of Visitors' Attitude on Visit Intention in the Context of Museum Applying SEM: Offering an Alternative Visit Intention Model. *Bangladesh Journal of Tourism*, 1(1).

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ORAL PRESENTATION SCHEDULE

Date: 12 July 2019

Time 13.00-17.00 PM

Hospitality and Tourism Management

No.	Submission ID	Paper Title	Author(s)
1	3756	A framework of empowerment and economic dependency towards resident support for tourism in Dali and Lijang, China: From a Gendered Perspective	Yixuan Cheng
2	3771	A Study on Impacts of Over tourism and Strategies Adopted by Industry Stakeholders in Bangkok	Kainali Yephthomi
3	3782	The Strategies for Addressing the Gender Imbalance in Five-star Hotels General Manager Positions in Thailand	Vorakarn Chalermchaikit
4	3784	Business Relationship between Hotels with Online Travel Agencies in Bangkok, Thailand	Ashish Ranjan Borah
5	3800	Host-Tourist Interaction and its Impact on Travel Behavior if International Tourists in Bangkok: The Case of Couchsurfing	Janis Radink
6	3803	A Study on the Business Aspects of Selected Coworking Space in Bangkok: Balancing the need of Owners and Co-workers	Gaurav Jyoti Gohain
7	3859	Opportunities and Challenges by the Chinese Inbound Tourism to Bangkok	Zeyu Liu



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CONFERENCE ABSTRACTS



A FRAMEWORK OF EMPOWERMENT AND ECONOMIC DEPENDENCY TOWARDS RESIDENT SUPPORT FOR TOURISM IN DALI AND LIJIANG, CHINA: FROM A GENDERED PERSPECTIVE

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Abstract

Empowerment has been widely recognized as an important component of sustainable tourism, the resident can be empowered by tourism from various dimensions. The tentative research proposal is designed to quantitatively examine the extent to which resident perceive themselves as being empowered and economically dependent on tourism from a gendered perspective in ethnic destinations Dali and Lijiang, China. A following qualitative exploration will be subsequently conducted to seek for deep reasons behind the quantitative results. The proposal also aims to further examine the effect of empowerment and economic dependency on resident support for tourism, which is expected to help government and tourism organizations acquiring more support from the local populations.

Keywords: resident empowerment, economic dependency, resident support for tourism,
Gender

Introduction

The UNWTO defines sustainable tourism as “ensure viable, long-term economic operations, providing socio-economic benefits to all stakeholders that are fairly distributed, including stable employment and income-earning opportunities and social services to host communities, and contributing to poverty alleviation”. The definition recognizes the transformative power of tourism to reduce poverty and empower disadvantaged groups in host

communities [Swanson & Edgell Sr., 2013]. Empowerment has been widely recognized as a vital component of sustainable tourism [Cole, 2006; Sofield, 2003; Scheyvens, 1999; Boley & McGehee, 2014; Strzelecka, Boley & Strzelecka, 2016]. As Sofield [2003] claims, “without empowerment, sustainable tourism development by communities is difficult to attain”.

It has been revealed that all processes and activities in the tourism industry are constructed in and influenced by gender relations embodied in



the society [Kinnaird & Hall, 2000; Kinnaird & Hall, 1996; Ferguson & Alarcon, 2015]. An overwhelming perspective has been widely supported by previous research that men and women are unequally empowered by tourism [Gentry, 2007; Schellhorn, 2010; Vandegrift, 2008; Cukier, Norris & Wall, 1996; Williams, 2002; Ferguson & Alarcon, 2015; Tucker & Boonabaana, 2012; Scheyvens, 2000]. Although the body of knowledge about gender issues in tourism development is growing, it is still highly fragmented and the findings of studies are often controversial. It seems that a gendered framework is urgently needed to examine resident empowerment in tourism development.

Furthermore, resident empowerment was evidenced as an important predictor of resident support for tourism in a few recent studies [Boley, McGehee, Perdue & Long, 2014; Strzelecka, Boley & Strzelecka, 2016]. However, it is questionable why men and women are unequally empowered by tourism yet they share similar attitudes and support for tourism [Harvey, Hunt & Jr, 1995]. Previous research indicates that economic dependency maybe an important predictor of resident support for tourism, the more a resident or community relies on economic benefits of tourism, the more positive attitudes he or she holds toward tourism development [Lankford, 1994; Lawson et al., 1998].

Statement of problems

Because of its natural scenery and historic heritage, Dali was identified as one of the 24 most important historical and cultural towns in China and has been one of the most popular destinations in Yunnan province. Bai minority is the larger part of the population in Dali due to it was the capital of Bai Kingdoms from the 8th to the 13th century [Gormsen, 1990]. The main attractions of Dali include Cangshan Mountain, Erhai Lake, Butterfly Spring and the ancient town which was the state of

Dali in the Song dynasty and also an important town on the Silk Road to Tibet [Dai et al., 2012]. As a leading tourism city in Yunnan province, Dali received 47.1084 million tourist arrivals with tourism revenue 79.58 billion Yuan RMB in 2018 [Wu & Nan, 2019].

Lijiang city is located in the northwest of Yunnan province, China. The total population in 2017 was 1,227,009, approximately 58% of the population is minority groups, including Naxi (representing 58% of the minorities), Yi, Bai and others [The Tourism Development Committee of Lijiang, 2019]. The ancient town of Lijiang has a history spanning more than 800 years and has been listed in the UNESCO World Heritage List in 1997. Its historically diverse cultural heritages and natural landscape attract growing attention from both of tourists and media, which significantly improves its competitiveness as a destination thereby enhancing government's priority of tourism as a leading industry in the city [Wu, Xu & Eaglen, 2011; Yuan et al., 2006; Du, 2006; Wang & Ap, 2013]. In 2018, Lijiang City received 46.433 million tourist arrivals with tourism revenue 99.845 billion Yuan RMB [The Tourism Development Committee of Lijiang, 2019].

Although tourism promotes local economic development and generates more employment opportunities, comprehensive development, including social, cultural and environmental dimensions, seems to be ignored [Wu, Xu & Eaglen, 2011; Yuan et al., 2006; Du, 2006; Tian, 2007; Su, 2011]. It reveals that local resident suffers disempowerment in the process of tourism development at different degrees in both of destinations [Wu, Xu & Eaglen, 2011; Dai et al., 2012]. For example, the majority of houses in the main streets of Lijiang ancient town were used for commercial purpose by non-locals and only a few shops are operated by local residents, selling ethnic food, handcrafts and souvenirs, which



indicates the increasing phenomenon of displacement of ethnic residents by migrant entrepreneurs [Wu, Xu & Eaglen, 2011]. Additionally, migrant entrepreneurs from other provinces sell machine-made souvenirs with lower prices which crowd out handcrafts made by local people in Dali and Lijiang, which reveals that only less access is provided for local people to economically benefit from tourism development [Wu, Xu & Eaglen, 2011].

Furthermore, the average educational levels of local people in Lijiang and Dali are relatively low, which leads to residents are lack of professional knowledge and deep insights thereby losing the ability to grasp the opportunities and control tourism development [Wu, Xu & Eaglen, 2011]. The majority of market channels and tourism resources have been controlled by external entrepreneurs and tourism corporations, even small and medium tourism enterprises also have been dominated by external entrepreneurs from other provinces [Wu, Xu & Eaglen, 2011; Su & Teo, 2008; Tian, 2007]. It argues that employment opportunities provided for local people are usually labor-intensive, unstable and low-paid, which indicates the trends of the resident being a disadvantaged status in tourism development [Wu, Xu & Eaglen, 2011; Su & Teo, 2008].

Based on the problems mentioned above, the study aims to first examine the extent to which residents perceive themselves being empowered through tourism and the extent of residents' economic dependency on tourism development by gender. Then, the effect of resident empowerment and economic dependency on resident support for tourism will be examined in Dali and Lijiang. Finally, the research will qualitatively explore the

perceive themselves being socially, politically, economically and psychologically empowered through tourism in Dali and Lijiang;

reasons behind the quantitative results mentioned above.

Significance of the study

Theoretical significance

The research will quantitatively measure the construct of resident empowerment and economic dependency applying a gendered framework in the context of ethnic destinations of China. Additionally, the research aims to further examine the effect of empowerment and economic dependency on resident support for tourism in Dali and Lijiang, China. Deep reasons behind the quantitative results will be qualitatively explored based on the existed literature gap.

Practical significance

The quantitative results of the study will help government and tourism organizations to understand the extent of resident empowerment and economic dependency in the tourism development from a gendered perspective. The qualitative results will further assist relevant practitioners to understand reasons behind gender discrepancies in resident empowerment and economic dependency through tourism. The combining of quantitative and qualitative results will provide practitioners with the ability to identify dimensions where men and women are unequally empowered by tourism thereby making corresponding solutions and strategies. Further, if it is evidenced that resident empowerment has an effect on their support for tourism, government will probably pay more attention to the improvement of resident empowerment, which will promote the achievement of sustainable tourism in ethnic destinations of China.

Research objectives:

To examine the extent to which male and female residents respectively

To examine the extent to which male and female residents respectively perceive themselves being economically dependent on tourism in Dali



and Lijiang;

To examine the effect of the extent of social, political, economic and psychological empowerment perceived by male and female residents on their support for tourism in Dali and Lijiang;

To examine the effect of the extent of economic dependency perceived by male and female residents on their support for tourism in Dali and Lijiang;

To explore reasons for any gender discrepancies in the extent of social, political, economic and psychological empowerment perceived by residents through tourism in Dali and Lijiang;

To explore reasons for any gender discrepancies in the extent of economic dependency on tourism perceived by residents in Dali and Lijiang;

To explore reasons why the extent of social, political, economic and psychological empowerment perceived by male and female residents may affect their support for tourism in Dali and Lijiang;

To explore reasons why the extent of economic dependency perceived by male and female residents may affect their support for tourism in Dali and Lijiang.

Research questions:

What is the extent of social, political, economic and psychological empowerment perceived by male and female residents respectively in Dali and Lijiang?

What is the extent of economic dependency on tourism perceived by male and female residents respectively in Dali and Lijiang?

Does the extent of social, political, economic and psychological empowerment perceived by male and female residents affect their support for tourism in Dali and Lijiang? If does, in what

degrees?

Does the extent of economic dependency perceived by male and female residents affect their support for tourism in Dali and Lijiang? If does, in what degrees?

Why male and female residents may perceive themselves being differently socially, politically, economically and psychologically empowered by tourism in Dali and Lijiang?

Why the extent of economic dependency perceived by male and female residents may be different in Dali and Lijiang?

Why the extent of social, political, economic and psychological empowerment perceived by male and female residents may affect their support for tourism in Dali and Lijiang?

Why the extent of economic dependency perceived by male and female residents may affect their support for tourism in Dali and Lijiang?

Literature Review

Empowerment framework and Resident Empowerment through Tourism Scale (RETS)

To analyze the impacts of ecotourism on the lives of local people in New Zealand, Scheyvens [1999] develops a framework containing psychological, social, political and economic empowerment based on Friedmann's [1992] research. There already have been a considerable number of studies analyzing resident empowerment through tourism based on the empowerment framework in different contexts [Boley & McGehee; Boley *et al.*, 2014; Ramos & Prideaux, 2014; Boley, Maruyama & Woosnam, 2015; Boley *et al.*, 2016; Strzelecka, Boley and Strzelecka].

Based on the empowerment framework of Scheyvens [1999], Boley and McGehee [2014] develop the Resident Empowerment through Tourism Scale [RETS] to quantitatively examine resident empowerment from social, political and



psychological dimensions [Boley & McGehee, 2014]. Four dimensions of resident empowerment in tourism will be subsequently analyzed based on the empowerment framework [Scheyvens, 1999] and the resident empowerment through tourism scale [Boley & McGehee, 2014].

Psychological Empowerment

According to Scheyvens [1999], pride and self-esteem of host residents will be enhanced through tourism because tourists recognize the uniqueness and importance of their culture, traditional skills, and natural environment. Additionally, tourism also provides traditionally low-status groups with employment opportunities to earn money, which leads to an increase in confidence of the groups, such as women and youths [Scheyvens, 1999; Boley & McGehee, 2014].

On the other hand, psychological disempowerment refers that residents no longer feel special and pride for their culture and traditional knowledge as the tourism development wipes out the uniqueness of the local community, which leads residents to feel confused and disinterested with the development of tourism [Scheyvens, 1999; Boley & McGehee, 2014].

It demonstrates that tourism development has a great potential to increase women's confidence and self-esteem [Gentry, 2007; Moswete & Lacey, 2014], which has been further explained that the extent of psychological empowerment perceived by residents depends on the type of tourism product provided within the destination and how closely men and women are involved in the production of the tourism product [Gentry, 2007; Moswete & Lacey, 2014].

Social Empowerment

Scheyvens [1999] claims that the successful development of ecotourism will improve community cohesion as all members and families in the community share the same goals and work together to develop ecotourism. On the other hand,

the tourism development will also cause disharmony and conflicts when tourism benefits are not equally distributed within the community [Scheyvens, 1999; Boley & McGehee, 2014]. As the study indicates that unequal access to benefits of tourism leads to jealousy and enmity among residents at ethnic minority destinations in China [Chen, Yang & Li, 2011].

It was hypothesized that disadvantaged groups, such as women, usually suffer more problems and negative effects resulting from tourism development and have less access to tourism benefits within the community [Scheyvens, 1999]. Any discrepancies in social empowerment will negatively affect community cohesion and tourism development.

Political Empowerment

When it comes to the political empowerment in tourism, it is necessary to consider whether the community equally represents needs and interests of all groups and provides residents with a platform through which local people can raise problems relating to tourism development in the community [Scheyvens, 1999]. As Cole [2006] describes, residents have the ability to identify problems, making decisions, find solutions and implement actions in the process of tourism development.

On the other hand, if the community has an autocratic leadership, residents will be treated as passive participants and failed to involve in the decision-making of tourism planning [Scheyvens, 1999]. Previous studies indicate that women are usually underrepresented and undervalued in tourism development [Scheyvens, 2000; Tucker & Boonabaana, 2012; Ling et al., 2013; Duffy et al., 2015].

Economic Empowerment

It is widely perceived that tourism can be an effective tool to improve



the lives of local people, reduce poverty and promote economic development [Scheyvens, 1999; Swanson & Edgell Sr., 2013]. While, whether the economic benefits are equally distributed to all groups within the community will be closely related to residents' motivation and community cohesion [Scheyvens, 1999]. Therefore, any tourism planning and policies must be capable of ensuring the economic benefits should be fairly spread to the all relevant population over the long term [Ritchie & Crouch, 2003].

However, Scheyvens [1999] argues that most economic gains go to outside businessman, government and local elites rather than residents. The perspective was evidenced at ethnic minority destinations in China, it indicates that local people only have less access to economic benefits in tourism development and most of the incomes are distributed to outside businessman and government [Chen, Wang & Li, 2010; Han et al., 2014]. Pertaining to discrepancies of economic empowerment by gender, a few studies suggest that local elites, especially men, usually tend to control the development of tourism and therefore get more accesses to economic benefits of tourism than women [Akama, 1996; Mansperger, 1995; Moswete & Lacey, 2014].

Measurement of resident empowerment through tourism

Despite empowerment has been perceived as a crucial component of sustainable tourism, only a few studies quantitatively measure the construct [Boley & McGehee, 2014; Boley, Maruyama & Woosnam, 2015]. Boley et al [2016] measure and compare the extent to which male and female residents perceived themselves being empowered in tourism development. The results demonstrate that women are more likely to perceive themselves being empowered through tourism than men in three American countries. Interestingly, the results

from two Japanese samples reveal that there is no significant difference in perceived empowerment between male and female residents [Boley et al., 2016]. Despite there exist gender discrepancies in perceived empowerment through tourism, but not in the extent suggested by previous studies [Boley et al., 2016]. The study also suggests that further qualitative studies are needed to explore reasons behind the discrepancies.

Chen, Wang and Li [2010] examine resident empowerment through tourism in the ethnic minority community of Gui Zhou, China based on Scheyvens's [1999] empowerment framework. The results indicate that residents perceive themselves to be most psychologically empowered, followed by socially and politically empowered through tourism development [Chen, Wang & Li, 2000]. Female residents are showed to perceive themselves as being more empowered by tourism than male residents in all dimensions [Chen, Wang & Li, 2000]. The study suggests that further research can deeply examine resident empowerment by gender in ethnic minority destinations and explore why men and women perceived themselves being differently empowered by tourism [Chen, Wang & Li, 2000].

Resident support for tourism

It has been widely recognized that residents' support is a key component for the development of sustainable tourism [Cole, 2006; Nunkoo, Smith & Ramkissoon, 2013; Choi & Murray, 2010]. A handful of recent studies examine the effect of empowerment on resident support for tourism based on Weber's theory of formal and substantive rationality [Boley et al, 2014; Strzelecka, Boley & Strzelecka, 2016]. The research of Boley et al [2014] reveals that personal economic benefits and psychological empowerment positively affect residents' support for tourism. While, it is evidenced that political empowerment and social empowerment have no direct effects on resident

support for tourism probably as the low extent of political and social empowerment perceived by residents within three countries [Boley et al., 2014]. Additionally, Strzelecka, Boley and Strzelecka [2016] also evident that political empowerment also has no effect on resident support for tourism as residents seldom have access to involve in the process of tourism decision-making [Strzelecka, Boley & Strzelecka, 2016].

It seems that the extent of empowerment will moderate the effect of empowerment on resident support for tourism [Boley et al., 2014; Strzelecka, Boley & Strzelecka, 2016]. Pertaining to the unequal level of empowerment through tourism between men and women especially in ethnic minority areas, the effect of empowerment on resident support for tourism may be different by gender.

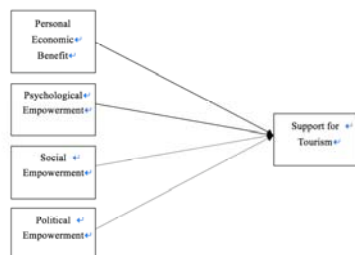


Figure 1. Boley et al.'s [2014] model of empowerment's influence on resident support for tourism.

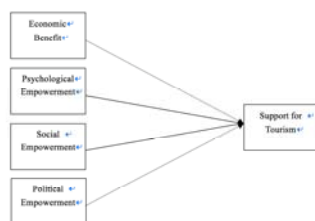


Figure 2. Strzelecka, M., Boley & Strzelecka, C.'s [2016] model of empowerment's influence on resident support for tourism

Economic dependency

Economic dependency has been also evidenced as an important predictor of resident attitudes and support toward tourism [Harrill, 2004]. It indicates that the more a resident or community relies on economic benefits of tourism, the more positive attitudes he or she holds toward tourism development [Pizam, 1978; Lankford, 1994; Lawson et al., 1998; Harrill, 2004]. As Ritchie and Crouch [2003] argue, residents are willing to support the development of tourism and tolerate its negative impacts because tourism is an important catalyst of local employment. Harrill's [2004] research further supports the perspective that residents are still supportive of tourism development although they suffer adverse impacts of tourism as their strong economic dependency on tourism.

It is hypothesized that men and women have different extent of economic dependency on tourism as they differently access to power and resources in the community [Nunkoo & Ramkissoon, 2010]. In ethnic minority areas of China, most of the women are less access to employment opportunities and therefore heavily rely on tourism development to gain economic incomes [Li, 2004; Walsh & Swain, 2004].

Resident empowerment studies in China

There already have been a considerable number of studies that analyze resident empowerment through tourism in various destinations of China based on Scheyvens's [1999] empowerment framework [Zuo, 2009; Sun, 2008; Han et al., 2014]. While, the majority of the studies qualitatively explore the issues of resident empowerment through tourism in China. Only Chen [2010] quantitatively examines resident perceptions on tourism empowerment in the ethnic minority

destination, Guizhou, China. The results of previous research indicate that the application of empowerment framework into

destinations of China is urgently needed as tourism has been widely promoted as a tool to mainly promote economic development in China [Zuo, 2009; Sun, 2008; Han et al., 2014].

On the other hand, there has been a lack of studies that further examine the effect of empowerment on resident support for tourism in the context of China. Additionally, economic dependency seems to be also an ignored indicator of resident support for tourism in China although it has been already mentioned in a few studies [Chen, 2010; Han et al., 2014]. Furthermore, it has been widely demonstrated that tourism provides women with opportunities to earn incomes, increase confidence and improve lives in ethnic minority destinations, yet seldom research examines resident empowerment through tourism from a gendered perspective in China.

Conceptual Framework

Based on the results of previous studies, research objectives and research questions, the following framework is developed to investigate the identified issues.

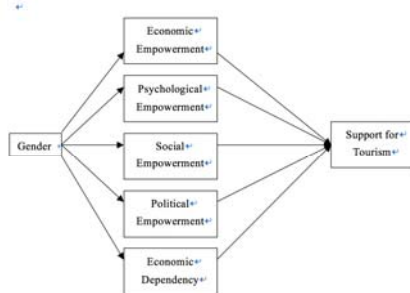


Figure 3. The Tentative Conceptual Framework

Phase I

Resident empowerment will be examined from four dimensions. The items of political, social and psychological empowerment will be developed based on Boley and McGehee's [2014] Resident

Empowerment through Tourism Scale (RETS).

The items of economic

Empowerment will be developed based on Perdue et al.'s [1990] original measure of Personal Benefit from Tourism. The items of economic dependency will be developed based on studies of Pizam [1978], Harvery, Hunt and Jr [1995] and Harrill [2004]. Therefore, *RQ.1* and *RQ.2* will be examined based on the statements above.

Based on Weber's theory of formal and substantive rationality [WFSR], both constructs of economic empowerment and non-economic empowerment are included in the tentative framework to predict resident support for tourism. A few previous studies also have evidenced that resident empowerment will affect their support for tourism [Boley et al., 2014; Strzelecka, Boley & Strzelecka, 2016]. Additionally, the construct of economic dependency also has been evidenced as a predictor of resident support for tourism [Pizam, 1978; Lankford, 1994; Lawson et al., 1998; Harrill, 2004]. Consequently, *RQ.3* and *RQ.4* will be examined based on the statements above.

Phase II

Previous studies widely recommended that subsequent study should be conducted to qualitatively explore reasons and meanings behind the quantitative extent of empowerment perceived by residents in tourism development [Boley et al., 2014; Boley, Maruyama & Woosnam, 2015; Strzelecka, Boley & Strzelecka, 2016].

Furthermore, although there have been studies that examine the effect of resident empowerment and economic dependency on resident support for tourism, yet seldom research qualitatively explores the reasons behind the effects [Boley et al., 2014; Maruyama & Woosnam, 2015; Strzelecka, Boley & Strzelecka, 2016; Boley et al.,



2016]. Previous research reveals that some dimensions of empowerment strongly affect resident empowerment for tourism while others have no effect [Boley et al., 2014; Strzelecka, Boley & Strzelecka, 2016]. Therefore, the study will explore why different dimensions of empowerment and economic dependency may affect resident support for tourism. Consequently, *RQ.5*, *RQ.6*, *RQ.7* and *RQ.8* will be explored based on the statements above.

Methodology

Based on research objectives and research questions mentioned above, this study will adopt an explanatory sequential mixed methods design to address eight research questions. Phase I will first examine the extent of resident empowerment and economic dependency on tourism by gender in Dali and Lijiang, China. Based on the research objectives and research questions, the population in the study should be local residents who involve in self-employed tourism activities in Dali and Lijiang. According to the measurement of resident empowerment and economic dependency in previous research, the questionnaire as the instrument will be designed and applied to collect data and the random sampling method will be applied to select respondents [Boley et al., 2014; Maruyama & Woosnam, 2015; Strzelecka, Boley & Strzelecka, 2016; Boley et al., 2016]. The sample size will be decided based on widely used confidence interval formula for obtaining 95% accuracy at the 95% confidence level:

$$n = z^2 [p.q] / e^2 = 1.962 [0.5 \times 0.5] / 0.052 = 385$$

Consequently, a total of 400 questionnaires will be randomly distributed in Dali and Lijiang, China. The questionnaire will include three sections. The first section is designed to collect demographic information of respondents; the second section is designed to examine four constructs of

empowerment, namely economic empowerment, political empowerment, social empowerment and psychological empowerment; the third section is designed to examine the construct of economic dependency; the fourth section is designed to examine the construct of resident support for tourism.

Based on the suggestions of previous research, the descriptive analysis will be applied to examine the extent of resident empowerment and economic dependency by gender within the Statistical Package for the Social Science's [SPSS]. Additionally, the Pearson correlation and multiple regression will be applied to examine the effect of resident empowerment and economic dependency on resident support for tourism [Boley et al., 2014; Maruyama & Woosnam, 2015; Strzelecka, Boley & Strzelecka, 2016; Boley et al., 2016].

Phase II will explore reasons for any discrepancies in resident empowerment and economic dependency on tourism and further explore why resident empowerment and economic dependency have an effect on resident support for tourism. Above twenty interviews will be subsequently conducted with respondents to further explain the quantitative results. The outline of the interview mainly includes four sections, the first section is designed to explore reasons for gender discrepancies in resident empowerment through tourism; the second section is designed to explore differences in economic dependency on tourism between male and female residents; the third section is designed to explore the reasons why resident empowerment has an effect on male and female resident support for tourism; the fourth section is designed to explore the reasons why economic dependency affects male and female resident support



for tourism. The interview manuscripts will be analyzed by content analysis to explore research questions.

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A Study on Impacts of Overtourism and Strategies Adopted by Industry Stakeholders in Bangkok

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Abstract

Over tourism has become an issue in the recent year, in those tourist destinations with the increasing number of tourists. However, Bangkok is known for the best tourist destination, the arrival of tourists keeps on increasing every year. The qualitative research examines how aware the tourist, residents, hotels, and travel agencies are on over tourism in Bangkok. It also studies on its impacts, sustainability practices and strategies that can be adopted by hotel and travel agencies to deal with over tourism in Bangkok. By using purposive sampling, the paper used in-depth interview method to collect the data from the residents and tourists at two famous tourist destinations and conducted a focus group interview with 4 resident students within 27 February to 2 March 2019. It also interviewed the owner/manager of 3 hotels and 2 travel agencies with an in-depth interview method within 5 March to 12 March 2019. All the interviews were conducted with structured open-ended questions in Bangkok and analyzed by Constant Comparison Analysis method, using manual coding. The study of over tourism in Bangkok shows that the residents and tourists are well aware of overcrowd at tourist destinations and do not take it as an issue. The hotels and travel agencies are moving towards sustainable practices to sustain their business. Therefore, the people living and visiting Bangkok have adapted themselves with tourism practices that overtourism do not stop them or creates issues. However, there is a need for more proactive practices than reactive to protect tourist destinations in Bangkok.

Keywords: Overtourism, increasing tourist, overcrowd, conflict, well-aware, sustainable practices, adapted, proactive.

Introduction

Headlines, Industry conference agendas, Political manifestos, Cities, Islands, whole countries are catching up on the concept, fast driven by the struggle to manage an ever-expanding influx of travelers (CN Traveler, 2018). According to the UN World Tourism Organization (UNWTO), international tourist arrivals will grow 3.3 percent a year from 2010 to 2030 to more than 1.8 billion arrivals—much faster than projected population growth (Dichter& Manzo, 2017). The well-known Overtourism issues in tourist destinations like Venice, Amsterdam, Machu Picchu, etc. are coming up with certain measures to tackle the problem. The solution for overtourism is not the same it differs from

has become one of the trend issues in the tourism industry in a recent year. However, the phenomenon itself is not a new one, as problematic forms of tourism crowding and their effects on local communities and environment have been studied for decades (Peeters, Gössling, Klijs, Milano, Novelli, Dijkmans, Eijgelaar,

destination to destination. Thailand authorities in the country announced that Maya Bay, on the Thai island of Koh Phi PhiLeh will be closed to tourists from June through September in an attempt to combat decades of damage (Travelpulse, 2018).

However, it is known that tourism contributes to the economy of the country. Any action taken can affect those people relying heavily on the tourism sector. When combined with domestic markets, the entire tourism sector last year contributed 12% of direct income to a gross domestic product (GPD) plus another 7-8% of indirect income to related businesses such as food suppliers and service businesses (Bangkok Post, 2018). Overtourism

Hartman, Heslinga, Isaac, Mita, Moretti, Nawijn, Papp &Postma, 2018). Thailand saw a record 38.27 million tourists in 2018, up 7.5% from 2017 (Bangkok post, 2019) where according to Agoda, Bangkok is the top most popular travel destination which is mentioned at The Jakarta Post (The Jakarta Post, 2019).



Hence, the research of overtourism in Bangkok aims at studying the impact of overtourism on tourism industry stakeholders, to find out the perspective of the tourists and the residents on over tourism. The sustainable strategies adopted by the hotels and travel agencies and the mitigations that can be necessary for the stakeholders in the tourism industry based on the attained practices, to cope with overtourism in Bangkok.

I. Materials and Methods

Theoretical Foundation

Overtourism came into usage in 2017, although the term was introduced earlier; but the phrase did not gain the popularity that it deserved (Singh, 2018). A limited set of literature is available that associates itself with overtourism and much of it is explorative in nature, some differences can be observed. Current work is more focused on the relationship between tourism and its wider city context and the political aspects of excessive tourism growth (Koens, Postma& Papp, 2018). The five major problems associated with tourist overcrowding are alienated local residents, degraded tourist experiences, overloaded infrastructure, damage to nature, and threats to culture and heritage (Dichter& Manzo, 2017).

The similarity in the literature review is the conflict between the residents, tourist, and the business related to tourism at tourist destinations (Koens, Postma& Papp, 2018; Postma&Schuecker, 2017; Peeters et al., 2018). The resident's lifestyle are disturbed and also the bad manner of tourist led to more conflict but in some case, the residents show good reaction towards the tourist coming from all around the country to their place (Cardoso & Silva, 2018; Koens, Postma& Papp, 2018). It is also well accepted by residents that tourism supports to the economy of that destination and shows positive towards it. But with the coming of globalization and online booking some literature talks on the issue of on how the local business are close down because of no customers (Koens, Postma& Papp, 2018; Peeters et al., 2018).

The increasing number of tourist in a particular destination is considered to be a threat to the environment and effect on the lifestyle of the people for being too crowded. However, with the research on over tourism results that over tourism is not only considered to be occurred in a tourist destination but any place where people or development is more than the capacity of that place can be considered over tourism like park, rural areas, islands (Singh, 2018; Koens, Postma& Papp, 2018; Peeters et al., 2018). The causes of over tourism are said to be not only because of the tourism industry but the whole activities and development in a city is directly or indirectly leading to over tourism (Koens, Postma& Papp, 2018; Peeters et al., 2018).

Methodology

This qualitative research encourages the respondents to express their opinions and issues faced personally, making it possible to collect precise information. The target participants for the research are the tourists, residents, hotels, and travel agencies in Bangkok. By using purposive sampling, the sample plan to collect the data of 10 tourists and residents each from the two famous tourists destination where only 6 tourist and 8 residents were interviewed, 4 residents refused because of a language barrier. For the hotel and travel agencies, as planned an interview was conducted with the owner/manager of 3 hotels and 2 travel agencies. In-depth interview method was used along with 10 open-ended structural questions and focused group interview was also conducted with 4 residents student at the university, proper information on the topic over tourism was given one day ahead before conducting the focus group interview.

The interview with the residents and tourists and focus group interview was conducted within 27 February to 2 March 2019. During the interview with the tourists and residents in the two selected locations, 10 open-ended structural questions were successfully asked in the first location, lasting for 30-40 minutes in English. However, in the second location, only 6-7 open-ended structural questions were used because the market was too crowded to keep it long, lasting for 20-30 minutes. The interview with the tourists was conducted in English and for the residents; it was conducted in native language with the help of a native friend which was later translated. Focus group interview was conducted in the university with 4 residents, lasting for 40 minutes in English. For the interview with the owner/manager of hotels and travel agencies, it was conducted within 5 March to 12 March 2019. All the chosen location of hotels and travel agencies accepted to be interviewed for the research when the requested letter from the university was shown. Proper appointment date and time were fixed with the owner/manager through the mail, lasting for 30-40 minutes. Among them one of the travel agency was interviewed only with 4 open-ended questions as only 20 minutes was given for busy scheduled, it lasted for 30 minutes.

All the interviews were analyzed by going through recordings and written keynotes. The constant Comparison Analysis method is used, by coding the key information from the interview transcript of the tourists, residents, hotels, and travel agencies, using manual coding. The same method is also used for analyzing the transcript of focus group interview.

II. Results and Discussion

The effects caused by overtourism in Bangkok

With the growth of tourism industry in Bangkok by a promotion of medical tourism, education tourism, culture tourism and many more, the city has been



developing which shows that the tourists enjoy their stay in Bangkok. The number of tourists has been increasing every year and the tourists visiting Bangkok are also aware of it. Too many tourists in a particular destination are already normal to most of the residents, most do not mind. The resident considered it to be beneficial to the economic and exchange of culture. However, there are certain tourist destinations like China town and Sao Ching Cha which is overcrowded the residents living around that area is being disturbed and face inconvenience especially with the language barrier.

The hotels and travel agencies are growing towards more on the practices of environmentally friendly business as they are aware that the tourism industry is growing which will lead to the destruction of the tourist destination. As the industry grows rapidly, more and more hotels and agencies are coming up and automatically there is a need for more tourists. When there are fewer tourists most hotels and agencies are faced with losses in their business but it is also a problem for the city. Overcrowd in Bangkok is considered to be only in some particular destinations like Chatuchak night market, Siam Paragon and not everywhere, mainly in the tourists' destinations. What becomes difficult to manage is mass tourism but these days more people prefer to travel alone and the small hotels manage with few tourists according to their capacity, for the resort they cut their capacity during peak seasons but tend to maintain well for efficient staffs and equipment. All the tourist, residents, hotels, and agencies agreed that environmental pollution is not because of an increase in tourists, it can be just a part of it by nature.

The sustainable practices and Strategies adopted by the hotels and agencies in Bangkok to overcome overtourism

The hotels that enforce sustainable practices built their architecture to relate to sustainability from the beginning. No plastic used by using only glass. Providing shopping bags to the guest during their stay, also provide stainless steel bottles, no usage of little plastic shampoo bottles, toothbrush, comb, shower caps, etc., Awareness on sustainability is also during the working hours. The residents are troubled with the crowd but are well adjusted with the situation as nothing can be done, it is considered to be because of no proper facilities and limitation. The tourists also state the same situation but do not hinder their travel and consider taking other available options like a taxi, motorbike taxi, etc.

The promotion of tourism in Bangkok has led to an increase in more tourist and development in the market. There has been a wide change in the market, both tourists and residents considered to be a positive change for them. The markets are diverse and divided into many segments where in some places the price are

represented and shown through online websites. Most tourists come to stay at hotels practicing sustainable to contribute and support the environment. The travel agencies enforce Dos and Don'ts of the place in accordance with their social norms, to make sure that the customers are aware of the environment while visiting that destination. They keep on updating the situations on their target market so that their business may not be hindered and the guides are well trained. The difficulty in practicing sustainability becomes difficult to the small business like hostels, as the guest pay few amounts which cannot keep up with the high price of organic products. Though the hotels and agencies practices sustainability there are many suppliers connected to them who do not practice it like in the Food and Beverages, there are double packages of plastics from the supplier of food in the hotel, and the continues maintenance around the hotels becomes difficult as the local people around are not well aware of it.

In order to sustain the business, the hotels and travel agencies maintain proper security and safety for their customers. Necessary equipment is available and installed in the hotels and the travel agencies take care of their guest from the start till they leave the place. The safety of the customers becomes difficult when so many tourists come at one time like a mass tourist but most deals with a small group of people and people are moving towards more FIT (Free Independent Traveller). These days communication with the residents and tourists has become easier because of social media, for the agencies tour guides are educated because they host the clients.

Awareness of overtourism by the residents and tourists in Bangkok

Both tourist and residents are well aware of increased tourist in Bangkok. The tourists do not really care or okay with it, they also feel good in meeting people from different countries. The same goes with the residents, they see many tourists in a certain location and know that it popular for tourist destination so they are used to the situations. It is considered to be a normal day and beneficial to the economy. There is an issue with overcrowding in the public transportations, especially high and other low price markets, it is ones choice to decide where to go. The vendors are also aware of the taste and preferences of the local and foreigners, in most cases, there are considerations for the local people and also depend on the target market. However, the residents also mentioned rush during peak season and considered staying at home.

Mitigations necessary for the tourism industry stakeholders in Bangkok based on the attained practices, to cope with over tourism

The tourists coming to Bangkok do not have an issue with the increase of tourist and crowd areas or consider it as an issue, but some wish to visit during unreason's



to avoid the crowd. However, in most cases, residents avoid the crowd they chose locations where less tourist visit, manage their time or avoid the place. This has become habitual and does not take it as an issue. Both tourist and resident are advised for changes in public transportation, there are a variety of options for public transportation but some are limited in certain locations or required better facilities.

The tourism marketing provides a variety of segments in the market, where the hotels and agencies expect to make it more expensive but the residents and tourists do not agree with it, it all depends on ones preference on what kind of travel experience they want. Most informants do not agree to limit the tourists in Bangkok but instead suggest for better management to protect the tourist destination, for example, the Jim Thompson, it can be overcrowded so it has managed to be visited by 10 persons at a time for 15 minutes, and a ticket system is made so that everyone gets to spend enough time. Also, as most hotels and travel agencies mentioned on the need for more tourists to keep on running the business and also the crowd or traffic jam in Bangkok does not stop the tourist. The travel agencies suggest proper information to be given to the tourist about a particular destination, by being honest and flexible. It all comes to the way the industry is managed.

Discussion

The literature review mention on the effects of social, economic and environment as overtourism hit certain destination (Postma&Schuecker, 2017; Koens, Postma& Papp, 2018; Peeters et al., 2018) the same effects can be seen even in Bangkok. The residents mention on avoidance of crowded areas and disturbance from the tourist at tourist destinations, the hotels, and travel agencies are moving towards sustainable tourism to protect the environment, and more positive are shown towards economic because of the benefits from the tourism industry. However, the differences are that the residents are habitual of many tourists at certain places and do not take it as an issue, even in the case of environmental issues the residents do not think that it is because of the tourism industry, instead take tourism as important part of the economy.

When it comes to a conflict between the tourists, residents, and entrepreneur, mention as one of the most occurring issues in the past literature (Postma&Schuecker, 2017; Koens, Postma & Papp, 2018; Peeters et al., 2018), it shows differently in the case of Bangkok. Most tourists and residents are well aware of the increase of tourists and crowd at certain destinations and at public transportation but this does not stop the tourist in coming to Bangkok. Both the tourists and residents take this as an opportunity to meet people from different places and do not consider it as a problem. The hotels and travel agencies are also aware of the situation because of that, proper

information is given to their guests and certain steps are also taken to take care of the issues when the guest arrive or before the packages are bought. Which shows that all the tourists, residents, hotels, and the travel agencies are already adapted to the situation in Bangkok, this level of acceptance is also mention in the literature (Koens, Postma& Papp, 2018; Cardoso & Silva, 2018).

The literature also mentions that tourism is caused not only by the stakeholders in the tourism industry that includes government, policymakers, airlines, travelers, residents, hotels, agencies, etc. But also all the activities that go on in the society and as the city keeps on getting developed it take part in the cause of over tourism (Peeters et al., 2018; Koens, Postma& Papp, 2018). In regard to these, through the research, almost all the residents, tourists, hotels and travels agencies agree that tourism is caused not only by the tourism industry. Therefore, the issue on over tourism is different from one destination to another and it does not have one solution, same in the case of Bangkok, it also needs its own kind of solution.

III. Conclusions

The problem of overtourism in Bangkok is not new the effects on social, economic and ecology has been going on as the number of tourists increase and the tourism industry keep on growing. All the tourists, residents, hotels, and travel agencies are also aware of it and know that it's crowded at certain destinations. However, as mentioned that every destination has its own kind of issue on overtourism and not one method to solve the problem, Bangkok requires different measures as well. Though the people are adapted with tourism there should be more proactive actions for sustainability of tourism in Bangkok.

Managerial Implications

As Bangkok is one of the best tourist destinations, the people visiting and living in Bangkok are also aware and familiar with the promotion of tourism. It shows an important source for the economy however, there are certain things that can be changed and developed in Bangkok to be better than what is it right now. Bangkok provides a wide variety of transportation like BTS Skytrain, MRT subway, taxi, motorbike taxi, bus, tuk-tuk, boat, and songthaew which may not be provided in every country. But throughout the research public transportation is shown to be the most issue mentioned by the informants. The complaint is on the traffic jam, limitation, facilities and crowded during working hour, this shows in need of better road and public transportation. The transportation should preferably be eco-friendly so that even with the increase of public transportation it can be prevented from the pollution.

To stop the arrival of people in Bangkok can be difficult as it is a place for the tourist to stay for a night or two days to go somewhere else like islands, there is an increase in the domestic traveler, and also most



hotels and travel agencies talk on the need of more tourists. So as suggested from the informants there should be a system to take care of the destination from being destroyed but not to limit the tourist. Therefore, despite the good acceptance of tourism by all, it does not mean that when the issue arises the people will just accept the situation, there should be more proactive than reactive in Bangkok.

Future Research

Throughout the research it can be seen that the study is very broad, it can be more specific to get details in each background. The future research can be conducted using a quantitative method so that it can be measurable on how accurate the results are. The research topic also says on the effect of stakeholder in the tourism industry but in the research, only the tourists, residents, hotels, and travel agencies are included, more stakeholders can be added to get a better opinion on the effect of over tourism in Bangkok. Lastly, the research shows the acceptance of tourism by the people living and visiting in Bangkok, a specific study can be conducted to know what will be the result as this continues.

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The Strategies for Addressing the Gender Imbalance in Five-star Hotels General Manager Positions in Thailand

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Abstract

This paper is a research proposal consisting of three sections which are introduction, literature review and methodology. The study aims to explore possible and relevant strategies which cause the gender imbalance phenomenon in five-star hotels general manager positions in Thailand. Based on this phenomenon corresponding to research, cultural dimension of Thailand influencing on characteristics of Thai people are applied by using Hofstede's cultural dimension to determine specification of Thai cultures. Then, the study will explore hotel general manager's competencies and the relationship from influence of Thai cultures toward hotel general manager's characteristics in order to explore new knowledge via relationship of Thai cultures and general manager position in five-star hotels to determine gender imbalance. Moreover, this paper provides a conceptual framework to generalize links of cultural dimensions and general manager's competencies via gender imbalance. Methodology will be provided with two proposed methods in both qualitative and quantitative or mix methods in order to generate effective outcomes through gender imbalance issue as well as sampling and analysis.

Keywords: Gender imbalance, five-star hotels, Thailand, general manager

Introduction

According to a current trend globally, tourism and hospitality sectors become emerged as one of the fastest growing industries in the world (ILO, 2010). Furthermore, in 2014, the worldwide gross domestic product was 9.8 % contributed from hospitality and tourism sectors and also about 277 million people were employed which was counted 9.4% of worldwide job numbers (WTTC, 2015). Therefore, it can enhance high workforce diversity to welcome tourists in each destination. Hospitality service is a core of the hotel business that can be defined as a statement about the relationship between a host, the hotel, and guests (Baker & Magnini, 2016). Hotel serves as one of the categories in the hospitality industry, providing restaurants, lodgings or open spaces on a short-term basis and during the user's available leisure time, via several groups of people responsible for facility operations and maintenance. When it comes to service aspects, people tend to think about feminism inferring to the sense of responsibility to home and emotional concerns (Koyuncu, Burke & Wolpin, 2012). Then, they may think about a female's tasks. For instance, in another service industry, there are more female flight attendants than male, since this career attracts more women than men to apply to enter it as a feminized

occupation (Simpson, 2014). However, when it comes to the hotel industry, some previous researches stated that cooking task is mostly looked upon as a male job, as there are inevitable always more male chefs than female (Wan, Hsu, Wong, & Liu, 2017), with the leading positions in the kitchen departments largely dominated by the male gender. Therefore, it apparently seems that men are often selected as or able to work their way up to be leader positions.

Since Thailand is well known as one of the most popular tourist destinations in Asia, accommodate tourists, there are up to 18,150 accommodations stating in Booking database (Booking, 2019). Booking serves as an important channel which is well-known at worldwide level as the main online travel agency in each destination (Fuentes & Mellinas, 2018). Hence, it is a credible channel to count on the number of hotels that registered in the database. Some tourists may want to stay in the most luxurious and comfortable hotels. Therefore, they tend to choose to stay in five-star hotels. Five-star hotels are defined as the highest level of service accommodation with comfort and luxury of service and amenity (Guillet & Law, 2010)



to count the number of five-star hotels in Thailand, there are up to 565 five-star hotels (Booking, 2019). In order to present the hotel image, the general manager may be represented five-star hotels. To get a precise statistic of five-star hotels general manager gender in Thailand, researcher already contacted to Hotel Association Thailand to ask for a statistic of the general manager's gender. Unfortunately, the official statistic cannot be provided unless the topic of a researcher is approved with a consent letter from the university. Therefore, the researcher found the statistic from five-star hotels samples in Bangkok by searching on the internet and contacted to hotels to make sure for statistic information. Based on a statistic from five-star hotels in Bangkok, there are up to 120 properties (Booking, 2019). 60 hotels were selected to search for general manager gender. Statistic reveals that 53 are males and 7 are females. From this statistic, it shows gender imbalance problem that is very interesting to investigate. Apart from statistic, some people may notice that in hotel advertisements, such as social media, brochures or press conferences, male a general manager is usually presented. Hence, from these facts, it seems to make sense that there are gender imbalances in the general manager position in the five-star hotel industry not just only in Bangkok as the static sample shows, but it may also occur in Thailand.

Then, in order to investigate gender imbalance in Thailand, characteristics of Thai people are concerned about the issue of national culture, so it leads to the causes of behavior and a style that people tend to believe and practice in country. In the previous study about characteristics of Thais, it stated about stereotypes of Thailand as collectivistic cultures which people tend to oblige and avoid conflict (Boonsathorn, 2007). Furthermore, the study also claimed that gender in Thailand can influence on the preference of management style (Boonsathorn, 2007). Another study about Thai characteristics stated that there are meaningful values making Thais differ from people who come from other collectivistic cultures such as face-saving, relationship orientation, smooth interpersonal relationship, flexible and adjustable orientation, interdependence orientation, pleasure orientation and task-achievement orientation (Komin, 1995). As the interpersonal relationship is the most important value of Thais that concerns to harmony in collectivistic cultures (Boonsathorn, 2007). It seems to make sense that Thai people see conflict as a negative situation which should be avoided. Moreover, expressing anger, embarrassment and disagreement are concerned to lose face (Boonsathorn, 2007). Therefore, people may tend to follow each other as a collective Third, the study will give a great contribution to five-star hotels in Bangkok, Thailand. As mentioned introduction part, due to male characteristics, they are

group and avoid being critical and independent. Consequently, people are discouraged to give contrast opinion and challenge others such as old values, traditions, higher hierarchy, and elder (Boonsathorn, 2007). Hence, a stereotype of gender that people think may influence also to the way that people react in Thailand. Generally, some people claim that the masculine orientation is more effective than the feminine persona. Generally, males seem to be forceful, ambitious, less emotionally complicated, high leadership oriented and self-confident (Kniveton, 2008). As a result, some people may tend to believe that based on male characteristics, males can work more effectively in hotel roles due to their decision-making, logical thinking, confidence, stability and goal achievement. However, females are portrayed as tender orientation with high emotional concerns and sensitivity (Kniveton, 2008). Whether correct or not these characteristics are the normal representative images of males and females. Based on characteristics of Thai people, they might affect in some extents that this study would like to investigate. Due to this phenomenon of gender characteristics, there are 4 main reasons why this topic should be explored and considered in hospitality research's field. First, there are not many kinds of research about the gender issue. Especially, in the hospitality field, it is hard to find a study about male and female. Even though there are some researches about the general manager, they specify and explore only the job issue but not as a gender perspective. Moreover, in the past, gender issue might not be an interesting issue unlike nowadays. People tend to be more open about gender as we can see from social media. However, in Thailand, there are few pieces of research about gender. With the growing rate of the hospitality industry in Thailand, this study will help to gather gender information and results that will be useful for hotels. Therefore, the outcomes might be able to apply in every province in Thailand and some countries that share similar cultures to Thailand.

Second, as people can see that nowadays, gender issue becomes a popular trend to promote gender equality in many industries especially in leadership issue. This study will allow readers to know the rational reasons about the gender imbalance in hotels of general manager position which can be implied the ways to promote gender equality of leader position in hotel workplaces. Since there are professional challenges in the hotel industry, leadership competencies need to correspond to challenges and achieve goals. Hence, this links to big gap knowledge to extract reasons how the woman leadership is perceived in the general manager position in five-star hotels.

predominant as a hotel image via the general manager. Guests and hotel employees may see it as a common phenomenon that male represents as a hotel image.



However, this research will explore about it specifying in five-star hotels where guests and employees assume that they are the best hotels providing great accommodations with outstanding services from their luxurious facilities and well-trained staff. Hence, the outcomes will correspond to the gender imbalance phenomenon of general manager happening in five-star hotel in Thailand and show chronological reasons.

Fourth, since Thailand locates in Asian continent enriching with traditional cultures and practices, it is influenced by oriented impacts passing from Siam era. Therefore, it is interesting to explore whether characteristics of Thai people have an effect on gender imbalance general manager positions or not because they have no researches written about cultural dimensions in five-star hotels in Thailand before. Cultural dimension shows cross-cultural issues toward Thais' characteristics describing the impacts of cultures in society to cultural values. Also, it relates to people behavior and attitude reflecting on people's interaction and response.

Therefore, from these unexplored points, this study would like to explore factors affecting to gender imbalance in general manager position in five-star hotels. Based on 4 gap knowledge of this topic, this study can be highlighted with 4 main following research objectives.

- To examine gender imbalance the phenomenon from general manager position in five-star hotels in Thailand.
- To identify gender characteristics that may influence gender imbalance in general manager position in five-star hotels in Thailand
- To seek and examine factors of Thai cultures that may influence gender imbalance of general manager position in five-star hotels in Thailand
- To explore the relationship between influence of Thai cultures and five-stars hotels general manager position's characteristics in Thailand
- To identify factors from general manager position's characteristics that may influence gender imbalance in five-star hotels in Bangkok

From this study, it will give several benefits and great outcomes throughout the five-star hotels in Thailand. Based on the research process, it will seek for the factors that may create a gender imbalance based on the phenomenon that the author has observed in many hotels and worked in a five-stars hotel. This study states about national culture, so the analysis will

Literature review

To determine cultural dimension relating to specific characteristics of people in each country,

Hofstede dimensions presenting national cultures (Kirkman, Lowe & Gibson, 2006) which can represent

go along with Thai culture via characteristics representing a practical belief and behavior. Also, the general manager's characteristics will be analyzed influenced by national cultures and seek for the results whether they affect gender imbalance. This will affect the trend of gender, opportunity for being the general manager in five-star hotels and may minimize gender inequality via promoting gender equality. Also, this study will be explored all factors which may address gender imbalance phenomenon in five-star hotel. Consequently, stakeholders such as general manager, operational employees, hotel owners, ministry of sport and tourism and people who are interested to work in the hotel business can have awareness about this phenomenon and they can come up with a strategy to promote gender equality by using this study result as a data representing gender imbalance and all factors that generate gender imbalance phenomenon. Therefore, these stakeholders will get ideas of the pathway to reach to general manager positions apart from competencies that people may concern as the first thing when they apply for their works in five-star hotels. This study will show whether national cultures influence on the competencies relating to gender inequality in general manager position or not. It will allow them to come up with the plan to cooperate with the coming trend for gender equality via samples from five-star hotels employees' comments and preferences both in operational and general manager level. As nowadays woman leadership is a famous trend of a social movement. Thus, the research outcome can be used to adapt in strategy toward social factor both in short and long term from 5 to 10 years. Since the hotel business sectors compete with each other hard, it is important to increase competitive advantages which this study will help to represent a conceptual framework to see the factors addressing the gender imbalance in general manager position in five-star hotels, it can use to apply and maintain their business with good quality and also promote gender equality at the same time. Moreover, it can enhance the hotel competencies and attract new talented candidates who want to work in the hotel industry in Thailand. Then, Thailand can capture talent people based on gender issue in the future which they can earn benefits in the long-term. Also, the framework may be able to test in another city in Thailand or another country in Asia where there is an ambiguous phenomenon for gender imbalance.

Hofstede's cultural dimension is a well-known theory of national culture. Geert Hofstede is recognized as a theorist who created Hofstede

environmental characteristics via behaviors. Therefore, it can be inferred that national cultures can influence



the psychological factor from people's reactions (Salter, Sharp & Chen, 2013). There are 6 dimensions that are patterns of Hofstede's dimension consisting of power distance, individualism-collectivism, uncertainty avoidance, masculinity-femininity, long-term and short-term orientation and indulgence-restraint (Hofstede, 2011). Some people might claim that there is the drawback of Hofstede's dimension. The framework was developed and his research was done at IBM which all surveys were from IBM (Hofstede, 1980; Touburg, 2016). Furthermore, the terms that were used to measure all national cultures cannot relate the level of individuals (Venaik & Brewer, 2013). Hence, it can be inferred that some terms of cultural dimension cannot be measured in individual aspect because the outcomes may be different toward individual or organizational practice. However, other researches stated that Hofstede's dimension is a great tool to generalize national culture with relevant and credible information. Even though his framework was done at IBM, the surveys were from staff in different parts of the world (Blodgett, Bakir & Rose, 2008). Therefore, the results were from different opinion from different people relating to attitudes in organizations from IBM staff in various countries. Hofstede chose IBM to be a place where he tested his framework and got reliable findings to cultural differences. Hence, his framework was applied and used in many studies in various fields. Over 25 years, Hofstede's dimension has been used to understand national context such as advertisement (Gregory & Munch, 1997), complaint reaction (Liu & McClure, 2001; Mattila & Patterson, 2004), global brand strategies (Roth, 1995), acceptance of new innovations (Singh, 2006) and others. Therefore, national dimensions can be used to capture characteristics of people in a country which Thailand can also be applied by Hofstede in order to get particular cultural data leading to characteristics of Thai people. From Hofstede's cultural comparison, Thailand serves the purpose as indicative of an Asian aspect, having 'high power distance', which means that all individuals are unequal and people tend to accept inequalities in society. A high power distance score refers to inequality of authority (Khlif, 2016). Therefore, each level in an organization and community has its own privileges, with employees having to show their loyalty and respect to their higher colleagues, whether in terms of age or position, in order to get guidance and protection in return. Consequently, it might lead to paternalistic management or male orientation because

of this attitude towards top management position is extremely formal. Also, managers in a country with a high level of power distance tend to have strong decision-making authority (Hofstede, 2001). Moreover, hierarchical control is exercised in the management style. Another cultural concern is individualism. It represents the degree in the country whether people support individual or collective achievement (Khlif, 2016). In high countries that have high individualism, people always pursue their self-interests (Zhang, Zhang & Zhang, 2015). However, in case of national culture in Thailand, it is apparent that collectivism is dominated. It refers to the self-image that people tend to define themselves as 'We' and they have to make sure that they belong to the 'in group' so that the group itself takes care of them in terms of security (Hofstede, 2001). In addition, people tend to get long-term commitment from the members of their group, whether applying to family, organization or relationship. Thus, this can be linked to the practice of a collectivist culture, rules, and regulations since the group forms a strong relationship which group members need to take responsibility for. Additionally, people are non-confrontational and any offenses leading to loss of face become very sensitive issues because people try not to be shamed in front of their group. Hence, it seems to make sense that people like to strictly follow the traditional ways that the majority of people have been practicing from the past because they do not want to offend anyone. Moreover, they behave and respond indirectly, which means a simple 'Yes' may not actually mean an agreement. Therefore, the traditional cultures might transfer to current the period which male might play an important role and express strong leadership style in the country with low individualism. Uncertainty avoidance shows the condition of stressful acceptance in society for unknown future (Hofstede, 2011). Moreover, it refers to the degree of tolerance to uncertain and ambiguous situations in the country (Khlif, 2016). Also, Thailand focuses on the avoidance of high uncertainty. It is reflected in society that the people have an intense belief and turn to spiritual values in order to deal with unknown situations, so people prefer to avoid uncertainty as much as possible. Therefore, in order to reduce the level of uncertainty, society provides strict rules, regulations and policies to be implemented without question (Khlif, 2016). People like to control everything in order to avoid encountering unexpected situations, accordingly they are reluctant and restraint to change, preferring

to practice the same things as before because of they believe that what people have been practicing for many years is good and so will remain effective in the modern era as well. Therefore, society does not easily

accept rapid change, nor high-risk situations. If something has to be changed, it must be perceived by the majority of the group as being a better thing.

Hofstede's dimension also represents masculinity versus femininity. Low masculinity level means that country contributes to the importance of relationships and modesty (Khelif, 2016). Thailand presents itself as a submissive country, where expressing a quality of life and standing out the group is not seen as an admirable trait. Consequently, it shows that society is less assertive and competitive because the values of the group are seen as more significant, so people focus more on traditional male and female values in each organization and community. Hence, the male may dominate the traditional role that male represents authority and leader.

The next dimension is long-term and short-term orientation. It refers to the focusing choice of people's endeavors for the future or the present and past (Hofstede, 2011). Therefore, it definitely shows the relevant links to how people maintain their own past or nostalgia to deal with present and future challenges. Long-term orientation refers to flexible orientation implying to establish good relationships and openness for strong ties in the future (Khelif, 2016) known as a pragmatic approach encouraging efforts in modern practice (Hofstede, 2011). However, Thailand represents a country with a low score on this dimension. It reflects that people refer to maintain and be strict to norms and traditions. Hence, people have strong values in national practices and cultures, so societal change may be perceived as a suspicion. The last dimension is indulgence-restraint. It presents the level of gratification versus control for basic desires to enjoy lives (Hofstede, 2011). Then, it refers to the socialization how people control their impulses and desires based on the way that they grow up, so national cultures can describe as indulgent or restrained. However, Thailand score ranks at a moderate level. Consequently, a result cannot be determined to represent specific cultures.

Based on these 5 cultural dimensions: high power distance, collectivism, submissive femininity, high uncertainty avoidance, and short-term orientation, it is clear that Thais prefer to practice and pass on traditional aspects to the new generation as the norm of society. As a previous the study mentioned the link between gender and Hofstede's dimension, it affects the roles of women and men. It stated that the perception of gender role is different effectively in different cultures (An & Kim, 2007). In the Asian context, women are supposed to be loyalty (Van Der Boon, 2003). Hence, gender the role may be distinct in a society in which men are considered to be tough,

assertive and success oriented while women are tender and quality of life oriented (An & Kim, 2007). Based on a gender perspective, it effects on opportunities in professional areas. In the past, masculinity was the most important aspect of a society where males were dominant in political parties and management positions. People believed that the man acted as a leader and head representative of any mixed group, while the gentle female was the supporter of the male only. A woman tends to not participate in decision making. Consequently, a previous statistic mentioned that the ratio of men and women was about 85:15 as the gender mix in an organization (Simpson, 2000).

Then, a woman is under-represented at governance level and executive positions (Davies, 2016) and normally works in low to middle organizations level (Hurst, Leberman & Edwards, 2017). With the man always have the sole say in deciding community tasks and goals. Females needed to be patient and good, but unquestioning listeners. At the same time, they had to give birth while taking care of offspring and household chores, including cooking, as well as preparing entertainment for the menfolk. Therefore, symbolically, males were automatically the head of any group. Also, men were always given the support that allowed men to succeed with good relational authenticity (Kusterer, Lindholm & Montgomery, 2013). Even though there is a new the trend for woman leadership and gender equality in workplace, it might be hard and take time to be accepted in Thai society since people have such a strong belief in traditions and group practice. However, in Europe or America, when we compare gender in the workplace, we may find a different scenario. There are differences between Asian and Caucasian aspects. In a Caucasian society, there are more opportunities for females working in top management positions (Välimäki, Lämsä & Hiillos, 2009). Their culture focuses more on individualism, but less on power distance, masculinity and uncertainty avoidance. This means that people are more concerned with looking after themselves in relationship to their own goals. For instance, in Scandinavian countries, Norway is always considered as a leader in gender equality (Vikan, 2003). Norway also rates as the highest access to women training at 53% (Evans, 2010). This is exactly similar to Hofstede's finding in Scandinavian countries indicating that countries lean via feminine to encourage women to pursue their professional careers (Evans, 2010).

Moreover, in Europe such as Germany and the Netherlands, number of women has been raised to the top positions in management as well as America (Evans, 2010). It extends to the world of work,

promotion, hiring, and decision-making based on what individuals can actually do. Also, they focus on egalitarianism, which can be defined as lacking of status or class distinction in society and workplace, so



there is less hierarchy in an organization. Heads of department or managers are always accessible and managers tend to rely on individual employees' skills and competencies. For example, managers and subordinates can consult each other, sharing their suggestions and comments freely, in a direct and straightforward manner, in order to exchange their information frankly.

Another cultural dimension of Caucasians is that it is a more masculine society (Hofstede, 2019). People prefer to strive to achieve high standards of working performance with respect to achievement, endeavor, winning and success. Moreover, people also tend to be more confident and accepting, which can be defined as low uncertainty avoidance. It indicates that people are open to accepting new ideas, innovation, initiation and willingness to get or try something different which could be through business practice, organizational culture, technology, and consumer products. At the same time, people are patient, tending to listen to new ideas and opinions from everyone, thus allowing freedom of speech and liberty in the workplace. Therefore, from this Caucasian cultural dimension, it allows gender equality more than in the Asian context. Although males might have been the leader in the past, when hunting or in times of war, the current practice, and trends are flexible to change and adaptation into new innovation and behavior. Consequently, woman leaders and leadership can be promoted effectively because people do not have to strictly conform to the traditional values and also value in gender equality such as Sweden (Kusterer et al, 2013). They are ready to try new things, which can be called risk taking. Also, people are more attentive in open mindedly listening to opinions from others and are direct in terms of their speech, so it seems to make the sense that people have absolute retention in the workplace. Moreover, any job is based on individual interest as long as he or she can show their competence and ability fitting to the job description or job specification, in doing so proving that he or she can perform well and achieve good results via the organizational mission. Hence, many women can become leaders or achieve top management position in organizations, since people perceive that they are capable of doing the job just as well as men do. This practice can enhance women leadership and promote the gender equality that minimizes gender imbalance because people have individual willingness to pursue their career path equally. Thus, in the hotel industry, there are many

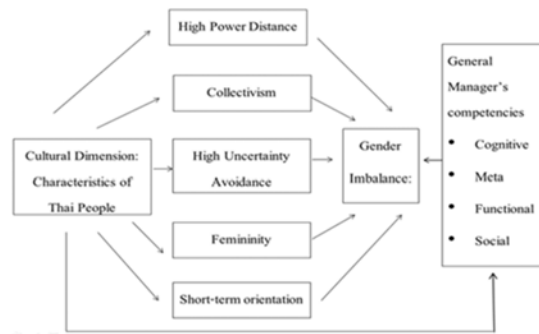
women taking responsibility to make decisions and delegate tasks in each department. Additionally, it is not at all uncommon to see a woman general manager or head of department working equally as a male counterpart would. Apart from gender issue, the nature of leadership competencies may influence on gender imbalance phenomenon. General Manager's competencies are classified into many categories based on job function and individual's personality (Bharwani & Talib, 2017). In the job tasks, competencies relate to the basis of attitude and ability to perform given works. Based on the general manager's competencies study, 4 aspects relating to leader competencies. First, cognitive competencies interpreted as knowledge relate directly to the knowledge of an individual (Delamare Le Deist & Winterton, 2005).

Second, functional competencies interpreted as skills related to the job-specific skills (Delamare Le Deist & Winterton, 2005). Third, social competencies interpreted as attitudes and behaviors related to interpersonal attitude and individual behaviors and the ability to interact with other people (Delamare Le Deist & Winterton, 2005). Fourth, meta-competencies interpreted as motive and traits relate to the ability to understand, adapt and handle the situation to get new competencies or use existing competencies when each situation should be handled (Delamare Le Deist & Winterton, 2005). People may observe that knowledge and skills are characteristics that can be observed easily. However, individual attitudes and motives may be taken times to observe it through behaviors. Thus, knowledge, skills, and attitudes or KSA are important competencies for leader development (Bharwani & Talib, 2017). At the same time, motives and traits of individuals are concerned about intrinsic via an individual's personality (Bharwani & Talib, 2017). Therefore, these competencies come from personality and core traits and motives that other people can perceive. However, as there are 4 rational aspects of general or managerial competencies that previous the study already proved that they are effective, gender the issue may be perceived at the same time because leadership style can carry out representatives of each gender. The demographics were an outstanding career stage as a training ground for the development (Li, Tse & Xie, 2007). Because of the different demographic concerned about gender, women were perceived as an informal networking (Simpson, 2000). Therefore, based on theoretical

framework of Hofstede national culture's dimension and 4 factors general manager competencies, it may lead to the impact of gender imbalance of executive positions employees in five-star hotels. Gender inequality effects to individual

working experience and produce hierarchies among gender difference (Kapasi, Sang & Sitco, 2016). This is relevant that female is interpreted as positioning less powerful and acceptable (Ybema, Keenoy, Oswick, Beverungen, Ellis & Sabelis, 2009). Therefore, the

female workforce may tend to be perceived as incapability from general perspectives which in reality; a woman may have different working style and express leadership differently. Consequently, they may claim that they have their own authentic leadership style. Then, the following conceptual framework responds to gender imbalance based on all relevant factors of literature review.



(Figure 1)

There are 5 elements of Thai cultural dimension through characteristics of Thai people influencing on gender imbalance and general manager's competencies. First, Thailand serves as a country with a score of power distance '64'. Hence, it can be inferred that Thailand has a high power distance. Hofstede identified power distance as a societal value of the extent to which a society accepts inequality (Hofstede, 1980). Even though the power distance is a fundamental of societal-level, it measured whether how intense power distance stayed or not throughout relationships between managers and subordinates. Managers were usually expected to act in the way that they have power and authority, so they have to be distant and directive (Rao & Pearce, 2016). Then, in Thailand, managers are expected to give authority to subordinates who cannot approach and make a criticism of their managers freely because they are expected to respect and follow guidelines strictly. This relates to decision-making which is one of the most important managers' competencies. Then, this hierarchical management style may effect to particular general manager competencies influencing on gender imbalance because of people may assume that male could make rational decision-making effectively.

Second, from individualism dimension that shows the level of people in society integrates into

the characteristics and the managerial style are necessary things to determine effective workforce and work diversity. Also, the traditional value could apply to this dimension because having a great relationship is an essential part of society. Thus, it leads to competencies of executive positions influencing on gender imbalance.

groups (Hofstede, 1980), Thailand scores 20 out of 100. Hence, it means that Thailand is collectivism. From birth and later on, people in collectivist country tend to be strong in groups and avoid unquestioning loyalty (Hofstede, 2011).

Consequently, people would like to stay in a group and tend to have similar ideas and perceptions. If some of them have different ideas, they may be not accepted in a group and offense may lead to loss of the face which is a sensitive issue (Rao & Pearce, 2016). Therefore, it concerns about relationships with non-confrontational behaviors. It seems to make sense that people prefer to follow traditionally practice strictly because most of the people have been doing from the past and they do not want to oppose others' ideas. Thailand has been practicing collectivism for many years, as people may see that most of the leaders are men such as king and prime minister. Then, male represents as a symbol of leadership, so it may transfer and pass this value to now as a social value that people may focus on the image of general manager position. Third, uncertainty avoidance captures the extents how ambiguity and uncertainty are desirable and people tend to minimize it or not (Hofstede, 2001). Also, it concerns the perception of risk and uncertainty via how much people are ready to be open to new experiences (Duron, Nishida & Nakayama, 2005). Thailand scores 64 out of 100. It means that Thailand takes high uncertainty avoidance. Due to the various cultural backgrounds of people, it may lead to different expectations. Therefore, roles and norms of behaviors are important in cultures having high uncertainty avoidance (De Mooji & Hofstede, 2002) because people would like to minimize contrasts and problems that may come from a misunderstanding of practical behaviors. It can be inferred that people want to follow the similar practice that already has been done in the past until now. In the case of management, they may perceive that male is a leader due to the practice from the past. Even though it is not the regular rule, it is invisible practice that people can sense. Fourth, Thailand represents femininity from a score of masculinity 34 out of 100. Femininity represents the environment sustain via the relationship which quality of life and negotiation become very important (Hofstede, 2011). Therefore, competition is not aggressive because people value in groups as harmony and perceive that it is more important. This relates to manager 4 competencies because of

Fifth, based on Hofstede's dimension that can be applied in Thailand, Thailand scores 32 out of 100 from long-term orientation. Then, it interprets that Thailand serves a short-term orientation. This dimension refers to how the country relies on the past to deal with difficulties currently and in the future (Hofstede, 2011). Short-term orientation indicates that society



prefers to follow traditions strictly because they value what they have done in the past such as national cultures and customs. Moreover, they tend not to prefer the change that is in contrast to the traditional values. Hence, from executive positions, traditional style and practice may be an essential part to represent leader relating to competencies that executive position employees should have. With general manager competencies, management competencies are important factors of how people can become at the general manager level. Due to the unique characteristics of the hotel, competencies need to be brought to managerial level staff (Bharwani & Talib, 2017). There are 4 concrete competencies that executive positions need to have: cognitive, functional, social and Meta competencies.

Cognitive competencies are considered about rational thinking such as systematic and pattern thinking with objectivity (Wheeler, 2008). It affects directly to individual capabilities how general managers manage the strategy to be practical in hotel practice. For example, they have to come up with a plan logically in order to solve problems with critical thinking and decision-making rationally, so they can make sure that their hotels carry out the best service for guests. Apart from knowledge, skills or functional competencies are important too. Managerial success needs to have a reliable set of managerial skills in which technical skills or functional skills support effectiveness in organization (Tonidandel, Braddy & Fledor, 2012). General Managers need to be able to carry good skills to work under pressure and also some specific skills are required such as yield management or computer skill. Next is a social competency concerning about engagement of behavior at the workplace (Kisamore, Jawahar, Liguori, Mharapara & Stone, 2012). Therefore, it can be inferred that interpersonal communication is very important because managers need to have an effective communication with attentive listening. Moreover, they have to understand messages that were sent from guests, subordinates and other stakeholders too. Also, they have to govern employees and use verbal and non-verbal communication wisely. Meta competencies are concerned with personal and conceptual because of it relates to intrinsic ability to handle incidences based on their competencies and personal experiences which have groomed their characteristics and personalities.

However, nowadays, a woman is promoted to work effectively in many organizations. Media woman representations via leadership positions are getting many interests (Mavin, Bryans & Cunningham, 2010). Moreover, there are many analyses of media representations focusing on gender leadership via social media such as websites, newspapers, advertisement, and photography (Mavin, Bryans &

Even though these competencies of general managers look similar in every country, the ways that people practice and react to them are different. National cultures groom them differently. For instance, general managers must have knowledge to deal with change management. However, based on national values, Asian countries tend to be indirect and tend not to change things because they focus on traditions, while countries in North-America tend to be direct and open for optional change. Therefore, they have to adapt their strategy to get along with national cultures in order to minimize conflict and problems. It can be inferred that national cultures can affect general managers' characteristics. Apart from characteristics, in Asia, the male is represented as a leader from traditional perspectives because of male in the past used to deal with decision-making and management. Therefore, people pass this tradition to the current period. Then, the male is usually selected to be the leader or the image of organizations. Some people might see that national cultures have direct impact on the competencies details and practices of executive positions which may create gender imbalance especially in five-star hotels where guests expect the best service. Hence, leadership style concerned about gender may lead create an unbalancing number of general manager position in five-star hotels.

Due to general managers' competencies, they can generate gender imbalance. The basic the premise of the human body is originated from male species, so an effective leadership can be carried out by male (Appelbaum, Audet & Miller, 2003). Hence, in the past, people believed that leadership was restricted for male only, as the premise biology influenced that male is equal to the leader. Moreover, stereotypes look at women as a less talented than men (Appelbaum, Audet & Miller, 2003). Hence, it links to leadership effectiveness and leader characteristics that people perceive from each gender. Another study in the past 2 decades indicated that male classifications were identified as a preferred leader rather than female (Kolb, 1999). Consequently, some people may think that women are incompetent compared to men based on their biology and characteristics. Another aspect is that the woman was concerned about worrisome and emotion, so the woman did not express self-confidence (Appelbaum, Audet & Miller, 2003).

Cunningham, 2010). Even though the current trend is supporting a woman leadership more than before, traditional stereotypes of gender are still represented. Some gender studies claimed that males are concerned with independent behaviors such as aggressiveness, push and ambition, whereas women are associated with communal actions such as support, kindness, and empathy (Patterson, Mavin & Turner, 2012). Some



people might claim that gender characteristics attribute to leadership style. Then, a previous gender study stated that male leaders are able to express anger without frightening their credibility, while woman's credibility seems to be weak in the eyes of subordinates (Kapasi et al, 2016). Thus, competencies of leadership and talent are considered by gender (Galloway, Kapasi & Sung, 2015) since people will look at appearance first. Therefore, based on their value and belief, they may have their strong perception toward different gender which they assume each gender will have different reaction and image. From this conceptual model, it explains chronologically how cultural dimension or national cultures effects to the way that general managers in five-star hotels in Thailand are expected to practice and react to others. Furthermore, the relationships that link to gender imbalance are depicted from the framework with theoretical framework and reliable studies. Also, this model will be tested by reliable samplings in order to extract useful results from this gender imbalance study and highlights strategies or theories that link to each other according to the study objectives. The next chapter will discuss the methodology of this study to find the relevant and rational outcomes from the method that this research will be conducted to seek for specific outcomes.

Methodology

To get rational data relating to gender imbalance of general managers in five-star hotels, this study will be conducted by a mixed method. It is an effective way to conduct research by collecting, analyzing and mixing quantitative and qualitative methods via study's data which will provide a deeper and better understanding of particular problems that only one approach (Creswell & Plano, 2011). Therefore, from the results, they will be reliable and credible because problems and hypotheses will be proved, collected and analyzed from both methods differently which the study will give priority to both of them because one data resource might not be adequate. Moreover, the results will be able to explain further and provide information to assure making sense of finding. The qualitative study will be begun firstly. Barnham (2015) stated that qualitative study allows research to focus more in depth of understanding in particular field. There are 30 questionnaires divided into 3 sections

Since the topic mentions Thailand, four big areas will be selected which are Central, North, North-East and South part. 40 interviews of five- star hotels general managers will be conducted both Thai and international chains. Also, all questions are translated in both Thai and English. For analysis part, all interviewing records will be transcribed in written form. Leximancer software program will be used to evaluate the keywords and sentences from what

concerning gender opinion: interviewee's background, cultural dimensions, and general manager's competencies which are open-ended questions letting respondents explain and give their opinions frankly. Therefore, they give opportunity to clarify their responses in details helping them to synchronize logically. Semi structured interview method will be applied from 3 sectional questionnaires with the guiding checklist which uestions can be modified according to respondents' answers. Moreover, in-depth interview method will also be applied in order to obtain primary data effectively from the interviewee and the interviewer can interact and be able to listen information deeply. Hence, from these methods, they will get information and data about the phenomenon of gender imbalance of general manager in five-star hotels which are clarified throughout their answer from their explanations. Consequently, this study will be able to get the best data from respondents' experiences because qualitative research constitutes a great nvironmental image of the context based on stories telling (Jansan, 2015). After a qualitative study conducted already, the quantitative study will be followed in order to assure and compare the results. The same 3 sectional questionnaires will be used as qualitative method. The first section is based on demography and general thinking about gender that they have experienced in their daily lives which the study would like to know about participant's demography. Moreover, it can serve as a warm-up section. After that cultural dimension section will be asked, it will seek employees' perspectives toward gender equality or inequality from their entire experiences in order to seek their behavior and attitude throughout their perceived value and image. The last section is the general manager's competencies which will be proved whether they influence on gender imbalance or not. This study uses a Likert scale that is one type of opinion questions so that respondents could evaluate them level of gender imbalance in each category. The scales start from the lowest, which is 1 to highest, which is 5 or 1 to 7. Hence, it can determine about the strategies addressing gender imbalance which uses cultural dimensions via characteristics of Thai people as a fundamental tool via hotel general manager's competencies.

respondents respond from the qualitative study as a coding process. It will show the frequency of each keyword which researcher can combine and calculate in percentage as results. For quantitative method, since there are up to 565 of five-star hotels in Thailand (Booking, 2019), this study selects five-star hotels both international and Thai chains. It is necessary that sample size should maintain the confidence level



which is 95%.

$$n = z^2 (p.q.) / e^2 = 1.962(0.5 \times 0.5) / 0.052 = 385 \quad (2)$$

Based on the above sample size evaluation of the quantitative method, the appropriate result to use in the research is 385. Hence, in order to get an even number, the number will be added up to 400 which is the number of appropriate questionnaires in a quantitative study. The quantitative study will be conducted after a qualitative study in order to confirm the data from interviews. Respondents will be staff at the executive level in 40 properties five- star hotels where the qualitative study, interview, will be conducted. Executive position employees come from different department both front and back of the house. They are both Thais and foreigners. Then, questionnaires are well-translated into both Thai and English in order to make respondents have an exact understanding, so they can respond to the questions frankly and deeply. For the quantitative study, a software will be used to examine the findings. One way analysis of variance, ANOVA, will be used to evaluate the results and hypotheses through gender imbalance throughout reject or non-reject. Then, all results and information will be explained in details whether each variable has a significant or not.

Conclusions

To sum up, this study would like to explore the gender imbalance issue from general manager position in five-star hotels in Thailand. It relates to relevant factors that influence gender imbalance based on 2 main factors which are cultural dimension and general

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Business Relationship between Hotels with Online Travel Agencies in Bangkok, Thailand

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Abstract

As online booking increases with time, Online Travel Agencies (OTA's) are gaining a majority of shares in the market. When it comes to booking a hotel online, OTA's seems to be surpassing all other distribution channels of hotels and as such for hotels to work without the OTA's will mean on missing a large part of the business. This research aims at understanding the relationship of hotels with OTA's in Bangkok, Thailand while trying to examine the role and impact of OTA's towards the hotels. Furthermore, the research explores the factors which have allowed the OTA's to gain an upper hand when it comes to booking a hotel online and tries to look at the positive along with the negatives that a hotel faces with an increase in the shift of online bookings from the OTA. While at this, researchers also try to examine a guest's approach and look into the factors which drive them in making a booking through different distribution channels of a hotel. The researcher followed a qualitative research design with a semi-structured approach to interview the target informants. A total of 8 hotels and 10 tourists all in the region of Bangkok, Thailand were interviewed for this study which took place between 27th February till 15th March 2019, while for the data analysis the researcher uses Keywords-in-Context' method along with 'Constant Comparison Analysis' to present the data and apply it for the findings of the study accordingly to meet the objectives of the study. The key findings showed that when hotels tie-up with OTA's there is a number of positives in the business as compared to the negatives. OTA's are growing in the market and at the current time, people are seen to prefer OTA's over hotel's website when it comes to booking their rooms online, indicating that hotels need OTA's for their business.

Keywords: Bangkok, customers, guests, hotels, market power, online booking, OTA's, relationship

Introduction

For decades hotels have been one of the major service providers in the tourism industry. Years after years hotels have been trying to provide their guests and their customers with exemplary services and hospitality and as a result, have been seen growing accordingly as an industry. With every passing year hotels have been seen coming up with many marketing and promotional strategies to find ways in improving their inflow of their guests and increase their business, which will further result in improving themselves as a brand, either be it individually or as a chain and this saw the hotels tying up with different distribution channels and online booking and reservations of the hotel industries.

industries for their growth. For a long period of time hotels experienced the method of booking where their guests booked their rooms directly by visiting the hotels or by a telephone call, which was said to be the traditional method, but ever since the introduction of online booking, the game or the approach of booking have started changing at a swift rate. Internet booking or the term online booking for a hotel reservation has seen a continual rise over the last few years and as such, Online Travel Agencies (OTA's) were one of the few channels which have benefited from this rise. Such has been the rise that at the present stage, OTA's seems to have gained the major shares of the With the rise of online booking channels, traditional channels have slowly but steadily started losing a large

part of the market share. OTA's have been the major contributor in this field and have evolved with the booking services and has also seen a rapid growth in the recent years, which is now reaching at the point of maturity in many tourism-based countries like Thailand, Switzerland, France, USA, etc. The power that OTA's has gained in today's time has allowed them to contribute a significant amount towards the hotel industry. Since OTA's were first introduced as a tool of travel agents, hotels have always had alliances with the OTA's and it has grown ever since, they have formed a relationship between them which exists along a spectrum between cooperation and antagonism (Ryan, 2017). A relationship which can be seen as a crucial factor for survival and organizational performance.

OTA's and their relationship with Hotels

1994, the year when it all started, with Travelweb.com when they added a component to take direct bookings (Carolyn 2017). But it was in the year 1996 when it started gathering momentum and came into the limelight. Microsoft came up and introduced its very first online travel agency, named Expedia and then the rest has been history.

Ever since then, OTA's have been selling different kinds of travel products to their consumers. It started with a flight ticket first and now consumers have many options like booking trains, hotels, travel packages, and car rentals. OTA's main goal always has been trying to solve the traveler's problems by giving them a platform with all their needs. Thus far, they have successfully established themselves as the middle man to provide all the necessities for the travelers from other travel-related industries, especially when it comes to providing online bookings of Hotel's rooms, OTA's are seen as the major players.

The success that OTA's have gained over time have provided the hotels with an opportunity in terms of revenues and promotions. The effective marketing campaigns done from the OTA's have allowed the hotels to reach a greater number of customers than the ones done by the hotels themselves or through their own medium. The marketing from the OTA's has allowed small and unbranded hotels to get the exposure of the vast tourism market, which without the help of the OTA's might have been within limited visibility. Since OTA's seems to have much better feasibility for investing in a marketing campaign than independent hotels or the hotel chains, the possibility of reaching a much wider and diverse number of customers increases. Getting listed in OTA sites may help in getting a boost for the reservations of a hotel. This marketing might also help the hotels with a better return in revenues. With this increase in customers and

the brand names of a hotel, the rise in the economy of hotels can also be seen.

Hotels relationship with OTA's in Bangkok

With online bookings starting to become popular, every hotel in different parts of the world has had an alliance with OTA's. Hotels in Bangkok, Thailand are no different here either, with OTA's having a fair amount of impact on the hotel industry. Bangkok has been one of the most popular tourist destination plus a tourism hub and has been growing in this field with every passing day. As a result, the number of hotels in Bangkok is growing in numbers as well. With the increase in hotel's growth, OTA's market has also been increasing with the help of this alliance. Almost every hotel's in Bangkok starting from a 1 star to 5 stars are listed in OTA sites. So much has been the growth of the OTA's that almost more than 50% of the bookings made for a Hotel has been coming through from the OTA's (Chrsitina 2019). But, although this alliance has helped the hotel industry with a number of benefits, there have also been certain problems that the hotels might have to counter. One among them can be related to hotels having to pay a certain amount of commissions to the OTA's for getting the reservations. This is where the relationship between OTA's and hotels shifts to the phase of antagonism. Especially now, with the growing age of internet and OTA's taking the larger chunk of the market share, OTA's seems to be having a superior demand over the commission percentage, or while determining the price of a Hotel's reservation. But that being said, hotels also cannot disapprove this alliance with OTA's as it has been seen that they help the hotels in return with many different benefits. Striking the correct balance is the key to the future of this alliance between hotels and OTA's so that it helps in providing an equal win-win situation towards both the industries. Especially in countries like Thailand where tourism and hospitality sectors are a boom and have a large market for both OTA's and Hotels.

With the main aim of understanding the relation of hotels with OTA's the study also concentrates on the following research objectives to further discuss the scenarios and give a better understanding of the current research, which also supports the research study:

RO1: To understand the business relationship between selected hotels with online travel agencies in Bangkok.

RO2: To examine the benefits among Bangkok's selected hotels provided by the OTA's from online bookings and how it helps to replicate it into their performance.

RO3: To examine how OTA's fair in comparison with the other distribution channels of a Hotel based in Bangkok.

RO4: To examine a customer's approach while making a hotel's booking online. The reasons which persuade a customer into making a booking online through an OTA or other different distribution channels vice versa.

Literature review

Antonio Lazzi, Oronzo Trio, Silvia Gravili (2017). Hotels and Online Travel Agencies: Power or trust for a competitive long-term relationship:

This study aimed to analyse the relationship between hotels and online travel agencies while trying to explore its features specially with regards towards the issue of trust, which the researchers believe are among the few widely regarded key factors which help in fostering the customer-host relations and also in sustaining market share over socially distant relationships, such as online hotel booking. The methodology used in the study was a multiple case study approach, the researchers followed a through 30 in-depth and semi-structured interviews approach with three, four and five-star Italian hotel's managers, which were selected on the basis of their attention towards online channels, both in terms of the website and social media interactions. The key findings of the study were four different kinds of relationships have been observed, depending on how information as a resource and contractual power may be balanced between hotels and Online Travel Agencies.

The study helps in understanding the relationship and alliance the hotels and OTA's hold against each other and helps in getting a view of the business relationship between them and also verify the determinants of power and trust, which can help to research further in the current study.

their customer base or the market.

Igor H. Crnojevac, Jadranka Gusic, Sasa Karlovcan (2010). eTourism: A comparison of online and offline bookings and the importance of hotel attributes:

The aim of the study was to investigate the impact of the demographic and travel characteristics of hotel guests and customers who book their rooms both through online and offline reservations. Furthermore, the researchers also try to examine the importance of hotel attributes in selecting a hotel and the differences in priorities between guests. For the purpose of this study, the researchers carried a survey where data were collected analyzed from the customers in three hotels in Croatia. The researchers developed a questionnaire which was divided into two main sections. The findings of the study showcased the results where the researchers found that the method of booking among

Yu-Wei Changa, Ping-Yu Hsub, Yi-Chen Lanc (2018). Cooperation and competition between online travel agencies and hotels:

This study investigates how OTAs and hotels cooperate and compete with each other at the same time on the current date. OTAs and hotels seem to have a relationship where both the parties cooperate and compete with each other simultaneously in a multichannel environment. The two channels cooperate to introduce new customers to each other but compete with each other for loyal returning customers. The researchers followed a survey methodology which was used to test the research model and hypotheses. The researchers collected data from the customers of 10 well-known hotel chains in the country of China. In addition, through study, the researchers also tried to investigate the factors which can attract customers to book Hotels in future visits. The data analysis included only respondents who booked hotels through OTA or Hotel's website through the online booking process. The results in this study show that OTAs helps in attracting new as well as returning customers by website service quality, while hotels can try to attract returning customers by providing a good value towards the customers. On the other hand, OTA websites also seem to have a negative effect on the intention to rebook via hotel websites because of their service quality along with the ease of access. Thus, the two channels seem to compete with each other for future visits of their customers.

The study provides useful information on how OTA's and Hotels corporate among each other for their organizational goals and also how they compete with each other to catch the market shares and their customers. The study also throws light into the different factors that help both OTA's and Hotels to increase

the guests was mostly depended on their nature of travel and that the importance of hotel attributes does not differ much between different groups of guests.

The study helped in understanding the factors that a guest, customer or a traveler takes into consideration while making a booking. What is more beneficial in making the call for booking online or offline. Also, the study throws light into the attributes of a hotel, the importance that they share while in making a customer choose or go for the Hotel either be it online or offline.

Jetske van de Logot (2017). The impact of online travel agencies. Is it still relevant for hotels to have their own booking channels?

This study aims to research the impact of Online Travel Agencies (OTAs) and to find out if it still relevant for hotels to have their own booking system? The study researches the relevancy of the Hotel's own booking



system and comes up in delivering different suggestions on how to make direct bookings more appealing towards the guests. For the methodology, the researchers follow a qualitative research method, where four interviews were conducted by the researchers with several managers from the hospitality industry in Helsinki. The finding of the research was related to the main aim of the research, which was about the Hotel's own booking system, is it still relevant. While the results showed that OTA's business is a profitable one, direct bookings via a hotels own website still seemed to be the best business for hotels. According to this research, it would be difficult to work without an OTA because of a great deal of business they bring in for the hotels. However, the own booking engines are still noted to be profitable since they still bring in a lot of guests for the Hotels.

The study helped in understanding how hotels look at other distribution channels for their business, in this case also a hotel's own booking system. Why hotels having their own booking system is important and how it can lower the dependency over an OTA. OTA's although helps in generating a fair portion of the economy for a hotel, the idea of hotels having their own independent booking system for the hotel should also be considered and worked on.

Brigitte Stangl, Alessandro Inversini, Roland Schegg (2016). Hotel's dependency on online intermediaries and their chosen distribution channel portfolios: Three country insight:

This research investigates hotels in three countries, namely - Austria, Germany, and Switzerland. The researchers investigate the hotel's different channels, how many they use and what major role does each channel helps to play in the hotel's business. The research also looks at a hotels dependency on a specific distribution system, channel/category such as an OTA along with the mix of offline and other online distribution channels that hoteliers choose for their business. For the methodology part, there was a questionnaire developed which comprised of questions concerning how the hotels divide the two bookings system and bookings are distributed among available direct and indirect channels. The final part covered questions related with the star rating, the size of the hotel in terms of rooms offered, amount of overnight stays, location, main target group and a number of days the Hotel operated in the year 2011. The findings of this research were based on questionnaires, which revealed that while traditional channels, such as walk-ins and telephone, still play a major role; however, about one-fifth of the bookings are completely generated online. On average, 3.61 OTAs are used. With regards to OTA penetration, Swiss and German hotels' OTA dependency is higher

than the Austrian's. An analysis from the researchers also showed results in four distribution portfolio groups which the Hoteliers decide in choosing: multi-channel-, electronic-, real time-, and traditional distributors.

The research helps in understanding how critical is the dependency of hotels towards different distribution channels and other online intermediaries. Along with it the research also helps to understand the factors considered by a hotel before investing on a certain distribution channel and how much they consider an OTA to be a driving force in generating revenues for them

Methodology

The researchers follow a qualitative research approach in this study and use interviews, views, comments, ideas, and opinions.

Qualitative research is defined as a type of research which is referred to be investigative research or which contains a fair amount of investigation. It seeks answers to a particular question or situation and it collects evidence to proof. The three most common methods are participant observation, in-depth interviews and focus groups (Jetske 2017.)

The reason to use a qualitative research method in this study is to look for trends in data. These trends can be used to come up with a final suggestion concerning the study topic. The researchers seek to explore when it comes to identifying trends in research analysis, looking for identical answers between the interviewees (Jetske 2017) Qualitative research also allows the interviewee to answer in many details as compared to a quantitative approach.

Also, the research questions could generally only be answered by professionals who have a fair share of experience related to this field. It requires some study and work experience to fully understand the relation between hotels and OTAs or the issues that are developing with it. Furthermore, the method also provides flexibility for the researchers in studying the participant and also allowing spontaneity between the two. Yielding out additional information which may not be captured by strictly following the interview agenda will go on a long way to provide useful insights for the researchers and that's why spontaneity is necessary.

The researchers used 'Keywords-in-Context' method along with 'Constant Comparison' for analysis of the data.

Semi-Structured approach

The interview method used in this research study is a semi-structured approach. An interview which included all the relevant questions is scheduled with the informants between 27th February to 15th of March, 2019, conducted for 30 to 50 minutes, semi-structured

approach was chosen for the research study as it provides the interviewer an option to explore a different direction or dive more into the details if the conversation allows, which will provide more information and data for the research (Jetske 2017).

This approach helps the researchers in collecting consistent information from all interviewees, which supports the study by providing useful insights and knowledge regarding the study. Flexibility is necessary regarding the interview, which is followed in order to obtain more useful data (Silverman 2013).

The interview questions mainly covered the following issues.

RQ1- How the hotels in alliance with the OTA's does business with each other in Bangkok?

RQ2- How OTA's contribute towards the profitability and performance of hotels in Bangkok through online bookings?

RQ3: Whether OTA's are slowing down the other distribution channels of the hotels in Bangkok, are hotels having their own reservation system still relevant?

RQ4: What determines a customer's mindset or what are the factors taken into consideration while making a reservation online using an OTA's/Hotel's website?

Target Informants

The target informants of this research are divided into two categories.

For the Hotels - the General Managers, Revenue Managers, HR, Assistant HR, Marketing and Sales related personnel in Bangkok, Thailand.

10 tourists both local and foreigners staying in the selected interviewing hotels in Bangkok, Thailand.

The first category of informants is selected for their knowledge and experience of their fields and being able to provide information's that are not available with the general public.

While the tourists were selected to get their viewpoints when they make an online booking which helps in understanding the factors they take into consideration while making an online booking and also allows in exploring different recommendations from a tourist's perspective.

Data Collection

To approach the research with relevant informants and to understand the alliance of OTA's and hotels, 19 in-depth and semi-structured interviews were chosen, which were divided among 2 sections – For Hotels (14 questions) and for Tourist (4 questions). Where 8 hotels and 10 Tourists were interviewed, all taking place in Bangkok, Thailand between 27th February to 15th of March, 2019.

The first sets of questions were designed to understand the business relationship of hotels with OTA in Bangkok.

The second sets of questions were designed to understand the benefits and how it helps to replicate in performance due to the relationship between Hotels and OTA's.

The third sets of questions were designed to understand how OTA's fair in comparison to other distribution channels of a hotel.

The fourth sets of questions were for the tourists to understand their buying behavior and the factors they consider before making bookings online

The hotels were identified on their availability through online bookings or the options to book the hotel's room through an OTA or any other distribution channels.

While the sample of guests includes both domestic and international tourists who have booked their rooms online either through an OTA or different distribution channels of the hotel for staying at the selected interviewed hotels.

Findings

'Keywords-in-Context' method along with 'Constant Comparison Analysis' was used by the researchers to summarise the research results based according to the research questions and objectives. It is found that the data provided by most of the informants are in a similar context but has some different opinions or views in some answers according to the individuals. 'Keywords-in-Context' allowed the researchers to analyze the data based on the actual words of the informants, further allowing in identifying how one uses the words in context. Therefore, helping in analyzing further the data's in hand by determining specific words or phrases used that are in interest to the researchers. Also, with the help of this technique, the researchers were able to underline connections that the informant was implying through their speech.

'Constant Comparison Analysis' allowed the researchers to put certain codes in the data which then can be used to interpret the following by grouping and comparing them accordingly to make the findings more obvious and allow the researchers to follow the research objectives.

Understanding the business relationship of selected hotels with online travel agencies in Bangkok, how Hotels do business with the OTA's.

Hotels generally have a fine line between corporation and antagonism with the OTA's. A bit of both love and hate, having both good and bad sides in it. The good side of the relationship is that OTA's are able to provide the hotels with a great deal of business, but this business comes with a high level of cost. Hotels feel that the cost associated in doing business with the OTA's are a little on the higher side, with the cost differing from independent hotels to chain hotels, which they term bad side of the business. The main part



of the business is that OTA's will provide hotels with customers and for every single customer the hotels have to pay a certain percentage of commission to the OTA. The commission depends on the room price of the hotels and ranges from around 15 to 25 percent depending on the different OTA's and also with chain and independent hotel. Normally an independent hotel here pays more in comparison to the chain-affiliated hotels. The deal in this alliance also requires hotels to pay the best rate agreement, meaning whatever prices hotels are offering needs to reflect with their partner OTA's as well. The contracts of this business alliance differ from short term to long term depending upon the hotels. Generally, the hotels have control over the pricing, on what price to set on your rooms and the commission of OTA's are based on these prices. Hotels also have the option to set the prices accordingly regarding different areas and seasons.

While the business comes with a high cost, there is no denying the fact the OTA's helps in the growth of a hotel in this alliance, especially, when it comes to small and independent hotels. OTA's helps in the marketing and promotion of a hotel and helps in showcasing the hotel's product to a large number of people in different regions with a higher reach all later converting into revenue for a hotel and plays a role towards the hotel's economy. While doing all these, OTA's have achieved an upper hand in this alliance with their wider reach and a large number of the customer base. Hotels need them more in today's date for their business, especially because of the difference in the number of hotels in comparison to only a limited number of OTA's. OTA's are able to deliver a large chunk of customers to the hotels which outplays all the other channels and because customers are the main revenues earning an option of the hotels, they need the OTA and this alliance.

How OTA's contribute towards the profitability and performance towards the Hotels in Bangkok through online bookings and what are the drawbacks?

OTA's have been able to invest in the digital age and hotels have benefited from it. They have been able to provide the hotels with marketing and promotion which have seen the hotels get a larger number of customers and increase in the guests flow through the OTA's. With the exposure and the reach OTA's have provided, hotels are able to showcase their products in different regions, resulting in an increase in business. While the only drawback is seen as the cost involved in the business. The commission that OTA's asks for seems to be a slight on the higher side. Since hotels have extra costs to deal with, which includes maintenance and such, on top of that they have the deal of offering the best rate possible, which in the end doesn't leave the hotel with much to earn.

Also, the mechanism where chain hotels have greater control compared to small independent hotels can be an issue. Big hotels or international chain-affiliated hotels do not have an issue with the cost involved and are willing to add in many OTA's in their business, while small hotels have to look after the cost and can only align with few numbers of OTA's as compared to the other, because if they do the hotels will end up paying higher commission and the profit margin will start declining.

OTA's in this alliance have also helped the hotels in performing better. While the hotels are able to make money from the OTA's it is also because the hotels are making money, OTA's are able to earn their share, with providing the best services to their customer being the main option of earning this money between the two. In order to get more guests and customers, hotels need to make sure that they deliver their best of services and this can be only done by performing better. The option of reviewing and rating a hotel on OTA sites based on the performance of the hotel has pushed the Hotels in working more and keep performing better. Since OTA's are the main mode of getting guests and customers for the hotels, they have to make sure that the hotel is well rated in their sites to keep improving the inflow of their guests. People do not like to book a hotel that is rated poorly by previous customers. The better the ratings are of a hotel, people are more inclined to go for that hotel. These also make sure that the hotel improves as a brand and more revenue gets generated.

To examine if OTA's are slowing down the other distribution channels of the hotels in Bangkok, do hotels having their own reservation system still relevant?

OTA's are only one of the distribution channels that hotels work with while having the option of working with a few other channels as well. This also includes their own personal channel where they can work with, like their own websites, direct booking options and all where the hotels can create an opportunity to be less dependent with the OTA's. While working more on a digital marketing campaign and promotions hotel can decrease their dependency with OTA's. Hotel needs to invest money into search engine optimizations and offer deals and extra benefits along with building a presence in the social media if they are to look for customers coming to them directly. Hotels need to have a strong brand presence to get direct bookings, which will also reflect in getting loyal customers. All these being said, more money is needed to be invested for all these. That's the reason small and independent Hotels are more reliant on OTA's. Without the OTA's, hotels will lose on customers and also the reach it provides. The rooms will not be filled

up which will go to hamper the revenue. The network will be limited and this is where OTA's are really valued. Although directing guests in booking directly from a hotel's website or another channel might have its share of positives, people still choose OTA's over all other channels. This shows that OTA's are definitely ahead in this mix of online booking when compared to other distribution channels of hotels. Online booking is the new trend and it has almost taken the traditional system out of the mix. People prefer booking their rooms online these days and OTA's have been the major player when it comes to online booking of hotels. These have persisted hotels into working more with OTA's rather than any other distribution channels. While hotels can work on their own reservation and booking system, it would not be wise to completely cut down ties with the OTA's.

What determines a customer's mindset or what are the factors taken into consideration while making a reservation online?

While hotels and OTA's have their own game of cooperation and dissension, it is the customers and the guests that are constant at both the industry. It is important to know the mindset of the customers/guests from a hotels point of view to know what are the factors they look into when making online bookings or while choosing a channel to make their bookings. Because of it the customers and the guests are the main sources of income for the hotels. Before making any booking online for a hotel, people have the tendency to search for the hotel, about its services, ratings and whether it will good or bad for them. Looking into OTA sites/apps and searching about the hotels on google is what people normally do. People prefer to book a hotel rated highly with good reviews, where a hotel with bad ratings tends to lose on its potential customers. While hotels are trying to pull their guests through their direct booking option, people are still reluctant to use OTA as the main mode or channel of booking their hotel's room. The easy access and the many available options that OTA's provides in their sites are preferred by the people.

One of the main factors people look into while booking a room is the pricing, OTA's in most case have been able to provide better prices, along with extra deals and offers on top of that, which have allowed them to gain a large number of customers. While at these, OTA's and hotels should also look into the other factors which people prefer having when making online bookings, like – Cashback option, Option to pay while check-in, confirmed a booking, hassle-free experience along with added discounts and offers. Working on these factors will allow both hotels and OTA's pull their target guests and customers accordingly.

Discussion

The researchers interpret the findings of the study through the discussion along with the result which was obtained following the research according to the research objective.

Understanding the business relation of selected Hotels with OTA's in Bangkok can be related to the study of Antonio Lazzi, Oronzo Trio, Silvia Gravili (2017). Hotels and Online Travel Agencies where the relationship between the two was explored which helped the researcher with the general perception of the relationship. The researcher through the research with hotels in Bangkok found out that most of the hotels see the relationship with OTA's to be both good and bad. But at the end of the day, both hotels and OTA's wants to earn money and both help each other in the process. In general, OTA's provides hotels with customers and in return, hotels have to pay a certain percentage of commission to the OTA's for providing them with the customers and this is how both make money with the help of each other. Hotels have to also accept a major deal with the OTA's which says whatever price the hotel will be using, that needs to reflect with the OTA sites as well. While hotels doing business with OTA's comes with a ted high cost, there are also many benefits to this alliance received by the hotel, which is seen in the hotel's growth both as a brand and in the revenue. The analysis found that small or independent hotels seem to be more reliant on the OTA than the big chain affiliated 5-star hotels in Bangkok. But with the growth of online booking with the passing of time, almost all the hotels need an alliance with OTA's to increase their business and keep the inflow of guests strong.

The benefits along with the drawbacks of Bangkok's selected hotels provided by OTA's from online bookings and how it helps to replicate it into their performance is related to the study of Yu-Wei Changa, Ping-Yu Hsub, Yi-Chen Lanc (2018). Cooperation and competition between online travel agencies and hotels, where it helps in understanding and shares the benefits of working together with an OTA for the hotels and how performance is necessary in order to get their guests and customers. The researcher in the current research found out that the positives aspects and benefits of hotels in working together with the OTA's are greater when compared to the drawbacks. Hotel's when aligned with OTA's gets a better reach and the exposure increases, which results in getting guests from different parts of the world, increasing the revenue earnings. OTA's have been the major contributor to the hotels when delivering the guests to them. Guests have been able to share their experience of the hotel's services and rate them accordingly in the OTA sites, this has also pushed the hotels to keep performing better so that the inflow of guests keeps on

increasing. While the only concern of drawback for the hotels have been the commission, which the hotels believe seems to be on the higher side. Also, in some case, the mechanism on how hotels and OTA's work was doubted by small hotel's saying big brands of hotels have a greater advantage in comparison to smaller ones which, might be true in some cases as small hotels might not have the power to invest in a lot of money like a big hotel, leaving them with a limited number of OTA's to work with.

How OTA's fair in comparison with the other distribution channels of a hotel based in Bangkok, is seen following the current research that there is also the need of investment of the huge sum of money for the hotels that need to be put into to get guests in booking through the hotel directly. The amount of money that goes into marketing and promotion by the OTA's are higher in comparison to the hotels in general. Along with the higher reach and network, OTA's fair much better in comparison to other distribution channels. This has encouraged hotels to invest more on the OTA's, while also keeping their own channel open and in the mix, which has allowed the hotel's into getting customers or guests from both ways or channels.

Customer's approach and what persuades a customer into making a booking online through an OTA or other different distribution channels vice versa, is related to the study of Igor H., Jadranka Gusic, Sasa Karlovcanec (2010) which explores the travel characteristics of hotel guests and customers and also discusses different attributes which the guests go for in selecting a hotel either online or offline, while the study revealed that the method of booking depends on the nature of the travel, the researchers found out that it has changed with time, people are more inclined towards booking their hotels online in today's time and this seems to be the common trend, where OTA's seems to be bossing the market. People are willing to book through the OTA more with the ease of access along with the large verities of options available just at the tip of their fingers. With the growth of online booking, hotels are also trying to establish their online presence where they can get guests to book to them directly, while at this, both hotels and OTA's needs to understand the guests or customers approach, the factors which persuade them into booking online. While right pricing is one of the major factors, there are also others like Cashback option, Option to pay while check-in, confirmed the booking, hassle-free experience along with added discounts and offers which needs to keep reviewing from both the hotels and OTA's to keep improving on the inflow of their guests and customers.

related to the study of Jetske van de Logot (2017) which explore the needs of other channels, like the hotel's own website and if it is important for hotels to have their own booking channel. For the value of this study, it details the importance of the hotel's own direct booking system, which should not be underestimated. While it speaks of the importance, it also throws light on the alliance with OTA's, which should not be avoided as well. While the researchers found out the study to be appropriate, it was also

Conclusion

The study was conducted to investigate the business relationship of Hotels with OTA's in the region of Bangkok, Thailand and the researchers through the research has been able to explore many bits and pieces of this relationship between hotels with OTA's from the perspective of hotels which can be befitted to both hotels and OTA's. This information can be used by the hotels to work their ways with the OTA's while OTA's can use it look into certain drawbacks related to the alliance. The study might also benefit the group of people who likes to make online bookings of their stays.

While hotels might have a relation of both love and hate towards the OTA's they need to realize that at the current stage it is almost impossible to work without them, even if they do, they will not be able to benefit much. OTA's are providing with a large business and that requires hotels to make their ways with the OTA's and accordingly OTA's need to make sure that the suggestions from the hotels regarding different issues faced by them are well considered. since this relation is important for both the parties, both need to provide each other with a win-win scenario between them as both the industry needs each other for their business growth and performance.

Recommendations

Based on the result of the study, the key recommendation for the business relationship of hotels with OTA's in Bangkok can be that both hotels and OTA's needs to work vice versa for their benefits. The positives of hotels having an alliance with OTA's are far more in comparison to the negatives, so hotels need to treat them as a friend. There are certain costs involved in this alliance but hotels should not forget that OTA's are providing with a large piece of business which at the moment is not with other channels, which gives them a proper reason to stick with the OTA's. There is also a need to work on the mechanism of the alliance where both the small and big independent and chain hotels should have equal control over the relationship. While at this, with the growing age of online booking hotels should also keep their own



booking system and keep investing on their own brand, hotels should use their own website as a marketing tool which will then able them to get their guests from both the OTA's and their own channel as well.

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Host-Tourist Interaction and its Impact on Travel Behavior of International Tourists in Bangkok: The Case of Couchsurfing

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Abstract

The growth of hospitality exchange networks, induced by internet-based technologies, results in an increasing interest to examine potential impacts on travel behavior. Couchsurfing is such a network that connects people who search for and offer accommodation services to each other. The purpose of this study is to investigate the quality and quantity of the host-guest interaction in Couchsurfing and to determine the extent to which such interaction affects changes in the travel behavior. The data of 413 Couchsurfers in Bangkok were collected through an online survey. An ordinal regression model was employed. The results indicated that both, the quality and quantity of host-guest interaction significantly affect changes in the travelers' activities, length of stay, revisit intentions, and positive word-of-mouth. Moreover, the analysis revealed that the quantity of interaction has the strongest effect on the travelers' on-site behavior, whereas the quality rather affects the post-visit behavior. Suggestions for policy makers are provided and managerial implications were drawn.

Keywords: Host-Guest Interaction, Travel Behavior, Couchsurfing, Hospitality Exchange Network

Introduction

Sharing Economy platforms have emerged as alternative suppliers of tourism services by connecting individuals directly without a long chain of intermediaries. The internet has paved the way for those peer-to-peer markets to displace long-established distribution channels of the conventional tourism industry. A tourism field significantly influenced by Sharing Economy platforms is accommodation, as online hospitality exchange communities have been formed where tourists gain access to accommodations directly advertised by local owners. Couchsurfing.org is such a peer-to-peer accommodation platform where locals offer to share their home with travelers on an agreed basis. Couchsurfing's distinguishing feature compared to Airbnb and most other web-based hospitality exchange networks is the non-monetary motivation of the participants, as a monetary contribution to the host is not required. Several studies have found that the personal atmosphere and intercultural encounters are the key motivators for Couchsurfers [Jung, Yoon, Kim, Park, Lee, & Lee, 2016; Schuckert, Peters, & Pilz, 2017; Zgolli & Zaiem, 2018]. According to Steylaerts and O'Dubhghaill [2012], Couchsurfing corresponds with the recent development for tourists to seek more meaningful, less commercially mediated experiences. Although the peer-to-peer accommodation market is growing and gaining influence in the travel and tourism sector, there

is little knowledge of how this new form of traveling affects the travel behavior. One potential influencing factor is the personal contact between host and tourist.

Therefore, this research aims to analyze the potential impact of the host-tourist interaction on the travel behavior, with international tourists visiting Bangkok serving as research subjects. The study considers thereby four aspects of the travel behavior: tourism activities and the length of stay in Bangkok, both part of the on-site behavior, as well as the tourists' revisiting intentions and their propensity to recommend Bangkok as a tourist destination to others, as part of the post-visit behavior. The call for more research in this field was expressed, among others, by Fan, Zhang, Jenkins, and Tavitiyaman [2017] who argued that the social contact between hosts and tourists deserves more attention in tourism research considering its remarkable impact on travel behavior. Su and Wall [2010] pointed out that most researchers focus their research on impact of host-guest interactions on the local community, whereas only few studies have examined the effect of such interaction on the travelers' behavior. Decrop, Del Chiappa, Mallargé, and Zidda [2018] suggested to analyze the social interactions between Couchsurfers and their hosts and to examine how it influences behavioral intentions of Couchsurfers.

Pizam, Uriely, and Reichel [2000] conducted research on the impact of the social relationship of hosts and

working tourists on their feelings, satisfaction, and attitudes towards the destination. The results demonstrated that the intensity of the social relationship between hosts and working tourists has a positive effect on tourists' feelings towards their hosts and the destination in general. Furthermore, the academic work of Meng and Han [2018] revealed that the quantity and quality of the interaction between tourists and hosts have a positive effect on the revisit intentions, as well as positive word-of-mouth. Therefore, it can be argued that the quantity and quality of the interaction with the host influences the traveler's behavior. The following two hypotheses are suggested:

. Most significantly, the interactions with local people intensified with an increase in the Couchsurfers' age. Ribeiro, Woosnam, Pinto, and Silva [2018] investigated the association of the travelers' emotional solidarity after visiting a destination and the destination loyalty. The results indicated that especially male visitors are affected by 'emotional closeness' and 'feeling welcomed' in terms of their post-visit behavior. This is consistent with the findings of Ramkissoon and Mavondo [2015], who concluded that the satisfaction with, and attachment to a destination has a stronger influence on the post-visit behavior of male tourists. Therefore, an effect of the socio-demographic characteristics on the travel behavior is suggested, leading to the following Hypothesis:

Hypothesis 3: The Socio-demographic Characteristics affect changes in Travel Behavior through Host-Guest Interaction.

Moreover, previous research suggests travel characteristics to impact travel behavior. Considering the travel group composition, Campo-Martínez, Garau-Vadell, and Martínez-Ruiz [2010] found tourists traveling in a group to be more influenced to revisit the destination, compared to solo travelers. Li, Cheng, Kim, and Petrick [2008] conducted a systematic comparison of first-time and repeat visitors, showing a significant difference in their behavior. Furthermore, the results indicated that repeat visitors are more likely to give positive word-of-mouth and to revisit the destination again in comparison to first-timers. Li et al. [2008] explained these findings with intuition and theories of previous researchers to expect that first-time visitors are easier to be satisfied, also due to a typically lower expectation. Prentice, Witt, and Wydenbach [1994] identified first-time visitors to have rather superficial interactions with locals, whereas repeat visitors tend to stronger emotional attachment to the destination, not least because of deeper interactions with the host community. Moreover, Schuckert et al. [2017] discovered varying perception and behavior of Couchsurfers with different usage pattern. The authors

Hypothesis 1: The Quantity of Host-Guest Interaction affects changes in Travel Behavior.

Hypothesis 2: The Quality of Host-Guest Interaction affects changes in Travel Behavior.

Furthermore, several studies found significant effects on travel behavior by socio-demographic factors. Avcıkurt, Özdemir, Ergen, and Güzel [2017] conducted interviews with Couchsurfers. The comparison of the interviewee indicated that socio-demographic characteristics effect the behavior of Couchsurfers

suggested that Couchsurfers with extensive experience may be influenced more by the interaction with the host compared to unexperienced Couchsurfers. Studies on the motivation to use Couchsurfing or other peer-to-peer accommodation platforms further suggested that the travelers' motivation also has an influence on the travel behavior [Liu, 2012; Tussyadiah & Pesonen, 2016]

Hypothesis 4: The Travel Characteristics affect changes in Travel Behavior through Host-Guest Interaction.

Materials and Methods

The study was designed to, firstly, measure and describe the quantity and quality of host-guest interaction of international tourists visiting Bangkok; followed by a determination of the extent to which these factors effect changes in the travel behavior. Furthermore, socio-demographic characteristics and travel characteristics were included as additional predictor variables. The therefore developed four hypotheses result in the conceptual framework illustrated in Figure 1 below.

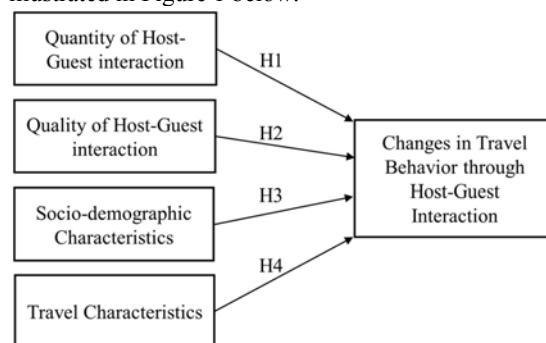


Figure 1: Conceptual Framework

To test the four established hypotheses, primary data was gathered through a questionnaire designed for an online survey. The questionnaire started with a screening question, followed by four sections to capture responses regarding the predictor variables, as well as the interaction-induced changes of respondents'



travel behavior. The screening question determined whether the

potential participant had the experience of an overnight stay through Couchsurfing in Bangkok in the past four weeks. This ensured the qualification to participate, as well as, through the time constraint, the respondents' capability to remember. The first section covered the socio-demographic characteristics, namely the gender, age, career, and origin of the respondent. The second section captured the quantity and quality of the respondents' interaction with the host. The measurement of quantity of host-guest interaction was based on Fan et al.'s [2017] approach to simultaneously measure the host and guest's joint activities and their frequency. For each proposed activity, respondents could indicate their engagement on a seven-point Likert-scale with the following gradations: never, very rarely, rarely, sometimes, somewhat often, often, and very often. The activities stated were derived from several studies on Couchsurfing [Avcikurt et al., 2017; Liu, 2012; Schuckert et al., 2017; Strizek, 2007; Strommer, 2010]. The measurement of the quality of host-guest interaction was conducted with the Interpersonal Relations Scale developed by Wish [1976], with the consideration of further adaptations of tourism researchers [Ap, 1992; Huang & Hsu, 2010]. The multidimensional scale contains eight items describing the relationship by means of opposing adjectives (e.g. superficial/ intense) with seven gradations provided to choose from. The third section captured the travel characteristics, including travel company, former Couchsurfing usage, former visits to Bangkok. Moreover, the motivation to use Couchsurfing was addressed by providing six choices to the respondents. These motives derived from the academic work of Zgolli and Zaiem [2018]. Lastly, changes in travel behavior through host-guest interaction were captured in the fourth section. Four statements considering the interaction-induced changes in the choice of activities, length of stay, revisit intentions, and positive word-of-mouth were given and respondents were asked to rate their agreement on a seven-point-Likert scale. The questionnaire was distributed online. A hyperlink to access the questionnaire was generated and sent via the messaging function on Couchsurfing.org to users with recent activities in Bangkok. To test the four hypotheses, an ordinal logistic regression was employed, using the polytomous universal model (PLUM) procedure of SPSS. In the model, the four ordinal components measuring the changes in travel behavior through host-guest interaction, namely activity, length of stay, revisit intention, and positive word-of-mouth, were applied as dependent variables. Each of which were estimated by the factors of gender,

age, career, origin, travel company, former Couchsurfing usage, former visits to Bangkok, motivation to use Couchsurfing, quantity of interaction, and quality of interaction.

Results and Discussion

The socio-demographic and travel characteristics of the respondents are presented in Table 1. Most respondents are male and in the age group of 25 to 34 years. The majority further indicated to be employed. The origin of respondents is predominantly Asia. The majority traveled alone with few former Couchsurfing experiences. About half of the respondents had visited Bangkok before. The main motives to use Couchsurfing in Bangkok are social interaction and cultural experience.

Table 1: Socio-demographic and travel characteristics

Characteristic	n	Percent
Gender		
Male	284	68.8
Female	120	29.1
Other	9	2.2
Age		
24 years or younger	71	17.2
25-34 years	276	66.8
35-44 years	55	13.3
45-54 years	8	1.9
55 or older	3	0.7
Origin		
Asia	219	53.0
Europe	95	23.0
North America	34	8.2
Middle East	30	7.3
South America	19	4.6
Africa	11	2.7
Oceania	5	1.2
Occupation		
Employee	259	62.7
Self-employed	58	14
Student	49	11.9
Unemployed	24	5.8
Retired	7	1.7
other	16	3.9
Travel company		
solo	305	73.8
group	108	26.2
Former visits to Bangkok		
First time	221	53.5
Repeat visit	192	46.5
Former CS usage		
never	100	24.2
1-5 times	192	46.5
More than 5 times	121	29.3

Motivation		
Social interaction	192	46.5
Professional reasons	8	1.9
Self-discovery	6	1.5
Environmental responsibility	1	0.2

Note. N=413

Moreover, descriptive statistics were analyzed to investigate the quality and quantity of the host-guest interaction in Couchsurfing. Considering the quantity of the host-guest interaction, about a fifth of the respondents indicated only little contact with their hosts. Most travelers indicated to engage in the proposed joint activities rarely to sometimes with their Couchsurfing host. Only few outliers with an extensive interaction were observed. This shows that although social interaction and cultural exchange are main motives for travelers to use Couchsurfing in Bangkok, it does not necessarily mean that host and guest spend an extensive time together. This is consistent with the results of the interviews conducted by Schuckert et al. [2017]. Moreover, discussing future travel plans and sharing past travel experience were found to be common activities of Couchsurfers and their hosts in Bangkok. This also supports further findings of Schuckert et al. [2017] indicating the participation in Couchsurfing and the interaction of hosts and guests in particular to encourage the exchange of travel information, discussion of itineraries, and to serve as a source of recommendations. The authors also observed Couchsurfers to partake in outgoing socializing activities. That is in line with the findings of the present study, as most respondents explored the nightlife in Bangkok and dined out with their hosts.

The section measuring the quality of host-guest interaction reveals that the most positive feelings were expressed for friendliness of the contact, followed by positivity, and pleasantness. These expressions reflect a generally good relationship between the Couchsurfer and the host. It comes to no surprise that items expressing the intensity and closeness had a lower agreement among the respondents, considering that host and guest were previously foreign to each other and Couchsurfers only stay for one or a few nights at the hosts' accommodation. The results suggest most respondents to experience a high quality of interaction, as only a few travelers expressed a negative interaction with their Couchsurfing host. This is consistent with findings of Strommer [2010], as most Couchsurfers expressed a good experience in the interaction with the host and only a few gave negative comments on the hosts' mind-set, values, and their interaction during their stay in the interviews he conducted.

Cultural experience	180	43.6
Financial reasons	26	6.3

The results of the ordinal logistic regression revealed significant effects of all four proposed predictor variables on changes in the travel behavior of international tourists using Couchsurfing in Bangkok. Therefore, all hypotheses regarding the effects of host-guest interaction on changes in the travel behavior are supported. The results proved both, the quality and quantity of host-guest interaction to be reliable predictors to significantly affect changes in the travelers' activities, length of stay, revisit intentions, and positive word-of-mouth. More specifically, the analysis revealed that the quantity of interaction has the strongest effect on the travelers' on-site behavior, whereas the quality rather affects the post-visit behavior. The findings pertaining to quality of interaction correspond with those of Meng and Han [2018]; however, the authors also found the quantity of interaction to particularly affect the intention to revisit a destination. This is not supported by findings of this study, as the ordinal regression revealed that the quantity of interaction has only small effects on changes of the travelers' revisit intentions. Furthermore, the positive effect of the quality of interaction on the travelers' post-visit behavior is an indication to support the findings of Pizam et al. [2000] who concluded that the intensity of the social relationship between hosts and working tourists has a positive effect on tourists' feelings towards the destination in general.

Furthermore, the travelers' socio-demographic characteristics were considered in the analysis. For this predictor variable, the most conspicuous association observed was that female travelers were significantly less affected by the interaction with the hosts in their propensity to recommend Bangkok as a tourist destination, as well as their revisit intentions. Such findings are in line with previous research that concluded that especially male visitors are affected by 'emotional closeness' and 'feeling welcomed' in terms of their post-visit behavior [Ribeiro et al., 2018], as well as that the attachment to a destination has a stronger influence on the post-visit behavior of male tourists [Ramkissoon & Mavondo, 2015]. Taken into account the considerable differences between male and female travelers, this study contradicts Tussyadiah and Pesonen's [2016] conclusion that the travelers' socio-demographic characteristics were not significant predictors of changes in travel behavior.

Moreover, the effects of the travel characteristics on changes in travel behavior were analyzed. The group of solo travelers, as well as first-time visitors were less affected in their choices of activities. Unlike



the previous research of Campo-Martínez et al. [2010], no significant differences were found between solo and group travelers in terms of revisit intentions. Additionally, a frequent former Couchsurfing usage was observed to intensify changes on the travelers' length of stay and propensity to recommend Bangkok to others. This confirms Schuckert et al.'s [2017] suggestion that Couchsurfers with extensive experience to be influenced more by the interaction with the host in comparison to unexperienced Couchsurfers. Lastly, no significant effects on changes in travelers' behavior were observed for the motivation to use Couchsurfing in Bangkok; yet again contradicting with the finding of Tussyadiah and Pesonen's [2016] that the motivation to use peer-to-peer accommodation affects changes in the travel behavior.

Conclusions

The growing trend among travelers to use platforms deriving from Sharing Economy and Collaborate Consumption raises the relevance to understand their impact on the travelers' behavior. These platforms bring together individuals to share either their accommodation, goods, or services directly with the tourists, without any involvement of intermediate companies and organizations, and therefore favor the direct interaction of travelers and the host community. Especially hospitality exchange networks, such as Couchsurfing, emphasize on the social contact and cultural exchange with their host. This study examined the quality and quantity of such contact and determined the extent to which the host-guest interaction affects changes in the travel behavior.

The results show that an overwhelming majority of Couchsurfer perceived the interaction with their host as friendly, positive, pleasant, and rather intense; even though the time spent together in joint activities was varying and often somewhat limited; suggesting that even if tourists encounter with the host community for a shorter time, the interaction can still be perceived as positive or even intense and therefore favor the touristic experience for travelers. The analysis further revealed that travelers were particularly influenced in their choice of activities and length of stay at the destination by the quantity of the social contact; whereas the quality of host-guest interaction affected changes in the travelers' post-visit behavior to a wider extent. This implies that in order to positively affect the behavioral intentions of travelers, and therefore to favor a long-term success of a destination, it is vital to influence the tourists' perception of the interaction with the host community to be positive and intense, rather than merely increasing the time of the encounter. Corresponding with previous researcher, the positive effect on post-visit behavior was observed particularly

for male travelers, even though the perception of the host-guest interaction was slightly more positive among female respondents. This suggests a better potential with male travelers to influence their willingness to revisit the destination and their propensity to recommend a tourist destination to others with social contact.

Furthermore, the findings confirm previous research suggesting that Couchsurfer with extensive experience to be stronger influenced by the interaction with the host compared to unexperienced Couchsurfers, as frequent former Couchsurfing usage was observed to intensify changes on the travelers' length of stay and propensity to recommend Bangkok to others in the present study. Therefore, familiarity with traveling in foreign countries and encountering host communities with different cultural background is suggested to encourage travelers to engage into more meaningful contact resulting in a higher impact on the travelers' behavior.

The findings lead to recommendations for both, policy maker and market players in the tourism industry. The results indicated that the higher the quality of the social contact between hosts and guests, the more favorable were the feelings of these travelers towards revisiting and recommending the destination. This should encourage policy maker to support initiatives that promote interactions between tourists and the local community. However, a potential hindrance for locals and tourists to engage into meaningful conversations could be the language barrier, especially in rural areas of Thailand. Therefore, providing language training to the host community may enhance the communication significantly. This is especially important for locals who frequently have direct contact with tourists, such as employee at the accommodation or in transportation, local guides, and manufacturers of handicrafts presenting art to tourists. Furthermore, policy maker can build a better awareness of the importance of welcoming tourists in a warm, personal, and high sociability environment to enable an atmosphere that encourages frequent and more intense interactions. Moreover, as policy maker in Thailand have imposed prohibition on several Sharing Economy platforms (such as Uber and Airbnb), the positive effects of the host-guest interaction in Couchsurfing on the travelers' behavior found in this study should be considered in potential future discussion of imposing interdictions on such platforms.

The benefits of social interaction in hospitality exchange networks should also lead market players to encourage and promote social interaction in traditional types of accommodation through an authentic and familiar environment. The high sociability environment of Couchsurfing has proven to positively



impact the travel behavior of the tourists that could not only benefit the destination as a whole, but the individual business owner as well. Lastly, a closer examination of the changes in travel behavior in consideration of socio-demographic characteristics revealed that especially male travelers are positively influenced in their behavioral intentions, suggesting marketing efforts to promote social contact with a focus on this group.

The study had several limitations associated with the applied research methods, that could be addressed by further research. Firstly, the present study limited its sampling to Couchsurfers and did not consider the perception of the Couchsurfing hosts. An extension of the study by taking the host's socio-demographic characteristics, motivation to host, and perceived quality and quantity of interaction into consideration could create additional knowledge. In addition, due to the predominantly young user group of Couchsurfers, travelers aged over 45 are widely underrepresented in this study. For a more reliable analysis of the host-guest interaction-induced changes in the behavior of travelers of older age groups, the sampling could include members of hospitality exchange networks with a higher age structure or consider host-guest encounter outside of those networks.

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A STUDY ON THE BUSINESS ASPECTS OF THE SELECTED COWORKING SPACE IN BANGKOK: BALANCING THE NEED OF OWNERS AND CO-WORKERS

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Abstract

Coworking space is increasing rapidly in Bangkok as it has brought independent professionals and mobile workers using the same space. Coworking space has become a workplace revolution that has changed the working mindset of the people in a new environment in a place with different talented professionals from around the world. Qualitative data collection technique is being used to know perspective of the coworking management members and the co-workers at coworking space. The strategy for the interview was based on the 18 informants of coworking space by interviewing the owners/ staff members and the users of coworking spaces. Purposive sampling technique with in-depth interview method is being used for the interview and were conducted between 26th Feb to 13th March 2019. The researcher uses Constant Comparison analysis technique for analysing the data. The key findings are- The accessibility to transportation, facilities, events, socializing with people, work environment, networking and meetups, exposure influenced them to choose a particular coworking space. The study also finds out about the host initiative to involve the co-workers by providing a platform to share experiences and ideas by organizing events that help in building community and developing collaboration. The researcher finds contrast in collaboration effort in different coworking space due to different organization structure as in some co-working space there is collaborative effort by coworking management by bringing business to its coworking space and also among co-workers there is collaboration when both the persons shared the same level of interest, collaboration on basis of sharing experience, ideas, organising events but not partnering with each other to do business although there are informal talks where the co-workers share feedback with each other but not in business mindset whereas in hotels there is no such collaboration. By taking the perspective of coworking management and co-workers it is found that coworking space helped in meeting various requirements of the co-workers as coworking management tries to fulfil their expectations with regard to collaboration in different coworking space need to be further studied to gain further understanding of coworking space.

Keywords- Bangkok, collaboration, coworking space, facilities, host initiative

Introduction

In recent years, the engagement of technologically advanced mobile devices, including smartphones, represents an essential part of daily life. The smartphone global market is growing rapidly. According to a report by Newzoo (2018), the number of smartphone users globally reached 3 billion for the last year, in which Asia-Pacific making up more than half of this number. As for the number of active smartphones across the world, there will be 3.3 billion

by the end of 2019, and the number of users is expected to hit 3.8 billion by 2021. The increasing trend in smartphone users is the main reason that has amplified the researchers' interest to study this topic by focusing on repurchase intention of the smartphone users toward a smartphone brand in Bangkok.

Thailand is one of the countries that has highest smartphone users around the world. Samsung smartphone brand is claimed to have highest market share in Thailand market which confirmed by



bworldonline.com. When think about a smartphone brand, Samsung frequently come up in Thai people's mind. Thus, the success of Samsung smartphones inspired the researchers to investigate repurchase intention of this smartphones brand.

Balabanis et al. (2006) and Dixon et al. (2005) mentioned that increasing the customer repurchase intention is believed to positively influence the performance of firms and lead to achieve the competitive advantage. Hence, the conceptual framework was developed from the previous studies including the variables such as perceived value, perceived quality, trust, customer satisfaction, brand attitude, E-WOM, and repurchase intention.

In this research, the researchers intend to investigate how perceived value, perceived quality, trust, customer satisfaction, brand attitude, and E-WOM impact on repurchase intention of customers towards Samsung smartphones. The target population of this research is the customers who have experience using Samsung smartphone brand. The outcome of the research can provide Samsung smartphones to maintain as a market leader of smartphone market in Thailand by understanding the key factors influencing repurchase intention towards Samsung smartphone in Bangkok, Thailand.

Research Objectives

The objective of this research is to study the factors affecting repurchase intention of Samsung smartphone buyers. Therefore, the researchers aimed to investigate and find out the influence of 6 variables including perceived value, perceived quality, trust, customer satisfaction, brand attitude, and E-WOM on repurchase intention towards Samsung smartphone in Bangkok, Thailand. Consequently, the specific objectives of this research are as follows;

To investigate the influence of perceived value on trust of customers towards Samsung smartphone brand.

To investigate the influence of perceived value and perceived quality on customer satisfaction towards Samsung smartphone brand.

To investigate the influence of perceived quality on E-WOM of customers towards Samsung smartphone brand.

To investigate the influence of trust, customer satisfaction, brand attitude, and E-WOM on repurchase intention of customers towards Samsung smartphone brand.

Literature Review

Perceived value

Cronin et al. (2000) described that perceived value as trade-offs between what customers receive, such as quality, benefits, and utilities, and what they sacrifice, such as price, opportunity cost, time, and efforts.

Bolton and Drew (1991) described perceived value is an overall assessment of consumers towards their perception or judgment of a product's advantages, which are based on the individual or society (Kahle, 1983 and Schwartz, 1999). Perception of consumer to product value can enhance by providing benefit, and uniqueness of the product (Steenkamp and Geysken, 2006).

Perceived quality

Tsiotsou(2006) interpreted perceived quality as the quality of the product that perceived by the consumers who already had experience with the product. Perceived product quality has the relationship between attitudes of consumers and experience towards the brand that they applied as the factors to judge the product's performance (Zeithaml, 1988). However, the firm can intensify its level of product quality, in order to gain more competitive advantages (Parasuraman et al., 1988).

Trust

Chaudhuri and Holbrook (2002) identified that brand trust is referred to its ability to create high valued relationships. McKnight et al. (2002) indicated trust is the belief of an individual in the trustworthiness of others which can be determined by their perceived integrity, benevolence, and competence. A more general definition of trust is that a party has confidence in the "reliability" and "honesty" of his partner (Morgan and Hunt, 1994).

Customer Satisfaction

Kotler and Keller (2006) defined satisfaction as "person's feeling of pleasure or disappointment which resulted from comparing a product's perceived performance or outcome against his or her expectations". Customer satisfaction is defined by Hellier et al. (2003) as overall level of customer pleasure and contentment resulting from the experience with the product or service as how much customers are satisfied, and how well their expectations are met. Oh (2000) interpreted the meaning of customer satisfaction is that comparisons between customers' expectations and what customers received from using a product or service.

Brand Attitude

Chen and Chai (2010) stated that attitude towards a product is the experience of consumers towards the product, which refers to customers' desires, expectations, and customer needs in a favorable or unfavorable aspect influencing the level of consumers' satisfaction. Thus, attitude can be defined as mental condition of willingness to do something, which is related to personal's reaction (Allport, 1935). In addition, attitude towards a product is a personal evaluation of a product's performance perceived by the

users that influences repurchase intention (Mackenzie and Spreng, 1992; Teng, 2009).

E-WOM

One of the most comprehensive conceptions of eWOM was proposed by Hennig et al. (2004), who described eWOM as an informal communication via the internet about goods or services or the sellers. The buyer shared their opinions and reviews with other users by using online platforms. Hennig et al., (2004) mentioned E-WOM as positive or negative statement or conversations made by buyers regarding products, brands or company. Consumers search for information posted by former customers in order to make themselves comfortable before purchasing the products or services (Pitta and Fowler, 2005). The Internet provides several appropriate platforms for eWOM such as blogs, consumer review websites, discussion forums, shopping websites and recently social media websites (Cheung and Thadani, 2012).

Repurchase intention

Chen and Chang, (2012) defined that purchase intention is the state of customers who purchased product/service/brand at least once, desired to purchase the product, service or brand again. Izbán and Balarabe (2016) stated that repurchase can be described as a real action of customers in buying or using the product again. George (2004) also mentioned repurchase intention as the individual's judgment of purchasing once more for the same product or same brand or company. William and Kent (1985) explained repurchase intention is a behavior tendency of a customer who is intended to purchase a product.

Related Literature Review

Perceived value and trust

Mohammad (2012) developed the study about an application of the American Customer Satisfaction Index (ACSI) in the Jordanian mobile phone sector, discovered the relationship between perceived value, perceived quality and customer satisfaction. The outcome of the research showed that perceived value and perceived quality are mainly functions and have directly influences on customer satisfaction. Similarly, Cronin et al. (2000) found that there is a significant association between perceived value and customer satisfaction. The value of product judged by the customer would be high if the customer gets more satisfaction from the specific brand or product.

Perceived value, perceived quality and customer satisfaction

O'Cass and Carlson (2012) who investigated a study of an e-retailing assessment of perceived website-service innovativeness discovered that perceived quality is one of the key factors of eWOM. Alessandro (2017) found that e-service quality has directly a strong positive effect to eWOM, Mutaz (2015) found about the

correlation between perceived quality and E-WOM after examined the research of the effects among trust, perceived quality, perceive benefit and consumer attitudes towards online shopping MarkaVIP. The result of this research presented there is a moderate the relationship between perceived quality and E-WOM towards online shopping MarkaVIP.

Trust and repurchase intention

Trust has been linked to a variety of outcomes. Thorsten and Alexander (1997) theorized the factors influencing customer satisfaction and relationship quality on customer retention and found that trust played significant role in repurchasing decision. This is supported by the empirical findings of Bart et al. (2005) who noticed a strong relationship between trust and behavioral intention to purchase. Behavioral intention to repurchase may include trust based on the company's guidelines to suggest the new option for new technologies based on new version of product, such as revisiting the same company, engaging in interactivity with the same company, and purchasing or repurchasing from the same company (Bart et al. 2005).

Customer satisfaction and repurchase intention

Recently, Simon et al. (2018) examined repurchase intention among smartphones users in Nigeria by using SEM approach. The result showed that users' satisfaction has dramatically impacted customers repurchase intention of smartphones users. Moreover, Chinho (2014) researched the factors affecting online repurchase intention. And the result showed that customer satisfaction is an essential factor for online repurchase intention, thus, the satisfaction of the clients has a strong positive effect on intention to repurchase.

Brand attitude and repurchase intention

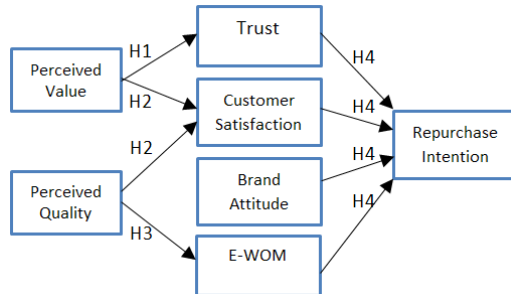
Spears and Singh, (2004) who studied measuring attitude toward the brand and repurchase intentions found the significant influence of brand attitude on repurchase intention. Moreover, James and Clay, (2006) who studied the impact of brand trust and satisfaction on retailer repurchase intentions also found the significant relationship between brand attitude and repurchase intention.

E-WOM and repurchase intention

Chetna and Amresh (2017) have studied about Social E-WOM affecting the brand attitude and purchase intention of brands. The result found that there is significant influence of E-WOM on repurchase intention. Themba et al. (2013) examined the motivation of E-WOM among university students and observed that students search for E-WOM to get engaged in seeking some opinion which ultimately and positively influence their purchase decisions. Jalilvand and Samiei (2012) who studied the effect of online reviews in tourism business found that online reviews

significantly impact on travelers' final decision to repurchase.

Conceptual Framework



The researchers developed the conceptual framework to find the factors, which have influence on repurchase intention towards Samsung smartphone in Bangkok, Thailand.

Figure 1: The Conceptual framework **Hypotheses**

H1o: Perceived value has no influence on trust toward Samsung smartphone

H2o: Perceived value and perceived quality have no influence on customer satisfaction toward Samsung smartphones

H3o: Perceived quality has no influence on E-WOM toward Samsung smartphone

H4o: Trust, customer satisfaction, brand attitude, and E-WOM trust have no influence on repurchase intention toward Samsung smartphones.

Materials and Methods

The researchers applied descriptive research to describe and develop this study. The descriptive research is designed to describe the data and characteristics of the population in details (Patricia, 2013). Thus, the researchers used the questionnaire method to collect the data from the respondents. Also, Comfrey and Lee (1992) suggested that collecting the data from 300 respondents is a proper sample size to apply for a good research. Thus, for this study the researchers collected the data from 300 customers who have experience in using Samsung smartphone.

In this research, non-probability sampling was applied as sampling method by using judgment, quota, and convenience technique to collect the data. For the judgment sampling method, the researchers selected the locations to collect the data by using own judgment. The researchers designed to collect the data at crowded area in Bangkok which are Siam, Chidlom and Sukhumvit. Moreover, the researchers applied quota sampling method to collect the data at three locations that have Samsung shop in Siam, Chidlom and Sukhumvit areas. And the researchers collected the data from customers who are convenience to answer the questionnaire. Furthermore, the researchers applied

statistical treatment to analyze the data by MRL and SLR. In addition, the researchers performed the hypotheses testing by using the Statistical package for Social Science (SPSS)

Data Collection

The researchers collected the data from 300 respondents to obtain a primary source of data. Primary data is an original and unique data, which is directly collected by the researchers from an original source such as observations, surveys, questionnaires, case studies and interviews according to his particular research project (Hasan, 2016). However, in this study the researchers applied survey technique by distributing the questionnaires to the customers who are convenience to answer. The researchers distributed questionnaire on weekend started on 2nd Feb 2019 at 1.00pm to 4.00pm till 17th Feb 2019. Furthermore, the researchers distributed 100 questionnaires in each Samsung shop located at Siam Paragon, Central World, and EmQuartier.

Moreover, the researchers developed a set of questionnaire that was divided into 3 sections. The first section consisted of 2 screening questions. The second section consisted of 20 questions for the variables including 4 for perceived value, 3 for perceived quality, 3 for trust, 3 for customer satisfaction, 4 for brand attitude, 3 for E-WOM and 3 for repurchase intention. Furthermore, the researchers used five point Likert scale to measure the questions of each variable. The last part is demographics which consisted gender, age, education level, occupation, and income level. In addition, the Cronbach Alpha test to check the reliability of research instruments was applied as pretest. The results of alpha test of all variables are above 0.60 which means that all questions are consistent and reliable to apply as the research instrument.

Results and Discussion

The majority of the respondents in this study are female accounting for 57.7% of total population and aged between 21-30 years old accounting for 35%. The majority have bachelor degree occupying 49.7%. Moreover, most of them are employee accounting for 43% and have monthly income more than 30,001 baht showing 57%.

Table 1: Summary of Descriptive Analysis Result

Demograp h-ics Factors	Charact -eristics	Frequenc y (f)	Percent -age (%)
Gender	Female	173	57.7%
Age	21-30 years old	105	35%
Education level	Bachelor degree	149	49.7%



Occupatio n	Employee	129	43%
Income level	≥ 30,001	171	57%

Hypothesis testing analysis

For the hypothesis testing, the researchers applied SLR and MLR to investigate the hypotheses. Hypothesis one (H1) investigates the influence of perceived value on trust. The hypothesis two (H2) investigates the influence of perceived value and perceived quality on customer satisfaction. The hypothesis three (H3) investigates the influence of perceived quality on E-WOM. And the last hypothesis (H4) investigates the influence of trust, customer satisfaction, brand attitude, and E-WOM on repurchase intention towards Samsung smartphones. The result showed that all hypotheses are significant. Therefore, all null hypotheses are rejected. For H1, perceived value has significant influence on trust ($\beta=0.687$, sig.< 0.05). For H2, perceived value ($\beta=0.370$) and perceived quality ($\beta=0.594$) have significant influence on customer satisfaction (sig.< 0.05). In addition, H3 showed that perceived quality has significant influence on E-WOM ($\beta=0.246$, sig.< 0.05). Furthermore, H4o showed that trust ($\beta=0.189$), customer satisfaction ($\beta=0.303$), brand attitude ($\beta=0.258$), and E-WOM ($\beta=0.115$) have a significant positive influence on smartphone repurchase intention. By considering the beta coefficient, customer satisfaction has the highest beta value which is equal to 0.303 thus, customer satisfaction influences repurchase intention the most. For the summary of hypothesis testing are as follows:

Table 2: The Summary of Hypothesis Testing

Hypothesis	Standardized Coefficient	Significant Level	Results
H1o: Perceived value has no influence on trust toward Samsung smartphone	0.687	0.000	Reject H1o
H2o: Perceived value and perceived quality have no influence on customer satisfaction toward Samsung smartphones			Reject H2o
- Perceived value	0.370	0.000	
- Perceived quality	0.594	0.000	

H3o: Perceived quality has no influence on E-WOM toward Samsung smartphone	0.246	0.000	Reject H3o
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H4o: Trust, customer satisfaction, brand attitude, and E-WOM have no influence on repurchase intention toward Samsung smartphones			Reject H4o
- Trust	0.189	0.014	
- Customer satisfaction	0.303	0.000	
- Brand attitude	0.258	0.000	
- E-WOM	0.115	0.006	

Conclusions and Recommendations

The result of hypothesis 1 showed a significant influence of perceived value on trust which means that increasing perceived value will lead to higher trust. This result is supported by Adelia et. al., (2016) who studied the influence of perceived value and service quality on trust and found that perceived value has a significant positive impact on trust.

Moreover, the testing of hypothesis 2 showed a significant influence of perceived value and perceived quality on customer satisfaction which means that increase in perceived value and perceived quality will lead to higher customer satisfaction. Sufrin et. al., (2014) who investigated the impact of perceived quality, perceived value, and customer expectation on customer satisfaction also detected that customer satisfaction is influenced by perceived quality and perceived value. Thus, this finding supported the result of hypothesis 2.

In addition, the finding of hypothesis 3 presented that perceived quality has a significant influence on E-WOM. This means that E-WOM is the antecedents of perceived quality. O'Cass and Carlson (2012) found that there is an effect of perceived quality on E-WOM. The results supported the outcome of hypothesis 3. Furthermore, the results of hypothesis 4 showed that trust, customer satisfaction, brand attitude, and e-WOM have a significant influence on trust. In addition, customer satisfaction has the highest influence on repurchase intention. Chinho (2014) studied the factors affecting online repurchase intention and found that customer satisfaction is an essential factor of repurchase intention which is similar to the result of hypothesis 4.

The results clearly showed the importance of customer satisfactions towards repurchase intention which is directly related to the perceived value and perceived quality of smartphones offered by Samsung. This study showed that perceived value and perceived quality towards the brand can help smartphone providers to

increase customer's satisfaction. Samsung can increase customer's satisfaction towards their smartphones by focusing on product standardization, design development, and implementing new technologies and functions to satisfy customer needs and expectations. Also, they should set up the reasonable price for each smartphone version. Then, higher customer satisfaction will lead to higher repurchase intention. Moreover, smartphone producers should not ignore to improve their brand attitude. From the result of the research, a good brand attitude can generate repurchase intention. Therefore, to build good brand attitude perceived quality is the one of major factors they should focus. And to build brand attitude they might launch roadshow events to promote the brand and build a good reputation. Also, Samsung should increase trust of the customers by keeping what they promised according to the advertising and improving product value such as adding new functions, creating new designs and selling the products with the reasonable price.

Furthermore, Samsung might develop the strategies to increase positive electronic word of mouth which is by far the cheapest way of advertising. E-WOM is also the most efficient way of advertising as customers give more importance to peer customer reviews, posts, and comments than commercial advertisements. Therefore, increasing of positive E-WOM will lead to repurchase intention.

These suggestions will help the smartphone producers to generate better promotion mix, product strategies and marketing strategies which will result in raising sales and achieving more market share in the highly competitive industry.

Further Study

Since the smartphones market is changing rapidly, there can be some opportunities for extending this study in the future. For further research, the researchers would like to recommend to include the other smartphone brands such as iPhone, Huawei, Xiaomi and Oppo by using the research framework in order to know more about the effect of the factors on repurchase intention towards smartphones. Moreover, The researchers recommend to conduct the research in different areas and demographic such as different locations in Thailand to develop suitable marketing strategies and product strategies for each area. Furthermore, the researchers suggested to investigate the influence of possible variables on repurchase intention towards smartphones.

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Opportunities and Challenges by the Chinese Inbound Tourism to Bangkok

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Abstract

As the Chinese tourists spent more and more time to travel abroad, the Chinese outbound tourism has a rapid development at present. The purpose of this study is to find out and discuss the opportunities and challenges brought by Chinese tourists to Bangkok. The researchers adopted qualitative research method, by interviewed 15 Chinese tourists who were traveling to Bangkok during research period January to March in 2019 and 1 Thai travel agency, all the interviews were conducted as face to face in-depth interview. All the audio data was transferred to a transcript by the researchers and analyzed by constant comparison and thematic analysis technique. The study indicated that travel behavior and travel motivation of Chinese tourists had been changed nowadays and the current operation modes of Thai travel agencies rarely direct connect with the Chinese tourists. The opportunities and challenges brought by Chinese tourists present as the Chinese inbound tourism to Bangkok can obviously, enhance the income and employment opportunities of locals, but there still have some main challenges such as the loss of confidence in tourism safety and the imperfect local situations and non-standard industries.

Keywords: Chinese inbound tourism in Bangkok, travel motivation, travel behavior

Introduction

Chinese outbound tourism market had a rapidly development since the Chinese the government made 146 Approved Destination Status (ADS) destinations available to its people based on the bilateral tourism agreements that China signed with each counterpart foreign country. In nowadays, Chinese outbound tourism boomed in both travelers' number and travel frequency. As China promoted the second wave of the tourism industry, it became the largest source market in the world's tourism market in 2012, which spend 102 billion US dollars in that year (UNWTO, 2014). Growing numbers of articles about Chinese outbound tourism have been published in English academic journals, but most of the research is based on European countries and North America, rarely in Asian countries. As the Asian countries have the advantages of cheaper consumption and shorter distance, the research on this topic in Asian countries are meaningful. The travels of the Chinese people to Hongkong and Macao are widely considered in Chinese outbound tourism, this is due to the status of these two cities and special measures to control visit by Mainland Chinese. (Jin & Wang, 2016)

country is not just about looking at buildings, visiting islands, eating, drinking and having fun.

In 2013, the top 10 Chinese outbound travel destinations were Hongkong, Macao, South Korea, Thailand, Taiwan, the United States, Japan, Vietnam, Malaysia, and Singapore. Some long-distance destinations such as Australia, New Zealand and European countries were also popular (CTA, 2014). In 2017, Thailand had become the number one outbound destination of Chines tourists; it showed that the Chinese outbound tourism the market had rapid growth in Thailand in this half a decade. On the other hand, in 2017, Chinese outbound tourism market made a revenue almost THB 439 billion, as the largest market segment of Thailand tourism industry, which overtook THB 346 billion to the second market segment--Malaysia (TAT, 2017). In 2016, Thailand's tourism turnover was THB 2.51 trillion, an increase of 11.09% over 2015, and tourism revenue accounted for 17.7% of the total GDP. However, in the same year, global tourism revenue reached 5.17 trillion US dollars, accounting for about 7.0% of global GDP. It can be seen that the proportion of tourism revenue in the national the economy in Thailand is much higher than the global average. Traveling to a

Tourism industry is actually a highly comprehensive industry. On the one hand, it is a labor-intensive

industry, which requires considerable human resources, that is, tourism practitioners. On the other hand, tourism is a cross-industry, cross-regional system economy, involving many related industries in society. The development of tourism will affect local consumption and flow, and a series of economic indices such as price and house the price will rise accordingly, forming a new cycle chain. Sustained demand for passengers has led to the construction of local infrastructure (airports, railways, etc.), supporting industries (hotels, services, etc.) and artificial attractions. In turn, more capital and means of production will flow into tourism, which will also lead to an increase of foreign exchange, investment and employment opportunities. Chinese Tourism Academy (CTA) has conducted research with Ctrip, which is the largest Chinese outbound tourism service provider; the research is mainly about Chinese outbound tourism. Thailand remained the hottest and largest destination to Chinese outbound tourists, attracting 9.8 millions of Chinese tourists to visit in 2017 (CTA, 2017), and the package tour still the main travel form for the Chinese tourists.

How tourism and the new leaders in 2013 officially advocated and developed outbound tourism in China?

Jing and Wang (2016) noted that Chinese outbound tourists travel to Hong Kong and Macao are widely considered as outbound tourism, and in 2014, the top two destinations of Chinese outbound tourists were still these two cities. But according to the data of 2016, Thailand has become China's most popular outbound destination and China has also become the biggest contributor to Thailand's tourism economy. Rong and Tao (2018) considered that the growth of Chinese outbound tourism depended on the two new market segmentation, the Chinese international students and the Chinese senior tourists; they believe that these two groups of people have sufficient purchasing power and tourism motivation, contributing a considerable part of the Chinese outbound tourism market. Bao et al. (2018) considered that in China there is an elite middle-age cohort with ample buying power and considerable discretionary time to support the outbound travel of themselves and their children, and this group could possibly form a "the third wave" of Chinese outbound tourists, this coincides with previous literature studies, there will be some repetition on the population of the group of Chinese international students and Chinese senior tourists.

Methodology

The target population of this study is the Chinese inbound tourists who were traveling in Bangkok during 14th Jan to 25 the Mar in 2019. The location of selection for interview covered the Suvarnabhumi international

airport, the Central World shopping mall and the Central Phra Ram 9 areas, so as to obtain many Chinese tourists. One tourism agency-- Tera company was also covered to gain the data about the current situation of Chinese inbound tourism in Thailand. In this qualitative research, all the interviews were conducted with the type of face to face in-depth interviews, that 15 tourists and 1 travel agency lead to the data saturation already. Researcher selected sample of tourists randomly in place that Chinese often visit in Bangkok, interviews were taken place at Central Phra Ram 9, Suvarnabhumi the international airport, the Central World shopping mall and the Central Phra Ram 9 areas. All the respondents were asked "Are you Chinese? Can you speak English?" first, 10 informants at the airport were asked for interview, 2 rejected, lots of people at Central world mall rejected. Researcher contacted with 3 travel agencies and 2 requests were rejected. All the respondents were asked the basic checklist questions and the researcher asked more detailed questions according to the answers from respondents. The researcher tried to make every respondent express their opinions detailed and understand their meaning correctly. Most of the data were recorded by audios and transfer to transcripts by researcher. One was noted by the researchers as the respondent doesn't allow to record by audio, another one don't allow to take a photo as evidence. Constant comparison analysis is adopted in this study for analyzing the data from the Thai travel agency. Constant comparison an analysis is the most common technique for qualitative research, through flexible and repeated access to data "coding", this method can be more effective and accurately get to the true meaning of the respondents. Researcher repeated read the data showed in appendixes and trying to find out the most frequent "coding", and finally get the conclusion of data analysis. Thematic analysis is adopted for analyzing the data from Chinese tourists, by horizontal vertical comparing the answers from all informants; the researcher can easily get the findings. Thematic analysis is widely used in qualitative analysis, especially for novice researchers who are unfamiliar with more complex qualitative analysis techniques. The thematic analysis allows for rich, detailed and complex descriptions of the data.

Results

Findings and Conclusion

The travel types of Chinese tourists are no longer only focus on a group tour, more and more Chinese tourists are willing to experience the local culture and customs by themselves. The group tour is no longer satisfying the demand for travel aboard from the Chinese tourists, especial for the young generation. The language barrier is not a big the problem, as among the 15 answers of



Chinese informants, only one tourist mentioned that he was worried about the problem on communication with locals. As the Chinese people use to read Chinese language first, so they are willing to use them websites or cellphone applications of several famous Chinese online travel agencies to reserve and purchase their trip, such as Ctrip, Qunar, Taobao, Feizhu (belongs to Taobao company), Mafengwo, they all provide professional travel services toward Chinese people.

The current situation of Chinese tourists is the Chinese travel agencies provide a bridge to connect with Chinese tourists and Thai travel agencies. Thai travel agencies rarely direct contact with Chinese tourists, the normal way to gain the Chinese tourists resources are cooperation with Chinese tourists. The Chinese tourists have large numbers of tourists' resources which with the strong consumption power, that may lead to the increasing income of local people and the creating of work opportunities related to tourism, those are good situations for developing tourism industry rapidly. The challenges found are: Govern the traffic problem that is the problem of government level. Regulate the taxi industry so that tourists can be at ease to use this public service. The negative events or incidents such as Phuket tragedy will lead a bad perspective for foreign tourists, how to recovery this situation and rebuild the are no longer

focus on group tour, the individual traveling become popular among Chinese tourists. The researcher suggests that the Thai local travel agencies could create a new website for Chinese tourists who want to travel individually, or just add the Chinese language service for them, directly propagate Thai traditional culture to the Chinese tourists, to attract more Chinese tourist. So that the Chinese tourists will bring more benefits to locals. Based on the travel motivations of Chinese tourists, relax in leisure, spending holiday time, climate and environment factors, combined with the most frequent activities that Chinese tourists took, the Thailand government should increase its propaganda to other tourism areas. This not only ensures the over-use of tourism resources in areas like Pattaya, but also promotes the economic development of other areas. At the same time, Thai travel agencies can cooperate with the government to formulate corresponding tourism products and services. Transport problem is important, the Bangkok government should strengthen the control of traffic jam, if necessary, it can learn the governance methods of other international cities. Strengthen develop public transportation, such as build more subway to deal with the problem of road tension on the ground. Based on the findings of this study, the high-quality services and kind local people

are the main factors that attract Chinese tourists to visit, so the regulation of special industry related to

tourists' confidence would be another challenge. Publish reasonable tourism policies are also important because they can help both on attracting tourists and rebuild the tourism confidence.

Discussion

Soultana, T. K. et al (2015) showed that Chinese tourists are used to booking a trip with online travel agencies, Ctrip, Qunar and Taobao became the leading OTAs that are the same with the key finding of this study. Rong and Tao (2018) indicated that the Chinese international students and Chinese senior tourists would lead to a new wave of Chinese outbound tourism that would make more opportunities for the destinations. This study only discussed the Chinese tourists that traveled in Thailand, not only focus on the contribution of Chinese international students and Chinese senior tourists. Don and Dou (2001) mentioned that the consuming habits of Chinese people had been changed and traveling aboard was no longer considered as a luxury activity, that also be proved in this study, with the changing travel behavior and the enhancing of buying power from Chinese tourists, the Chinese outbound tourism is developing rapidly.

Implications

Based on the finding of this study, the Chinese tourists

tourism must be strict, such as the attitude of local tour guides and the taxi driver. The government should make some reprice policies to the taxi industry to match their basic need, instead of detouring or swindling money out of customers. That would be worst damaged on Thailand tourism image.

Limitations

This study can only provide Chinese inbound tourism-related operators with a deeper understanding of the meaning of the group, but it is beyond the scope of this study to provide normative recommendations for marketing and other behaviors. Compared with the number of inbound tourists in China, data from authoritative agencies and departments are obtained, analyzed and compared, and conclusions are drawn from previous literature. What's more, based on Bangkok, data obtained on Chinese inbound tourists who may have visited Thailand for the first time. Those who visit twice or more may choose other cities of Thailand, such as Chiang Mai and Phuket. The research may lack data collection on this aspect. Based on the findings of this study, the researcher suggests that the future study can divide the Chinese tourists as a different part of China. The findings showed that Chinese tourists from the north or south part of China have obvious different characters, lead to different travel motivation and travel behavior. Future research is better conducting quantitative research with a wider



range, cover more quantity to avoid particularity. Research on different types of travel is also suggested by the researcher, for example, only one tourist is business traveler, the data from this respondent may have particularity.

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POSTER PRESENTATION SCHEDULE

Date: 12 July 2019

Time 10.30 AM -12.00 PM

No.	Submission ID	Paper Title	Author(s)
1	3785	A Comparative Study for Clinical Efficacy and Safety Between 0.1% Jasmine Rice Cream with 2% Alpha Arbutin Cream for Facial Skin Whitening Effects in Thais	Chunwipa Rujiraworungsilp
2	3787	A Study for Clinical Efficacy and Safety of International Injection of Mixed Inco botulinum Toxin and Hyaluronic Acid Filler for Facial Lifting	Anatthinee Thammachong
3	3799	An Efficacy and Safety of International Injection of Leukocyte Platelet Rich Fibrin Solution for Facial Rejuvenation	Thewika Thearavanont
4	3839	Factors influencing intention to use LINE@ application for Bangkok people	Rywyn Uttamayodhin
5	3850	Efficacy and Safety of Picosecond Laser Using Combination of 1064 and 595nm for Acquired Bilateral Nevus of Ota-Like Macules (Abnom)	Waraporn Jaturapun
6	3852	An Exploration of Factors Influencing female Passangers' satisfaction and behavioral intentions Toward On-Demand Grabbike Motorcycle Taxis Usage in Bangkok and Perimeters.	Chompoonuch Saengjaronsuklert
7	3853	Factors Driving Serviced Apartment Growth in Bangkok- Perspective of Serviced Providers and Customers	Nutnicha Khunto
8	010	Daytime Sleepiness and Impaired Sleep Quality among Medical Residents: Prevalence Rate and Their Contributing Factors	Supanat Thitipatarakorn, Thep Chalermchai



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CONFERENCE ABSTRACTS



A COMPARATIVE STUDY FOR CLINICAL EFFICACY AND SAFETY BETWEEN 0.1% JASMINE RICE CREAM AND 2% ALPHA ARBUTIN CREAM FOR FACIAL WHITENING

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Abstract

BACKGROUND: Fair skin has been considered as a long-lasting ideal beauty value in Asian countries, and the popularity of having fair skin is still increasing gradually in Thailand. Jasmine rice is the main source of world's nutrition and Thailand's economic crops, with beneficial usage in medical treatment. The main component of Jasmine rice is phenolic compounds, which show cutaneous benefits and activity towards skin disorders. Presently, an in vitro experiment conducted in laboratory demonstrates its benefit in skin whitening effect by suppressing melanogenesis via tyrosinase and TRP-2 inhibitory effects. Moreover, a study in human (in vivo) compared Jasmine rice cream with placebo cream, and found that Jasmine rice cream can significantly brighten up skin. However, there is no comparison in terms of whitening efficacy between Jasmine rice cream and others creams that are popular in general market, such as alpha arbutin.

OBJECTIVE: To compare the efficacy of 0.1% Jasmine rice cream with 2 % Alpha arbutin cream in the treatment of facial whitening in Thai patients.

METHODS: The study was designed as double-blind, randomized, and controlled clinical trial. A total of 22 patients (15 females and 7 males; age 20–55 years) were enrolled. The patients were randomly selected for application of either 0.1% Jasmine rice cream or 2% Alpha arbutin cream in a split-faced design (right and left side), and applied twice daily for 12 weeks. The primary outcome was assessed by using mean melanin index measured from Mexameter MX18 and photographs from VISIA®, evaluation was performed every 4-week interval. Secondary outcome were side-effects and patient's satisfaction, evaluated by questionnaires on 12th week.

RESULTS: All 22 patients completely participated in the study. Both groups demonstrated statistically significant reduction from the baselines at 4th, 8th, and 12th week respectively. And paired differences of mean melanin index showed 0.1% Jasmine rice cream has statistically significant effectiveness in facial whitening more than 2% Alpha arbutin cream at 4th and 8th week. However, global photographic scores compared between both sides of the face revealed no statistically significant in results. In terms of satisfaction, most patients rated 0.1% Jasmine rice cream as more preferable improvement method. No side-effect was detected in both groups.

CONCLUSION: 0.1% Jasmine rice cream has statistically significant effectiveness more than 2% Alpha arbutin cream, and no side effect was observed. Thus, 0.1% Jasmine rice cream represents as one of the alternative cream options for facial whitening.

Keywords: skin whitening, Jasmine rice cream, Alpha arbutin

Introduction

Fair skin has been considered as a long-lasting ideal beauty value in Asian countries. Currently, beauty and cosmetics business are growing rapidly with extensive production and distribution of whitening products, including the study of various chemicals to find

effective compounds for market competition, in order to satisfy the need of consumers.

Jasmine rice (scientific name: *Oryza Sativa*) is Thailand's economic crops, belongs to Gramineae family, originated in Thailand. It can grow well in tropical countries as edible food source; Jasmine rice



contains various vitamins and has medicinal and treatment properties.

The main Phytochemical or Phytonutrients in Jasmine rice is Phenolic compounds. In laboratory extractions, phenolic compounds that have been found most in Jasmine rice are P-coumaric (pCA), Ferulic (FA), and Caffeic (CA) respectively, which inhibit melanin production in cells through Tyrosinase inhibitory effect and TRP-2 inhibitory effect. In addition, a study conducted in human discovered that 0.1% Jasmine rice cream has whitening property, it can significantly brighten up skin without any side effect when compare with placebo cream.

Based on the limited data on the efficacy of Jasmine rice extracts, we conducted a randomized double-blind prospective study to compare its effectiveness with 2% Alpha arbutin cream. Our purpose was to find out whether 0.1% Jasmine rice cream is, in the future, one of the alternative cream options for facial whitening purpose.

Materials and methods

Twenty-two patients (15 females and 7 males; age 20–55 years) from Mae Fah Luang University Hospital, Bangkok, with skin color according to Fitzpatrick's skin type standard of 3-5 evaluated by physicians, who seek treatment and able to keep up with the follow-up process were enrolled for this study. The study was approved by the local ethics committee (REH-62061, 2019) and received informed consent from all patients. The patients were clinically examined thoroughly by dermatologists.

Coexistent skin disorder, lactation, pregnancy, and allergy to medications were criteria for exclusion. In addition, patients who have been exposed to any laser, chemical peeling, and treatment for facial whitening within 4 weeks prior to the enrolment were excluded from participation in the study. Likewise, patients who required hormonal drug for treatment were also excluded. At the baseline, general demographic data was recorded, including sex, age, skin type, occupations, and Sunlight exposure duration. All patients were treated for 12 weeks and followed up on 4th, 8th, and 12th week after starting the treatment respectively.

Study design

Enrolled subjects were randomly assigned to apply with 0.1% Jasmine rice cream and 2% alpha arbutin cream on each side of face. They were recommended to apply the cream twice a day, apply sunscreen in the morning and avoid sun exposure. No other medications or treatment for facial whitening were allowed during the study period. Appearance and packaging of both agents were identical and were provided the

pharmaceutical companies (S U B CORPORATION CO., LTD)

To determine the skin type, Fitzpatrick's skin type system was used for evaluation by research physicians. Measure the skin coloration (Melanin) with Mexameter MX18 at the position of forehead, cheek, and lateral of mouth for 3 times, on 4th, 8th, and 12th week of treatment, calculate the average as mean melanin index. Then all adverse effects, such as erythema, scaling, edema, itchiness, dry skin, and other conditions were asked and monitored by physicians.

Photos were taken with the same camera setting and lighting conditions using VISIA® Complexion Analysis, compared photos of participants taken on 4th, 8th, 12th week with the one taken before treatment (0 week) by 3 physicians who did not involve with the study. And applied Global Aesthetic Improvement scale: no change (0), improved (1), much improved (2), very much improved (3), exceptional improvement (4). In addition, patient's satisfaction was also evaluated at the end of the study, divided into five scales: very dissatisfied (0), dissatisfied (1), neither satisfied nor dissatisfied (2), satisfied (3). Very satisfied (4).

Statistical analysis

The chi-square test and independent samples t-test were used to compare baseline characteristics of the two groups. Within-group Mexameter scores were assessed by Wilcoxon Signed Ranks test. Nonparametric Mann-Whitney U-test was applied to assess between-group clinical severity scores. The Chi-square tests were used to determine the satisfaction rate. SPSS version 23.0 software was used for statistical analysis. $p < 0.05$ was considered as statistically significant.

Results and Discussion

A total of 22 patients were enrolled in the study. Patients' demographic data are shown in Table 1. The majority were female, consisted of 15 patients (68.2%), and 8 patients were male (31.8%). All 22 patients have age range from 20-55, average age is 35.36 ± 6.34 , which completed the treatment period by using either 0.1% Jasmine rice cream or 2% Alpha arbutin cream. Patients' groups were divided into skin type III (50%) and skin type IV (50%). The mean duration for sunlight exposure during 10.00 – 16.00 daytime is 62.73 ± 24.77 minutes. None of the patients have any underlying disease.

Table 1 Patients' demographic data
Population (n=22)

Sex	
Female (%)	15 (68.2)
Male (%)	8 (31.8)
Mean age in years (range)+S.D.	35.36±6.34



Skin type		After 8 weeks of cream application in both groups,
Skin type 3 (%)	11 (50)	0.1% Jasmine rice cream and 2% Alpha arbutin cream,
Skin type 4 (%)	11 (50)	the group with 0.1% Jasmine rice cream has
		statistically significant differences in mean melanin
mean duration for sunlight exposure	62.73±24.77	index at $p < 0.05$, in which group that applied Jasmine
No underlying disease (%)	22 (100)	rice cream has lower mean than group that applied
		Alpha arbutin cream at 274.91±54.20 and
		279.17±52.57 in forehead area, 271.77±54.40 and
		276.58±53.72 in cheek area, 274.55±53.85 and
		278.21±52.68 in area at the corner of the mouth
		respectively. The data are as showed in Table 2, 3, and
		4.
		After 12 weeks, both creams have no significant
		difference in mean melanin index at forehead, cheek,
		and corner of the mouth. The data are as showed in
		Table 2, 3, and 4.
		When comparing mean melanin index, before and after
		application, within group that applied 0.1% Jasmine
		rice cream and 2% Alpha arbutin cream, it is found that
		mean melanin index was reduced on 4 th , 8 th , and 12 th
		week respectively, with statistically significant value
		treated with 2% Alpha arbutin cream was 13.6% very
		satisfied (5), 54.5% satisfied (4), 31.8% indifferent (3).
		The data are as showed in Table 6.

Treatment efficacy

Regarding to the study, after 4 weeks of cream application in both groups, 0.1% Jasmine rice cream and 2% Alpha arbutin cream, the group with 0.1% Jasmine rice cream has statistically significant differences in mean melanin index at $p < 0.05$, in which group that applied 0.1% Jasmine rice cream has lower mean than group that applied 2% Alpha arbutin cream at 284.11±54.13 and 289.15±53.47 in forehead area, 280.33±55.13 and 283.97±52.85 in cheek area, 283.11±55.25 and 286.92±53.06 in area at the corner of the mouth respectively. The data are as showed in Table 2, 3, and 4.

($p < 0.001$).

Average GAIS comparison done by physicians who did not involve with the study shown no statistical significant ($p > 0.05$), group that applied 0.1% Jasmine rice cream has higher GAIS average than group that applied 2% Alpha arbutin cream at 1.05±0.79 and 0.91±0.81 on 4th week, 2.05±0.72 and 1.86±0.71 on 8th week, 2.82±0.59 and 2.50±0.60 on 12th week respectively. The data are as showed in Table 5.

Patients' frequency distributions regarding their satisfaction after administration of 0.1% Jasmine rice cream and 2% Alpha arbutin cream for 12 weeks of treatment are showed in Table 6. Significant differences were observed between these 2 groups ($p > 0.05$). Group that has been treated with 0.1% Jasmine rice cream was 54.5% very satisfied (5), 36.4% satisfied (4), 9.1% indifferent (3). Group that has been

Table 2 Comparison of Mean melanin index at the position of forehead between group that applied 0.1% Jasmine rice cream and group that applied 2% Alpha arbutin cream. Measured before application, on 4th week, 8th week, and 12th week respectively (n=22)

	0.1% Jasmine rice cream		2% Alpha arbutin cream			
	Mean	S.D.	Mean	S.D.	z	p-value
Before	304.89	52.90	305.18	53.04	0.081	0.935
4 th week	284.11	54.13	289.15	53.47	3.495	<0.001*
8 th week	274.91	54.20	279.17	52.57	3.152	0.002*
12 th week	271.21	54.34	272.03	52.75	0.576	0.565

p-value from Wilcoxon Signed Ranks Test, * = The mean difference is significant at the 0.05 level.

Table 3 Comparison of Mean melanin index at the position of cheek between group that applied 0.1% Jasmine rice cream and group that applied 2% Alpha arbutin cream. Measured before application, on 4th week, 8th week, and 12th week respectively (n=22)

	0.1% Jasmine rice cream		2%Alpha arbutin cream			
	Mean	S.D.	Mean	S.D.	z	p-value
Before	301.55	53.87	300.70	52.92	0.887	0.375
4 th week	280.33	55.13	283.97	52.85	2.502	0.012*
8 th week	271.77	54.40	276.58	53.72	3.297	0.001*
12 th week	267.53	54.00	267.89	53.14	1.009	0.272

p-value from Wilcoxon Signed Ranks Test, * = The mean difference is significant at the 0.05 level.

Table 4 Comparison of Mean melanin index at the corner of the mouth between group that applied 0.1% Jasmine rice cream and group that applied 2% Alpha arbutin cream. Measured before application, on 4th week, 8th week, and 12th week respectively (n=22)

	0.1% Jasmine rice cream		2%Alpha arbutin cream			
	Mean	S.D.	Mean	S.D.	z	p-value
Before	304.09	54.38	303.52	53.03	0.609	0.543
4 th week	283.11	55.25	286.92	53.06	2.664	0.008*
8 th week	274.55	53.85	278.21	52.68	2.790	0.005*
12 th week	270.44	53.65	272.39	52.57	1.595	0.111

p-value from Wilcoxon Signed Ranks Test, * = The mean difference is significant at the 0.05 level.

Table 5 Average GAIS comparison between group that applied 0.1% Jasmine rice cream and group that applied 2% Alpha arbutin cream. Measured before application, on 4th week, 8th week, and 12th week respectively (n=22)

	0.1% Jasmine rice cream		2%Alpha arbutin cream			
	Mean	S.D.	Mean	S.D.	z	p-value
4 th week	1.05	0.79	0.91	0.81	0.566	0.571
8 th week	2.05	0.72	1.86	0.71	0.915	0.360
12 th week	2.82	0.59	2.50	0.60	1.941	0.052

p-value from Wilcoxon Signed Ranks Test, * = The mean difference is significant at the 0.05 level.

Table 6 patient satisfaction score (n=22)

	0.1% Jasmine rice cream		2%Alpha arbutin cream		p-value
	n	%	n	%	
Very satisfied(5)	12	54.5%	3	13.6%	0.010*
satisfied(4)	8	36.4%	12	54.5%	
indifferent(3)	2	9.1%	7	31.8%	

p-value from Fisher's Exact Test, * Significant at the 0.05 level firmness, and smoothness, as well as having benefit in fighting against dark spots and wrinkles formation.

This study is a randomized, double-blinded, prospective study, which aimed to compare efficacy and safety of 0.1% Jasmine cream with 2% Alpha arbutin cream for facial whitening purpose.

Mean melanin index has been reduced in both 0.1% Jasmine rice cream and 2% Alpha arbutin cream users on 4th, 8th, and 12th week, which can be inferred that 0.1% Jasmine rice cream and 2% Alpha arbutin cream are effective as facial whitening products. Moreover, 0.1% Jasmine rice cream demonstrated better efficacy in reducing mean melanin index than 2% Alpha arbutin cream at the position of forehead, cheek, and corner of the mouth on 4th and 8th week in statistically significant level.

When evaluating treatment result score from photography, we found that 0.1% Jasmine rice cream group, in general, tend to have better complexion improvement score than 2% Alpha arbutin cream group. However, these observations have no statistically significant, on 4th, 8th, and 12th week after application, because the observations were made with naked eyes, thus slight changes in melanin index cannot be noticed.

Based on these results, we considered 0.1% Jasmine rice cream as an effective agent that has

superior efficacy in facial whitening purpose when comparing with 2% Alpha arbutin cream. Therefore, 0.1% Jasmine rice cream could be added to the list of alternative facial whitening creams/options.

Limitation

There are two major limitations to our study. Firstly, the study was conducted on limited experimental duration. Secondly, the relapse time was not included in the evaluation. To our knowledge, this study is the first comparative study in comparing facial whitening efficacy between 0.1% Jasmine rice cream and 2% Alpha arbutin cream in Thai population.

Acknowledgement

There is no conflict of interest in this study, and no external funding has been received while the treatment was being performed in the study.

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A Study for Clinical Efficacy and Safety of Intradermal Injection of Mixed Incobotulinum Toxin and Hyaluronic Acid Filler for Facial Lifting

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Abstract

INTRODUCTION Facial laxity is commonly occur as major cosmetic concern. Several treatment modalities such as botulinum toxin and hyaluronic acid have been widely utilized for restoring elasticity and tightening the skin and are frequently used in the same anatomic area to provide volumizing and contouring with the movement reduction.

OBJECTIVE This study was determined the facial lifting effect of mixed botulinum toxin type A and hyaluronic acid filler in the same syringe and needle by intradermal injection technique.

METHODS AND MATERIALS Each of 10 patients underwent single treatment session with intradermal injection of mixed botulinum toxin type A and hyaluronic acid on upper the superior portion of frontalis muscles, the lateral part of orbicularis oculi and plastyoma muscles. Clinical evaluation was assessed by three blind dermatologists to determine the efficacy of facial lifting by using Global Aesthetics Improvement Scales and a validated facial grading scales. Biophysical evaluation parameters, elasticity and skin hydration were measured before treatment, immediate after treatment and at 15, 30, 60 and 90 days after the treatment session.

RESULTS This study showed immediately facial lifting effect after treatment with last longer than 90 days and also had effect on brow lifting, reduced forehead lines, and crow's feet more than marionette lines and nasolabial folds. Biophysical parameters showed the greatest improvements of skin elasticity and skin hydration. Most of the patients rated the therapeutic success as "very good" or "good" in facial lifting, facial tightening and skin hydration with no serious adverse events.

CONCLUSION Intradermal injections of mixed botulinum toxin type A and hyaluronic acid can improve dermal elasticity and tighten the facial skin especially in facial lifting, brow lifting, reduced forehead lines, and crow's feet, and have benefit from longer efficacy of both products when administered together.

Keywords: botulinum toxin, hyaluronic acid, intradermal injection, facial lifting effect

Introduction

As skin aging proceeds, the face becomes senile changes in volume, shape, and consistency. The physiologic and morphologic change in the bones, ligaments, muscles, fasciae, subcutaneous fat, and skin cause the skin elasticity decrease and facial laxity is commonly occur as major cosmetic concern. Several treatment modalities such as surgical and nonsurgical approaches have been widely utilized for cosmetic improvements. Surgical facial lifting is effective, but can be associated with scars and prolonged recovery times. While nonsurgical techniques including injections with filler and botulinum toxin, intense microfocus ultrasound (IMFU) are also simple and helpful.

Presently botulinum toxin type A is widely used for facial lifting. Many researchers studied for the other

off-label cosmetic in midface lifting by injection of diluted botulinum toxin type A into skin by intradermal technique and they showed that the lifting effect appeared immediately after treatment and statistically significant improvement of wrinkles and elasticity. With age, the amount of hyaluronic acid decreases, and, as a result, signs of aging start to show, such as loss of elasticity and volume in the skin, that leading to increased wrinkling. Various researches revealed hyaluronic acid filler in intradermal layer can stimulate collagen production, improve elasticity, skin texture, skin hydration, alleviation of rough skin surface and reduce pore size. Some study found that intradermal hyaluronic acid injections stimulate the production of type I collagen. This effect leads to increase skin elasticity and lifting effect.

Botulinum toxin type A and hyaluronic acid fillers are frequently used in the same anatomic area to provide natural looking outcomes by combining volumizing and contouring with the movement reduction. So far, there is no study that determine the facial lifting effect by using the combination of these agents in the single syringe.

Materials and Methods

The patients with symmetrical faces on both facial expression and expressionless were enrolled into the study. All patients had mild to moderate facial skin laxity with grading score of 1.5-2 and aged ranging from 25 to 50 years. All patients were injected for upper face-lifting, the superior portion of frontalis muscles and midface-lifting, the lateral part of orbicularis oculi and plastyoma muscles (Figure1.) with the combination of 1 ml botulinum toxin (50 unit) (Xeomin®, Merz Pharmaceuticals, Frankfurt, Germany) at 1:2 ml dilution (a vial of 100 U of INCO was reconstituted with 2 ml of sterile, preservative-free NSS) and with one syringe of hyaluronic acid (20mg/1 ml) (Belotero® soft, Anteis S.A., Geneva, Switzerland). Photographic documentation using Morpheus 3D® scanner (morpheus.co, Ltd., seoul, Korea) at baseline, days 0, 15, 30, 60 and 90 after treatment was collected for clinical evaluation. Independent clinical assessments of facial lifting will be conducted by three blinded dermatologists, using Global Aesthetic Improvement Scale (GAIS) 5-point scale and a validated facial grading scale. Patient satisfaction survey and side effects were recorded at the end of the study. Biophysical evaluations, Parameters assessed were the elasticity using Cutometer® MPA 580, and skin hydration using Corneometer® CM 825 prior to the treatment (baseline) and days 0, 15, 30, 60, 90 after treatment.



Figure1. Injection sites

Subjects' research profile, Subjects' Satisfaction, Subjects' side effects data were analyzed by using descriptive statistical analysis to provide descriptive information such as percentages, means, modes, medians, ranges and standard deviations. Inferential statistics set the statistical significance level at $p < 0.05$. The mean Global Aesthetics Improvement Scale

(GAIS) and a validated facial grading scale on the face during the Before, Immediate, Day 15, Day 30, Day 60 and Day 90 were performed using paired t-test statistics in the case of normal distribution. But if the data did not have a normal distribution, Wilcoxon Signed Ranks Test was used. To compared the mean effectiveness of skin elasticity and skin hydration in data collection 5 times (Before, Day 15, Day 30, Day 60 and Day 90) were used repeated measures ANOVA statistics and analyzed the average difference between each time by controlling errors by means of LSD.

Results and Discussion

Ten patients screened for the study, 8 females and 2 males were enrolled, all of the patients completed the study. The patients were recruited from an outpatient population. The mean age of patients was 38.40 years. None of them were taking any medication. All of them have 1.5-2.0 laxity score.

Efficacy

Clinical evaluation

The mixed botulinum toxin and hyaluronic acid filler in the same syringe had a significant improvement in clinical progression of facial lifting (statistical improvement of Global Aesthetics Improvement Scale, $P < 0.05$). After immediate injection of mixed agents show clinical improvement of facial lifting 5/10, much improvement 4/10, and 1/10 no change after immediate treatment. The mean of GAIS in immediate treatment was significant different with Day30th, Day60th, Day90th (p 0.009, 0.021 and 0.025, respectively)(Table1.). This result on each follow up visit has last longer than 90 days.

Table1. Comparison of mean GAIS after immediate treatment with Day 15, Day 30, Day 60 and Day 90

	Mean	S.D.	p-value
Immediate			
Day15 th	1.90	0.57	0.058
Day30 th	2.40	0.52	0.009*
Day60 th	2.10	0.74	0.021*
Day90 th	1.80	0.63	0.025*

p-value from Wilcoxon Signed Ranks Test

* The mean difference is significant at the 0.05 level.

For validated facial grading Scale of brow position, forehead line, marionette line, nasolabial fold and crow's feet of both sides, The mean of validated facial grading scale of brow position, forehead lines and crow's feet in before treatment were significant different with Day15th, Day30th, Day60th, Day90th ($p < 0.05$). The mean of validated facial grading scale of marionette lines and nasolabial folds in before treatment were significant different with Day15th and Day30th ($p < 0.05$). This results show the mixed agents have effect on brow lifting, reduced forehead lines, and crow's feet more than marionette lines and nasolabial folds. (Table2.)

Table2. Comparison of mean validated facial grading scale of brow position, forehead line, marionette line,

nasolabial fold and crow's feet of both sides before, immediate, Day 15th, Day 30th, Day 60th and Day 90th

Area	Day	Mean	S.D.	p-value
Brow position	Before	2.10	0.99	1.000
	Immediate	1.90	0.88	0.157
	Day15 th	1.00	0.82	0.005*
	Day30 th	0.90	0.74	0.010*
	Day60 th	0.80	0.42	0.016*
	Day90 th	0.80	0.63	0.016*
Forehead line	Before	2.30	0.82	1.000
	Immediate	2.30	0.82	1.000
	Day15 th	0.50	0.53	0.004*
	Day30 th	0.40	0.52	0.004*
	Day60 th	0.40	0.52	0.004*
	Day90 th	0.60	0.70	0.004*
Marionette line	Before	0.60	0.70	1.000
	Immediate	0.50	0.53	0.317
	Day15 th	0.10	0.32	0.025*
	Day30 th	0.10	0.32	0.025*
	Day60 th	0.40	0.52	0.157
	Day90 th	0.40	0.52	0.157
Nasolabial fold	Before	1.10	0.99	1.000
	Immediate	0.90	1.10	0.157
	Day15 th	0.60	0.70	0.025*
	Day30 th	0.60	0.70	0.025*
	Day60 th	0.60	0.52	0.059
	Day90 th	0.70	0.67	0.046*
Crow's feet	Before	1.90	0.99	1.000
	Immediate	1.90	0.99	1.000
	Day15 th	0.40	0.52	0.004*
	Day30 th	0.40	0.52	0.004*
	Day60 th	0.40	0.52	0.004*
	Day90 th	0.70	0.67	0.006*

p-value from Wilcoxon Signed Ranks Test

* The mean difference is significant at the 0.05 level.

Biophysical Evaluations

Biophysical parameters showed the greatest improvements of skin elasticity from baseline was observed at 30 days after treatment with mixed agents. In before treatment, there was a skin elasticity score (Cutometer) that was significant different from Day 30th, Day 60th and Day 90th, ($p < 0.05$)(Table3.). It suggests that placement of mixed botulinum toxin and hyaluronic acid within the dermis enhanced biosynthesis of new dermal compounds.

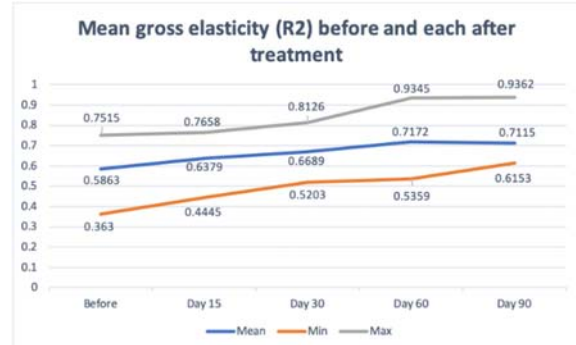


Figure2. Mean gross elasticity (R2) before and each after treatment

Table3. Comparison of mean elasticity of facial cutometer between before and after treatment on days 15th, 30th, 60th and 90th by Least Significant Difference (LSD) method.

	Mean difference	p-value	Lower Bound	Upper Bound
Before				
Day15 th	-.052	0.126	-.121	.018
Day30 th	-.083*	0.042	-.161	-.004
Day60 th	-.131*	0.005	-.211	-.050
Day90 th	-.125*	0.011	-.213	-.037

p-value from Wilcoxon Signed Ranks Test

* The mean difference is significant at the 0.05 level.

For skin hydration, it was found that the skin hydration score (corneometer) in the before treatment was significant different with Day 15th, Day 30th, Day 60th and Day 90th ($p < 0.05$)(Table4.). It shows that injection of both agents improve skin moisture from baseline and has last longer than 90 days.

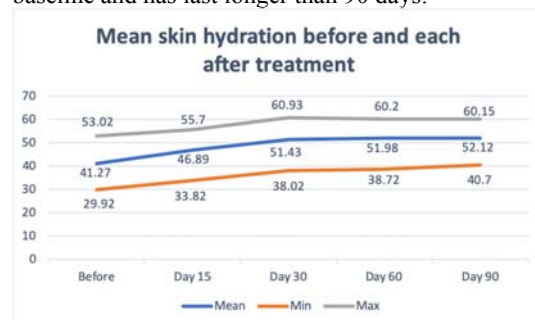


Figure3. Mean skin hydration score (corneometer) before and each after treatment

Table4. Comparison of mean skin hydration (corneometer) between before and after treatment on days 15th, 30th, 60th and 90th by Least Significant Difference (LSD) method.

	Mean difference	p-value	Lower Bound	Upper Bound
Before				
Day15 th	-5.617*	0.024	-10.317	-.916

Day30 th	-10.166*	0.002	-15.333	-4.999
Day60 th	-10.707*	0.001	-15.896	-5.518
Day90 th	-10.854*	0.000	-15.481	-6.227

Patient Satisfaction

All of the patients rated the therapeutic success as “very good” or “good” in facial lifting, facial tightening and skin hydration and some of them feel good in skin pigmentation, skin texture, corner of mouth lifting and improvement of nasolabial folds. No serious adverse events occurred during the course of the study. Almost patients had mild erythema lasting 30 minutes, bruise for 3-5 days and all of them feel pain for 15-20 minutes after injection. The serious adverse event such as asymmetry smile, numbness were not found in this study.

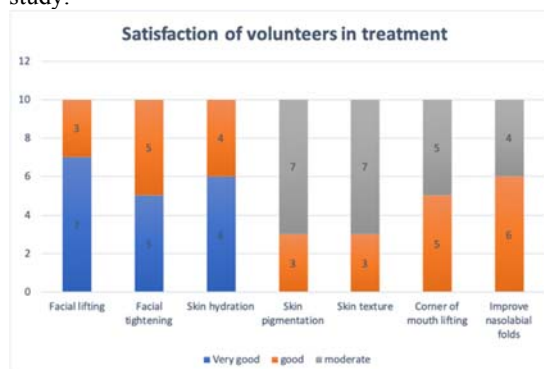


Figure4. Satisfaction of volunteers in treatment (n=10)

Discussion

From the previous studies, One split-face comparison study between intradermal injection of botulinum toxin and hyaluronic acid fillers for skin tightening demonstrated that both methods can improve skin elasticity but clinical facial tightening on the side treated with intradermal hyaluronic acid fillers injection is much better comparing to intradermal botulinum toxin injection due to stimulated the production of type I collagen. These effects of intradermal injections had shown to affect in facial lifting. So far, there is no study that determine the facial lifting effect by using the combination of these agents in the single syringe. The mixed botulinum toxin and hyaluronic acid filler in the same syringe had a significant improvement in clinical progression of facial lifting (statistical improvement of Global Aesthetics Improvement Scale, $P < 0.05$). After injection of mixed agents show immediately clinical improvement of facial lifting and these effect also has last longer than 90 days. For validated facial grading Scale of brow position, forehead line, marionette line, nasolabial fold and crow's feet of both sides, The mean of validated facial grading scale of brow position, forehead lines and

crow's feet in before treatment were significant different with Day15th, Day30th, Day60th, Day90th ($p < 0.05$). This results show the mixed agents have effect on brow lifting, reduced forehead lines, and crow's feet more than marionette lines and nasolabial folds.

Biophysical parameters from this study showed the greatest improvements of skin elasticity from baseline was observed at 30 days after treatment with mixed agents ($P < 0.05$). It suggests that placement of mixed botulinum toxin and hyaluronic acid within the dermis enhanced biosynthesis of new dermal compounds. For skin hydration, the moisture of the skin having an increase score from baseline with significant different ($p < 0.05$), It shows that injection of both agents improve skin moisture from baseline and has last longer than 90 days.

Limitation

The results of the study were limited by the use of a small sample size. In order to have a more comprehensive understanding of intradermal injections of both agents, future studies should consider expanding the sample size and assemble a more representative sample for more impact. Another limitation was a short follow up time period, however the remaining period of action of the mixed botulinum toxin and hyaluronic acid cannot be identified as it needs more time to follow up further for the actual duration of action

Conclusions

The mixture of hyaluronic acid filler and botulinum toxin type A treatment in a single needle for simultaneous injection offers several advantages over separate injections for both the patient and the injector. This study suggests that intradermal injections of mixed botulinum toxin and hyaluronic acid can improve dermal elasticity and tighten the facial skin especially in brow position, reduced forehead lines, and crow's feet. The patients receive an enhanced cosmetic experience by seeing the immediate effects of filler while waiting for the neurotoxin to take hold over the next several days and have benefit from longer efficacy of both products when administered together.

Acknowledgments

I would like to thank my supervisor, Dr. Paisal Rummaneethorn, M.D., for the patient guidance, encouragement and advice he has provided throughout my time as his student. I have been extremely lucky to have a supervisor who cared so much about my work, and who responded to my questions and queries so promptly. I would also like to thank all the members of staff at Mae Fah Luang Universities who helped me in my supervisor's absence.



Figure 5. The patient received the treatment with mixed intradermal botulinum toxin and hyaluronic acid on both side of her face. The pictures show clinical improvement of facial lifting effect at baseline, Day 30th, and Day 90th

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AN EFFICACY AND SAFETY OF INTRADERMAL INJECTION OF LEUKOCYTE-PLATELET-RICH FIBRIN SOLUTION FOR FACIAL REJUVENATION:

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Abstract

Background: The most obvious skin aging change is wrinkles which may cause low self-esteem. Aesthetic procedure for facial rejuvenation continues to grow overtime. Platelet-rich fibrin (PRF), the second-generation of platelet concentrate, has slow and gradual release of many growth factors over 10 days which help in accelerated tissue remodeling and regeneration. Nowadays PRF has been used in various field of treatment.

Objective: To evaluate an efficacy of leukocyte-platelet-rich fibrin intradermal injection for the improvement of facial wrinkles and for facial rejuvenation.

Methods: A total of twelve patients with grade 2 to grade 4 from Glogau Photo-damage Classification Scale were enrolled. All patients received PRF intradermal injection for 2 sessions with 4-week interval and were clinically assessed before and after treatment for a period of 16 weeks using Global Aesthetic Improvement Scale (GAIS) and 10-point photographic and descriptive scale.

Results: Twelve female patients with mean age of 48.58 years. After single treatment session a significant improvement in facial wrinkles from baseline were observed. Not only the facial wrinkles improvement, PRF also showed to be beneficial for skin rejuvenation due to significant reduction in UV spots and improvement of skin smoothness on crow's feet and NLFs. All of the patients were satisfied with the treatment. No serious side effects were found.

Conclusion: In this study found that PRF intradermal injection was effective treatment for facial rejuvenation. Not only improved facial wrinkles, but also improved other sign of skin aging. Besides, PRF injection provided significant long-term diminution of facial wrinkles. The procedure is cost-effective and easy to perform. Side effects found on this study were minimal. Patient satisfaction level was high.

Keywords: Platelet-rich fibrin, Platelet-rich plasma, wrinkles, L-PRF, PRP

Introduction

Skin aging is body process resulting from both intrinsic such as genetic factor and extrinsic factors (e.g. UV exposure, pollution). Aging skin can affect on individual self-confidence. Skin aging is characterized by reduction in skin thickness and extracellular matrix content that leads to alterations in the mechanical properties of the skin with reduced resilience and elasticity. Wrinkles are the most obvious change of aged skin. For facial rejuvenation, minimize the facial volume loss and reduce the appearance of wrinkles represent the main facial target in aesthetic medicine. There are many established treatments for facial rejuvenation included topical antiaging products, chemical peels, filler injection, botulinum toxin injection, energy-based device treatment and platelet-rich plasma (PRP) treatment.

PRP is an autologous solution of plasma which contains various growth factors include the platelet derived growth factors (PDGF), transforming growth factor beta (TGFb), etc. These growth factors promote tissue regeneration and rejuvenation by stimulation of fibroblasts. PRP can be classified according to their leukocyte and fibrin content: pure platelet-rich plasma(P-PRP), leukocyte- and platelet-rich plasma(L-PRP), pure platelet-rich fibrin(P-PRF) and leukocyte- and platelet-rich fibrin (L-PRF).

PRF is a second generation of platelet concentrate. The benefits of PRF over PRP are easy to prepare, inexpensive method and not require any anticoagulants or platelet activators. Moreover, it has ability to trap growth factors within fibrin matrix result in slow and sustained release growth factors over 10 days.



Materials and Methods

Study design

This study aimed to evaluate an efficacy of intradermal injection of platelet-rich fibrin solution for facial rejuvenation and conducted at outpatient dermatology clinic of Mae Fah Luang Hospital, Bangkok, Thailand. This study was approved by the Human Ethics Committee of Mae Fah Luang University.

Study participants

Twelve female patients (mean age of 48.58 years) with grade II to IV Glogau's Photo-damage Classification Scale were enrolled. Patients who performed any kinds of anti-aging or aesthetic treatment during the last 6 months prior to the study protocol were excluded.

Treatment protocol

Photographs was taken before and after treatment for evaluation. About 30mL of blood specimen was drawn from each patient into sterile plastic tube without anticoagulant and centrifuge at 700 rpm for 3 minutes. After centrifugation, the 1 ml of the middle layer in each tube was obtained in by 20 G needle for totally 6 ml. L-PRF was injected using 30G needle intradermally with serial puncture technique on the forehead wrinkles, crow's feet, nasolabial folds and cheek area (0.1ml/point for 60 point). Patients were advised to avoid sun exposure and applied moisturizer and sunscreen of SPF50 PA+++ daily.

Assessment

Photographs were taken before each treatment session (week0, week4) and 8-, 12-, 16-week follow-up visit using VISIA® (Canfield Limited, New Jersey, US). Photograph will be used to assess the improvement of general appearance of skin and wrinkles using Global Aesthetic Improvement Scale (GAIS) and 10-point photographic and descriptive scale respectively that assessed by independently blinded dermatologists. Biophysical evaluations, assessing the UV and brown spots, pores and texture measurements using VISIA®, skin smoothness and skin roughness using Visio scan® VC 98 before each treatment session (week0, week 4) and at follow up week 8, week12 and week 16 were performed. Pain score and adverse effects will be recorded immediate after each treatment session. Patient satisfaction score will be recorded at last follow-up (week 16).

Statistical analysis

The repeated measurement analysis of variance or ANOVA test was used to compare the data before and after treatment at each visit. The change from baseline in UV spots, brown spots, pore size, texture, skin smoothness and skin roughness at different visit were presented as mean and standard deviation.

Results and discussion

Twelve female patients were enrolled the study. Mean age of patient was 48.6 years. The Glogau Photo-damage Classification Scale of subjects was type II (50%) and type III (50%). All subjects had no serious underlying disease. No subjects had taken any medication. (Table1)

The mean (SD) of 10-point facial wrinkle score at baseline visit of forehead lines, crow's feet and nasolabial fold area were 3.17 ± 1.11 , 5.08 ± 2.54 , 6.33 ± 2.10 , respectively. At 8th week visit, the score were decreased to 2.0 ± 0.74 , 4.33 ± 2.23 , 5.25 ± 1.82 , respectively. The 10-point wrinkle score continuously reduced until last follow-up visit. (Table 3, Figure 1)

Table 1 Characteristics of the study population

Characteristics	n	%
Gender (Female)	12	100%
Age (y)		
Mean±S.D.	48.58±9.06	
min - max	40 - 60	
U/D (no)	12	100%
Drug (no)	12	100%
Glogau scale		
2	6	50%
3	6	50%

At baseline, the mean (SD) of 10-point facial wrinkle assessment score for forehead lines were 3.17 ± 1.11 . After single treatment, mean of forehead lines score decreased to 2.67 ± 1.07 , 2.00 ± 0.74 , 1.75 ± 0.62 and 2.25 ± 1.60 at week-4, week-8, week-12 and week-16 visit, respectively. There was statistically significant wrinkle reduction of forehead lines at week-4, week-8, week-12 and week-16 by compared with the baseline ($p < 0.05$). (Table 3, Figure 1)

Likewise, crow's feet and NLFs showed concordance results with forehead area. The mean 10-point facial wrinkle assessment score for crow's feet and NLFs were significantly reduced at every visit. (Table 3, Figure 1)

There was a significant difference of mean GAIS 5-point scale between week 4 and week 8, 12 and 16 with statistically significant at $p = 0.014$, 0.005 and 0.006 , respectively. At week 8,12 and 16, with mean GAIS increasing from week 4 equal to 2.00 ± 0.74 . (Table 2) Moreover, mean GAIS score at week 8 had a significant difference from week 12 and 16 with statistically significant at $p = 0.025$ and 0.034 , respectively. Mean GAIS of week 12 and 16 increased to 2.00 ± 0.74 and 2.08 ± 0.79 respectively

Not only the improvement in wrinkles, but this study also shown the significant reduction in UV spots and improvement of skin smoothness on crow's feet and NLFs. UV spots reduced in 8, 12, 16-week follow-up visit compare to baseline. The difference between each visit were 2.307, 2.896 and 3.061, respectively.

(Table4)

There was improvement of skin smoothness of crow's feet on each follow-up visit (week 8, 12, 16) compared to baseline. The difference between baseline and each

follow-up visit of skin smoothness were 13.864, 14.822 and 17.203, respectively with statistical significance, $p < 0.05$). (Table 4)

Table 2 Comparison of mean GAIS between each visit

Time	GAIS		Time	GAIS		p-value
	Mean	S.D.		Mean	S.D.	
Week 4	1.08	0.29	Week 8	1.58	0.51	0.014*
			Week 12	2.00	0.74	0.005*
			Week 16	2.00	0.74	0.006*

p-value from Wilcoxon Signed Ranks Test, * = The mean difference is significant at the 0.05 level.

Table 3 Mean 10-point facial wrinkle assessment score in each visit include forehead lines, crow's feet and NLFs

Time	10-point Mean	S.D.	Time	10-point Mean	S.D.	p-value
Forehead lines						
Week 0	3.17	1.11	Week 4	2.67	1.07	0.014*
			Week 8	2.00	0.74	0.002*
			Week 12	1.75	0.62	0.003*
			Week 16	2.25	1.60	0.046*
Crow's feet						
Week 0	5.08	2.54	Week 4	4.83	2.41	0.083
			Week 8	4.33	2.23	0.007*
			Week 12	3.92	1.98	0.006*
			Week 16	3.92	1.98	0.006*
NLFs						
Week 0	6.33	2.10	Week 4	5.83	2.12	0.014*
			Week 8	5.25	1.82	0.004*
			Week 12	5.17	1.75	0.006*
			Week 16	5.17	1.75	0.006*

Figure 1: Mean change of 10-point facial wrinkle score at each visit

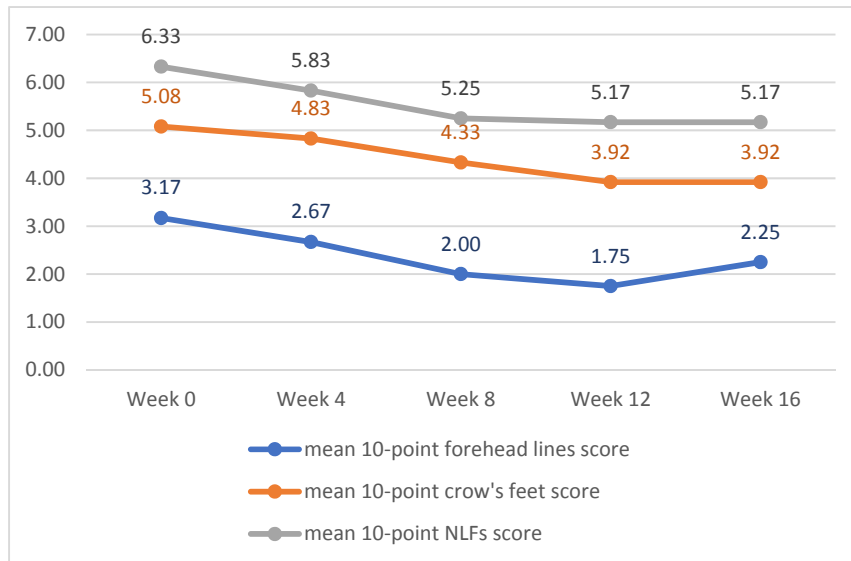


Table 4 Mean difference of UV spots, smoothness of crow's feet and smoothness of NLFs of each visit

UV spot				Smoothness crow's feet		Smoothness NLF	
Baseline	Follow up visit	Mean Difference	p-value	Mean Difference	p-value	Mean Difference	p-value
Baseline	Week 4	.964	.163	-4.598	.201	-4.692	.174
	Week 8	2.307*	.049	-13.864*	.000	-9.163	.059
	Week 12	2.896*	.011	-14.822*	.001	-18.780*	.000
	Week 16	3.061*	.019	-17.203*	.000	-22.240*	.000

* The mean difference is significant at the .05 level. Adjustment for multiple comparisons: Least Significant Difference

Figure 2: Photographs were taken at baseline (A), 4 weeks (B) and 16 weeks (C) after first treatment showed the significant improvement of forehead lines and NLFs.

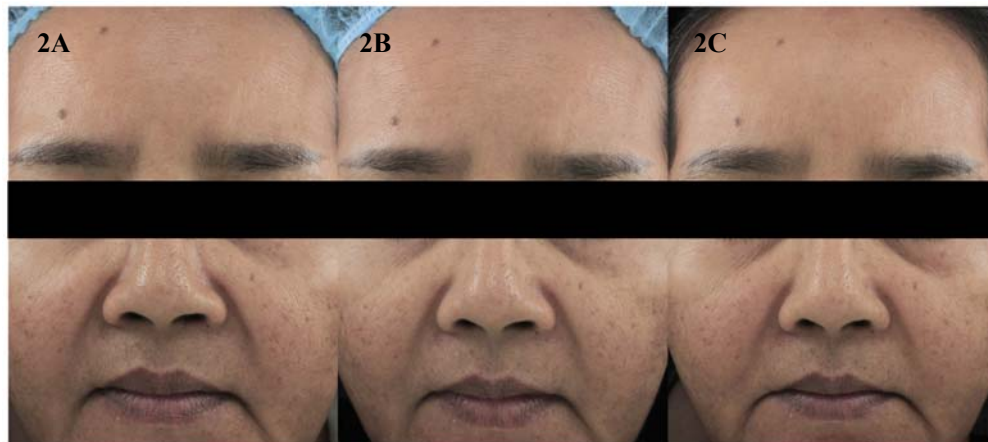
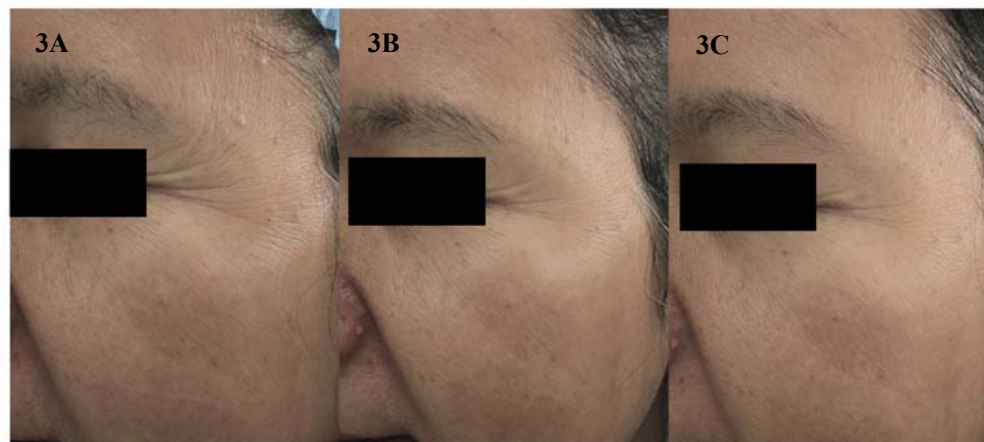


Figure 3: Photographs were taken at baseline (A), 4 weeks (B) and 16 weeks (C) after first treatment showed the significant improvement of crow's feet wrinkle.



At 12 and 16-week follow-up visit, there was significantly different of skin smoothness of crow's feet from baseline. Skin smoothness of crow's feet has increased by 10.224 and 12.605, respectively (statistically significant, $p < 0.05$). In the same way, skin smoothness of NLFs at 12- and 16-week follow-up visit was significantly different from baseline. Skin smoothness of NLFs increased from baseline to 18.780 and 22.240 respectively. (Table4)

For the patient evaluation after second treatment, 16.7% and 66.7% of patients reported excellent and good improvement respectively.

Transient early side effects such as skin erythema, edema and bruise were noted in all subjects, which resolved within few days. There were no serious side effects such as infection or hematoma. The mean pain score was 4.08 out of 10 from the visual analogue pain scale

Conclusions

In this study found that PRF intradermal injection was effective treatment for facial rejuvenation. Not only improved facial wrinkles, but also improved other sign of skin aging. Besides, PRF injection provided significant long-term diminution of facial wrinkles. The procedure is cost-effective and easy to perform. Side effects found on this study were minimal. Patient satisfaction level was high.

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Factors influencing intention to use LINE@ application for Bangkok people.

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Abstract

There are numerous organizations in Thailand have been utilizing web-based life and versatile texting (MIM application) apparatuses for Social media purposes and in users displaying correspondence methods and propelled publicizing, progressions and arrangements procedure. A couple of associations' focuses are to clearly manufacture bargains in light of the MIM users, and this examination separates the suitability of the use of the adaptable application. LINE@ has been illuminating and including online business with the application. LINE endeavor in extending bargains, and moreover its sufficiency of growing customer partition displaying learning and tendencies, customer correspondence, and customer relationship management. The aims of this paper are to find this business advising gadget, especially created for SMEs, has increasingly stepped results on customers correspondence and analysis. Including promoting to target markets and customers, and customers verifying and bargains. Moreover, the instrument was found reasonable in joined promoting and arrangements tries now and again. The examination further exhibited that the results were collected by those associations that have used the application at least once dependably and ordinarily, anyway dependably qualified results were collected in this study. In addition, this examination digressively addresses the noteworthiness of the creating MIM Platforms, and their relating impacts on web-based business and online entrepreneurs and dealers.

Keywords: LINE, LINE@, MIM, SMA, social media app, Thailand, instant messaging application, mobile instant messaging app, social influence, perceived usefulness, perceived ease of use.

Background of study

The uses and users of smartphones have spread widely and globally as well as mobile instant messaging (MIM) has turned out to be unavoidable, and truth be told, the consolidated client base of the best four informing or talk applications is bigger than the joined client base of the best four interpersonal organizations. The world's most broadly utilized informing applications. For example, Facebook and WhatsApp utilized more than 100 nations, trailed by Facebook Messenger utilized in 50 nations (Schwartz, 2016). Thailand is LINE's second biggest market compared to Japan's (Phoosuphanusorn, 2017). LINE is the Thai market head including over 50% of the all populations and users. Within excess of 40 million customers in Thailand, more than 90% of them or over 40 million are versatile web users. Be that as it may, imperatively, LINE is the most oftentimes utilized of any portable talk applications in Thailand with more than 30 million monthly active users (Phoosuphanusorn, 2017). Thus, of inescapable LINE

and LINE@ applications informing use by online sellers and buyers. The study and investigation centers around contextual investigation organizations in Bangkok, Thailand. Utilizing its LINE@ administration as a Business to Consumer (B2C) business visit instrument for advancement, PR, advertising and deals apparatus to reach and associate with their customers who use LINE application (MIM). LINE is the result of South Korea and Japan. The MIM stage and application, it offers the free balanced and gather informing, just as free household and worldwide audio and video calls, just as various extra highlights and administrations, for example, the LINE account, LINE Shopping, LINE Business, LINE@, LINE Webtoon, LINE Games, and etc. The stage administrations have been turning into the supporting column for LINE to wind up a brilliant entry. Line's vision isn't just to connect association between clients yet to likewise offer access to a wide scope of data and administrations, whenever, anyplace. The clients in LINE's most grounded

four markets are more connected with than expected in light of the fact that such a significant number of their loved ones utilize the Line application, and they use it normally for social interchanges. Line expressed in records that more than 60 percent of its month to month dynamic clients are on the application once a day, yet that figure bounces to over 70 percent of LINE four greatest nations. Creating high commitment like that gives Line and its LINE@ stage administration business customers an opportunity to utilize the application as a powerful social and business stage which has to go past visit to incorporate administrations and esteem include past simply informing. This research focuses on the SMEs business of mobile application. LINE@ in Bangkok, Thailand. It is an administration given by enabling the organizations to speak with their customers and potential ones. LINE@ enables organizations to send messages to all customers who included their LINE@ official account as a companion and tool for their business.

Literature review

Technology Acceptance Model (TAM)

Technology Acceptance Model (Davis, 1989). It plans to commonly clarify the definitive components for acknowledgment of Information Technology and the hypothesis has confirmed and clarified most utilization conduct of innovation by and large, TAM attempts to anticipate people's expectations toward utilizing an innovation dependent on their impression of its Ease of Use and Perceived Usefulness. It merits remembering that, earlier research having person's acknowledgment of portable administrations as their focal research center have utilized TAM to comprehend the selection of an alternate versatile (propelled) administrations.

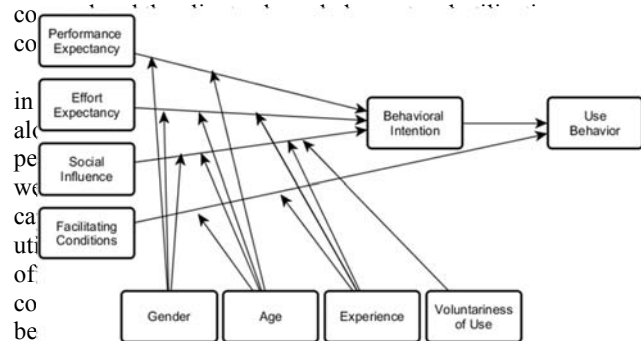
Cap has picked up help for being a ground-breaking model for anticipating the early selection of new advancements that can be utilized in different circumstances and in various settings (Park, 2009, Teo, 2009). Hat application inside a learning setting is useful. This model encourages us to dissect the purposes behind opposition toward the innovation

utilization in the learning procedure and would additionally empower us to take effective measures to improve client acknowledgment. As indicated by Davis (1989), frameworks are assessed for two principle purposes: 1) to foresee worthiness and 2) to analyze the reasons bringing about absence of acknowledgment so as to take legitimate measures to improve client acknowledgment.

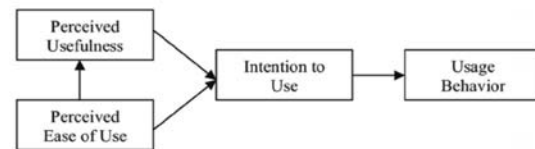
Unified Theory of Acceptance and Use Of Technology Model

Unified Theory of Acceptance and Use Of Technology Model (UTAUT) is one of the innovation

acknowledgment model has been created by (Venkatesh, 2003) brought together from eight existing model of acknowledgment innovation. They presented Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions as the center and direct determinants of client acknowledgment and use conduct. Moreover, they additionally presented Gender, Age, Experience, and Voluntariness of Use as the directing variables where they can be utilized to



account of a blend of a few past scales and the attainability of these scales has been tried.



Research Objectives

To determine the level of satisfaction of respondent using LINE@

To analyze the factor of Social Influence, Perceived Usefulness, Perceived Ease of Use affect Intention to Use LINE@.

To analyze the factors of Intention to use LINE@

To provide the recommendation for improve LINE@ usage.

Statement of problem

LINE@ has been being an effective versatile application with e-commerce clients, there still is some potential hazard that would frustrate client from tolerating it in Thailand. I would like to study the weaknesses and strengths of which factors effect to LINE@ for further improvements and recommendations.

Research topic

Factors influencing intention to use LINE@ application for Bangkok people.

Dependent variable

Actual Behavior.

Mediating variable

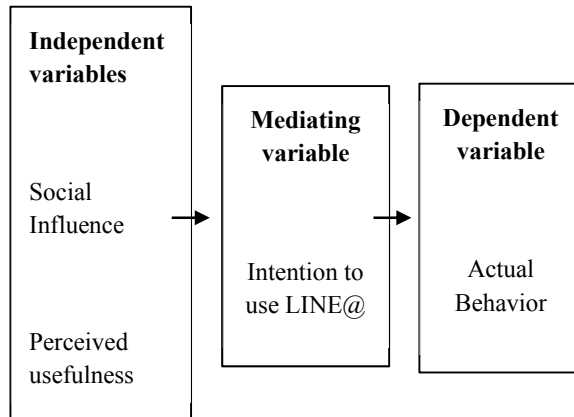
Factors influencing intention to use LINE@ application.

Independent variables

Social Influence, Perceived usefulness, and Perceived ease of use.

Scope of the study

The scope of this research emphasized on people



are Thai nationality, living or working in Bangkok or Bangkok metropolitan which age in the range 20-45 years old and have used LINE@ at least once. The survey uses questionnaire to find 400 respondents via Facebook and Line by distributing directly to the contact list. The independent variables are Social Influence which come from UTAUT model and Perceived Usefulness and Perceived Ease of Use from TAM model. We will investigate the influence of independent variables to Intention to Use LINE@ (dependent variable).

Definitions of terms Social Influence

Social Influence factor is defined as “the degree to which an individual perceives that important others believe he or she should use the new system”. (Venkatesh & Davis, 2000) Social Influence is the adjustment in conduct that one individual causes in another, purposefully or accidentally, because of the manner in which the changed individual sees themselves in relationship to the influencer, other individuals and society by and large.

Perceived Usefulness

How much the individual trusts that utilizing a specific data innovation framework would upgrade his or her activity execution. A framework high in Perceived Usefulness is one that a client accepts has a

positive utilization to execution relationship (Davis, 1989).

Perceived Ease of Use

How much the individual trusts that utilizing a specific data innovation framework would be free of exertion. An application Perceived to be simpler to use than another is bound to be acknowledged by clients (Davis, 1989).

Intention to Use

Expectation to Use essentially foresee real use conduct. Direct effect of Perceived Usefulness and backhanded effect of Perceived Ease of Use to both conducts aim and Actual Behavior showed the significance of Ease of Use of innovation acknowledgment. (Donghua Tao, 2009).

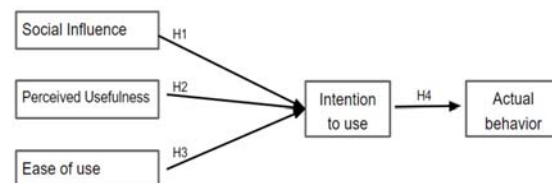
Actual Behavior

Actual Behavior is defined in terms of how often and frequency of social media used by the mobile users. (Fishbein and Ajzen, 1975)

Conceptual framework

The conceptual framework is constructed after studying the theoretical frameworks related to this research. Three independent variables are selected to be in the conceptual framework which are Social Influence from UTAUT model and Perceived Usefulness and Perceived Ease of Use from TAM model. Those independent variables are expected to identify the influence to Intention to Use LINE@. Then, we would like to find out more relationship between Intention to Use LINE@.

Research hypotheses



H2o	Perceived Usefulness has no effect on Intention to Use.
H2a	Perceived Usefulness has effect on Intention to Use LINE@.

Research methodology

This part includes the technique and devices connected in this investigation. There are six areas in this part which are explore structure, respondents and inspecting systems, look into instruments, poll configuration, snowball examining, and pilot test, technique for information social event and methods, Statistical treatment of information.

Research design

The research design describes the method of search used in this study. The researcher applied quantitative approach using descriptive and inferential statistic. First, descriptive analysis, this approach was used to identify the characteristic of 480 respondents' demographic data. Also using descriptive data analysis to analyze what extent of each variable impact to Intention to Use LINE@ application by measuring their answer on questionnaire. For inferential statistic, the researcher used the multiple linear regression method to determine if any statistic affecting to the dependent variable by the independent variables.

It used survey questionnaire distributed to the target group through online channel. The target group focuses on the Thai people who live or work in Bangkok or Bangkok metropolitan and have used or communicated via LINE@ application at least once. The data respondents have been collected in order to analyze the factors influencing Intention to Use LINE@ application. Descriptive research is being used to clarify the demographic data of respondents.

The questionnaire had been first distributed to the 30 respondents to be the pilot group checking the reliability of the instrument via online. Cronbach's alpha analysis is being used for the reliability test. Next, the complete and update version of questionnaire was distributed to gather the valid 400 respondents of target group via online. After gathering data from questionnaire, the statistical data were used to analyze and interpret. The demographic data includes gender, age, marital status, occupation, nationality and income. Multiple linear regression was used to determine if any statistical influencing to the Intention to Use LINE@ application by the independent variables which are Social Influence, Perceived Usefulness, Ease of Use.

Respondents and sampling procedures

Target population

The target population of this study are Thai people who live or work in Bangkok and have use LINE@ application at least once. The researcher focuses on this target group because age of 20 - 50 are generation Y who have used or communicated via LINE@ application once since LINE@ application are the first mover in social media application for business chatting. Especially the people who live or work in

H3o	Perceived Ease of Use has no effect on Intention to Use.
H3a	LINE@ Perceived Ease of Use has effect on Intention to Use LINE@.
H4o	Intention to Use has no effect to Actual Behavior of LINE@.
H4a	Intention to Use has effect to Actual Behavior of LINE@.

Bangkok or Bangkok metropolitan which are like to use social media application to communicate with family, friends, and for work as well.

Sample size

According to the total population of Thai people who live or work in Bangkok are 5,580,000 people. For the limitation of time to study, it is nearly impossible to get the all of respondents from the total population. Research selecting sample size have to realize of the confidence level which refers to the possibility that the final result will not vary from more than an absolute percentage from the actual population statistic. From 95% confidence level figure as below, when conducting a study on a population size more than 1 million, in order to get the reliability of the result +- 5% confidence level, it would be necessary to conduct 480 survey. This mean that in 95 out of 100 repetitions of the survey, the result will not vary more than +- 5 %. Hence, the 480 respondents are appropriate sample size to be for all population size of this research. (Hardwick research, 2014)

Sampling procedure

Convenience sampling technique was applied to this research. For using convenience sampling method to sample based on using people who are easily accessible, the researcher can distribute questionnaire by sending a link of online questionnaire to the contact list via social media network as Facebook and Line. All respondents are invited to do the survey without any discrimination.

Research instrument / Questionnaire design and pilot test

Questions design

In the research questionnaire is being used to be an instrument to collect data from respondents. First part of questionnaire, the researcher used the screening questions in order to select the appropriate respondents. The first screening question was used to screen only Thai nationality. The second question was used to qualify only Thai people who work or stay in Bangkok or Bangkok metropolitan. Third question was used to screen people who have used or communicated via LINE@ application at least once. The last questions, the researcher wants to know social messaging



application that respondents are using. For those who have not passed all of the screening questions, they are not allowed to complete the rest answer and are not count in. After the respondents passed the screening questions to be the suitable target representative, they will answer the next part of the questionnaire which is divided into 8 parts based on the conceptual framework.

Social Influence

The three questions to measure if the Social Influence factor influencing to behavioral for intention of using LINE@ application for messaging with friends and family. All of three questions use Five-point Likert scale to be the instrument to answer the questions. The ranging from Strongly disagree = 1, Disagree = 2, Neutral = 3, Agree = 4 and Strongly Agree = 5 respectively.

Perceived Usefulness variable

The four questions to measure if the Perceived Usefulness is influencing behavior of user to use LINE@ application. All of four questions use Five-point Likert scale to be the instrument to answer the questions. The ranging from Strongly disagree = 1, Disagree = 2, Neutral = 3, Agree = 4 and Strongly Agree = 5 respectively.

Ease of Use variable

The five questions to measure if the Ease of Use is influencing behavioral intention of user for using LINE@ application. All of five questions use Five-point Likert scale to be the instrument to answer the questions. The ranging from Strongly disagree = 1, Disagree = 2, Neutral = 3, Agree = 4 and Strongly Agree = 5 respectively.

Intention to Use variable

The four questions to measure if the Intention to Use influencing behavior for using LINE@ application. All of four questions use Five-point Likert scale to be the instrument to answer the questions. The ranging from Strongly disagree = 1, Disagree = 2, Neutral = 3, Agree = 4 and Strongly Agree = 5 respectively.

Actual behavior variable

The three questions to measure the behavior in using LINE@ application All of three questions use Five-point Likert scale to be the instrument to answer the questions. The ranging from Strongly disagree = 1, straightforward designs investigation. The characteristics of 480 respondents by using SPSS program. The demographic data that used are gender, monthly income, nationality, occupations, and marriage status in order to classify the characteristics of our respondents of LINE@. We also use descriptive analysis of the variables to see how the respondents answered on the questionnaire that could be applied for our LINE@ application.

Disagree = 2, Neutral = 3, Agree = 4 and Strongly Agree = 5 respectively.

The researcher also has opinion and satisfaction part in questionnaire which have 3 questions, the first question is to measure the popular features that user use in social media application. Second question is the level of satisfaction in using LINE@ application. The last question is an opened question for the opinion of respondent about LINE@ application. Furthermore, the last part of questionnaire, the Demographic factors was applied to gather the general demographic information of each respondent. This part was collected to the gender, age, marriage status, income and occupation.

Pilot test

Before the researcher distributed all questionnaire to the respondents. The researcher would like to ensure the reliable and acceptable questionnaire. Thus, the pilot test was conducted via online with 30 respondents to investigate the ambiguous questions or the misleading to answer. Cronbach's Alpha was used to be the instrument for finding the reliable result. To consider the result of Cronbach's Alpha, the score which being greater than 0.70, demonstrated the high reliability of the data.

Methods of data gathering and procedures

This research collected the primary data from questionnaire which align to the research objectives and conceptual framework. The questionnaires were distributed via online channel to collect the valid 480 questionnaires. The researcher distributed to the contact list of friends, family and acquaintances by passing the questionnaire link directly through Facebook and Line and also using the connection of friends to distribute the questionnaire link to their friends and their acquaintances again. From all of the participants, the researcher is able to receive the totally 480 set of questionnaires.

Statistical treatment of data

Descriptive analysis

Descriptive statistics are utilized to portray the essential highlights of the information in our exploration. They gave basic rundowns about the example and the measures. Together with

Inferential analysis

The inferential analysis has been analyzed base on SPSS program. The questions have been designed by using the Five-Point Likert scale to measure the agreement degree for all respondents. The following table shows the statistics to be used for inferential analysis



Table 1 : Inferential analysis

Hypotheses	Measurement scale	Inferential statistics
H1o : Social Influence has no effect on Intention to Use LINE@. H1a : Social Influence has effect on Intention to Use LINE@.	Five-point Likert scale	Multiple linear Regression
H2o : Perceived Usefulness has no effect on Intention to Use LINE@. H2a : Perceived Usefulness has effect on Intention to Use LINE@.	Five-point Likert scale	Multiple linear Regression
H3o : Perceived Ease of Use has no effect on Intention to Use LINE@. H3a : Perceived Ease of Use has effect on Intention to Use LINE@.	Five-point Likert scale	Multiple linear Regression
H4o : Intention to Use has no effect to Actual Behavior of LINE@. H4a : Intention to Use has effect to Actual Behavior of LINE@.	Five-point Likert scale	Simple Regression

Results and discussions

This chapter comprises of the statistical data of the dependent variable and independent variables and the outputs, results, and discussions. I used SPSS program to analyze the research hypotheses to analyze and understand the significant factors influencing Intention to Use LINE@ and Actual Behavior of Thai people in Bangkok or Bangkok metropolitan and to describe the demographic data of the target group

Reliability analysis of research instrument

I used SPSS program to find the reliability test result of 480 respondents and found that all the variables have the higher value than 0.70 that is considered as acceptable and determined the high reliability of the data (Tavakol, M., & Dennish, R., 2011). The result of the study is displayed in the below table.

Table 2 : The reliability testing result

Descriptive analysis

Descriptive analysis of demographic data

Table 3 : The data collected from the 480 respondents show the following results

Gender	Frequency	Percentage
Male	160	33.3
Female	320	66.7
Total	480	100.0

From Table 3, there are 160 (33.3%) of male

Variables	Number of items	Cronbach's Alpha	Result
Social Influence	3	0.785	Reliable
Perceived Usefulness	3	0.710	Reliable
Perceived Ease of Use	5	0.860	Reliable
Intention to Use	4	0.769	Reliable
Actual Behavior	3	0.794	Reliable

respondents and 320 (66.7%) of female respondents



Income	Frequency	Percentage
10,000 - 20,000 Baht	72	15.0
20,001 - 30,000 Baht	100	20.8
30,001 - 40,000 Baht	84	17.5
40,001 - 50,000 Baht	48	10.0

Age	Frequency	Percentage
18 - 24 years old	96	20.0
25 - 31 years old	260	54.2
32 - 38 years old	52	10.8
39 - 45 years old	52	10.8
46 - 52 years old	12	2.5
53 - 59 years old	4	0.8
60 years and above	4	0.8
Total	480	100.0

More than 50,000 Baht	176	36.7
Total	480	100

From Table 6, the data indicated that the most respondents have more than 50,000 baht for their

Table 7 : Descriptive statistics of Married status

Married Status	Frequency	Percentage
Single	372	77.5

Table 4 : Descriptive statistics of Age

From Table 4, the data indicated that the most respondents are ages 25 -31 years old 260 respondents

Occupation	Frequency	Percent age
Student	52	10.8
Teacher or professor	4	0.8
Government officer	24	5.0
Office worker	312	65.0
Business owner	68	14.2
Unemployed	20	4.2
Total	480	100.0

(54.2%), followed by 18-24 years old 96 respondents (20%). Next are 32 -38 year old 52 respondents and 39-45 year old 52 respondents (10.8%) , 46-52 years old 12 respondents (2.5%) and 53-59 years old 4 respondent and more than 60 years old 4 respondent (0.8%) respectively.

Table 5 : Descriptive statistics of Occupation

From Table 5, the data indicated that the most respondents are office worker occupation 312 respondents (65%). Second are business owner 68 respondents (14.2%), student 52 respondents (10.8%), Government 24 respondents (5%), Unemployed 20 respondents (4.2%), and Teacher or professor 4 respondents (0.8%) respectively.

Table 6 : Descriptive statistics of Income per month
income per month 176 respondents (36.7%). Second are 20,001 - 30,000 baht 100 respondents (20.8%). Next, they have income between 30,001 - 40,000 baht 84 respondents (17.5%), 10,000 - 20,000 baht 72 respondents (15%), and 40,001 - 50,000 baht 48 respondents (10%) respectively.

Married	104	21.7
Divorced	4	0.8
Total	480	100.0



From Table 7, the data indicated that the most respondents are have single status 372 respondents (77.5%). Next are have married status 104 respondents (21.7%) and divorced status 4 respondent (0.8%) respectively.

Table 8 : Descriptive statistics of Live or work in Bangkok

From Table 8, the data indicated that the most respondents are live or work in Bangkok 440 respondents (91.7%) and not live or work in Bangkok 40 respondents (8.3%) respectively.

Table 9 : Descriptive statistics of Nationality

Nationality	Frequency	Percentage
Thai	464	96.7
Non-Thai	16	3.3
Total	480	100.0

From Table 9, the data indicated that the most respondents are Thai 464 respondents (96.7%) and Non-Thai 16 respondents (3.3%)

Descriptive analysis of the variables

Table 10 : Descriptive statistics of Social Influence variable

Variables	Question	Mean	S.D
SI 6	Friends, people, and online shopping stores around me can influence my decision to use LINE@ application.	3.04	1.337

others have used.

Table 11 : Descriptive statistics of Perceived Usefulness variable

Variables	Question	Mean	S.D
PU 1	I find LINE@ useful in my personal and business life.	2.58	.998

Live or work in Bangkok	Frequency	Percentage
Yes	440	91.7
No	40	8.3
Total	480	100.0

SI 7	I will use LINE@ application for business purposes if It is widely used and recommended by my business partners and associates.	3.73	1.027
SI 8	If I use LINE@ for buying or selling products, most of the people and customers who are important to me regard it as useful.	3.16	1.123

From Table 10, Social Influence variable comprise of Three questions. Question number 3 which stated that "I will use LINE@ application for business purposes if It is widely used and recommended by my business partners and associates." has the highest mean. It would be implied that respondents are would like to use if

PU 2	Using LINE@ make me keep in touch with online product customers and sellers directly.	2.83	1.215
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Variables	Question	Mean	S.D.
PU 3	Using and getting communicated LINE@ enable me to get reconnected with new deals and promotions.	2.98	
PU 4	Using and communicating via LINE@ is easy and necessary for e-commerce business.	2.65	

From Table 11, Perceived Usefulness variable comprise of Three questions. Question number 3 which stated that “Using and getting communicated LINE@ enable me to get reconnected with new deals and promotions.” has the highest mean. It would be implied that respondents are would like to keep in touch with sellers to receive and keep updated with the new promotions.

Table 12 : Descriptive statistics of Perceived Ease of Use variable

Variables	Question	Mean	S.D.
EU 1	LINE@ has simple and easy to use platform.	3.31	.999
EU 2	LINE@ application functions and features are easy and convenient to use.	3.43	.990
EU 3	Sending picture and video on LINE@ are important to you.	3.21	1.218
EU 4	Sending stickers and Emoji on LINE@ are important to you.	2.50	1.416
EU 5	Making call and video call through LINE@ are important to you.	2.95	1.385

From Table 12, Perceived Ease of Use variable comprise of Five questions. Question number 2 which stated that “LINE@ application functions and features are easy and convenient to use.” has the highest mean. It would be implied that respondents are consider for the application functions are easy and convenient for them to use.

Table 13 : Descriptive statistics of Intention to Use variable

Variables	Question	Mean	S.D.
IU 1	As the success of LINE@ depends on being wider spread among users, you would recommend LINE@ to your friends, families, colleagues.	2.98	1.119
IU 2	You use LINE@ to communicate with customers and sellers.	2.01	1.269
IU 3	You use LINE@ to keep in touch and communicate with online companies' official account.	3.17	1.376
IU 4	You use LINE@ to communicate for business and work purposes.	2.43	1.378

From Table 13, Intention to Use variable comprise of Four questions. Question number 3 which stated that “You use LINE@ to keep in touch and communicate with online companies' official account.” has the highest mean. It would be implied that respondents choose to keep in touch and keep updated to receive and know the promotions by the online companies' official account.

Table 14 : Descriptive statistics of Actual Behavior variable

Variables	Question	Mean	S.D.
AB 1	You always check on LINE@ application.	1.78	1.227
AB 2	You spend most of the time check on LINE@ application.	1.82	.984
AB 3	You always check any updated deals and promotion via LINE@ application.	1.81	.943
AB 4	You always buy and sell products via LINE@ from their official online shopping stores.	.90	.300

From Table 14, Actual Behavior variable comprise of Three questions. Question number 2 which would be implied that respondents are using LINE@ application on their daily life.

Pearson's Correlation

Pearson's Correlation has been used to measure how strong a relationship is between two variables. It's also called Pearson's *R* is a correlation coefficient. The absolute value of the Pearson coefficient determines the strength of the correlation. Using Chee, J. D. (2015) guidelines for interpreting strength of association ($0.1 < R < 0.3$ a small correlation, $0.3 < R < 0.5$, a moderate correlation, $R > 0.5$ a strong correlation) (Hardwick research, 2014)

Table 15 : Pearson's Correlation

Independent variables	Pearson's Correlation (R)	Sig. (2-tailed)	Relations
Social Influence to Intention to Use	.400**	.000	Moderate Positive Correlation
Perceived Usefulness to Intention to Use	.624**	.000	Strong Positive Correlation
Perceived Ease of Use to Intention to Use	.633**	.000	Strong Positive Correlation
Intention to Use to Actual Behavior	.645**	.000	Strong Positive Correlation

Note: ** means correlation is significant at the 0.01 level (2-tailed).

From Table 15, They showed that Perceived Usefulness and Perceived Ease of Use has strong positive correlation to Intention to Use except Social Influence which moderate positive correlation to Intention to Use. It means that if LINE@ is simple to use and easy to interact. Users will intend to use LINE@ application. Intention to Use has strong positive correlation to Actual Behavior. Users will use LINE@ if the application serves their need in daily life so they will lead to Intention to Use and it will link to Actual Behavior as well. the strongest relationship with

stated that "You spend most of the time check on LINE@ application." has the highest mean. It Intention to use is Perceived Ease of Use, at 0.633 correlation.

Table 16 : Model summary from Multiple Linear Regression Analysis

Model	R	R. Square	Adjusted R square	Std. Error of estimate
1	.711	.506	.503	.69580

The result from Multiple linear regression analysis that used to determine how well a regression model fits with the data is shown in the table 16. The adjust R square value is 0.503 which means that 50.3% of the variance in the Intention to Use could be predicted from three independent variables which are Social Influence, Perceived Usefulness, and Perceived Ease of Use. On the other hand, this means that still left for another 49.7% of the variance in the Intention to Use that can be explained by other independent variables which were not in this study.

Table 17 : Model summary from Simple Linear Regression Analysis

Model	R	R. Square	Adjusted R square	Std. Error of estimate
1	.645	.416	.415	.51876

The result from Multiple linear regression analysis that used to determine how well a regression model fits with the data is shown in the table 17. The R square value was 0.416 which means that 41.6% of the variance in the Actual Behavior could be predicted from independent variables which is Intention to Use. On the other hand, this means that still left for another 58.4% of the variance in the Intention to Use that can be explained by other independent variables that were not included in the research.

Table 18 : Multiple Linear Regression Result

Variable	Unstandardized Coefficient		Standardized Coefficients	Sig.
	B	Std. Error	Beta	

Social Influence	.013	.039	.013	.743
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Perceived Usefulness	.448	.046	.389	.000		Standardized Coefficients (Beta)	P-Value (Sig.)	VIF	Results	Rank predictor (Absolute value)
Perceived Ease of Use	.414	.042	.407	.000						
Intention to Use	.444	.024	.645	.000						
<p>From the table 18, the result can be explained that two independent variables which are Perceived Usefulness, and Perceived Ease of Use has significant value less than significant level of 0.05 which means that they statistical significantly influences on Intention to Use, except Social Influence have no significant value more than significant level of 0.05. Therefore, the null hypothesis 2 and 3 were not supported. Moreover, independent variables that have significantly influences on Intention to Use. I can interpret the unstandardized Coefficient value (B) as every 1 unit increases in Perceived Usefulness, Intention to Use LINE@ will increase by 44.8% which is the most influence independent variable to Actual Behavior. Then followed by Perceived Ease of Use that every 1 unit increases, Intention to Use LINE@ will increase by 41.4%.</p>					H1 : Social Influence.	0.013	0.743	1.438	Not Supported	-
					H2 : Perceived Usefulness.	0.448*	0.000	1.559	Supported	1
					H3 : Perceived Ease of Use.	0.414*	0.000	1.650	Supported	2
					H4 : Intention to Use.	0.444*	0.000	1.000	Supported	-

Table 19 : Simple Linear Regression Result

Variable	Unstandardized Coefficient		Standardized Coefficients	Sig.
	B	Std. Error	Beta	
Intention to Use	.444	.024	.645	.000

From the table 22, the result can be explained that independent variables which is Intention to Use have less significant value than significant level of 0.05 which means that they statistical significantly influences on Actual Behavior. Therefore, the null hypothesis 4 was not supported. Moreover, independent variables that have significantly influences on Actual Behavior, the researcher can interpret the unstandardized Coefficient value (B) as every 1 unit increases in Intention to Use, Actual Behavior will increase by 44.4%.

Result of hypotheses testing

Note: * represents standardized coefficient (β) with P-value ≤ 0.05 .

From the result of hypotheses testing, two variables that are Perceived Usefulness, Perceived Ease of Use and Intention to Use have statistically influences to the Dependent variable which is Actual Behavior. Then, all hypotheses were supported except H1o Social Influence which was not supported all have used at 0.05 significant level or 95% of confident level. This result is supported by numerous literatures that indicated that there are a statistically significant influences between Perceived Usefulness, Perceived Ease of Use, and Intention to Use to Actual Behavior on LINE@. The case of Technology acceptance model (TAM) and social media Perceived Usefulness, Perceived Ease of Use, and Intention to Use have statistically significant to Actual Behavior to preferred LINE@ application. All in all, it would be implied that the panel of data set and analysis of the study is valid and credible.

Conclusion

The purposes of the research are to analyze the factors of Social Influence, Perceived Usefulness, Ease of Use



affect Intention to Use LINE@ application and Intention to Use affect to Actual Behavior. Also, to provide the recommendations for improvement of opened with three independent variables to predict Intention to Use (Mediating variable) and Intention to Use affect to Actual Behavior. The independent variables are the consist of Social Influence, Perceived Usefulness, and Ease of Use. The mediating variable is Intention to Use which is the dependent variable of Social Influence, Perceived Usefulness, and Ease of Use and Intention to Use is the independent toward the Actual Behavior.

Social Influence has no effect on Intention to Use LINE@, Thai people who stay in Bangkok do not concern to use LINE@ even surrounded people use it because the application for selling and buying products are related to users' preferences and conveniences.

Perceived Usefulness has effect on Intention to Use LINE@, Users can do more than chat and free call but also can doing business and communicate directly to sellers and buyers.

Perceived Ease of Use has effect on Intention to Use LINE@, users will think about the features on application such as PC version, purchase history, free calls, and etc. If the features meet their satisfaction, users will prefer to use.

Intention to Use has effect to Actual Behavior of LINE@, users will use LINE@ if the application serve their need in daily life so, user will put Intention to Use it and it will lead to Actual Behavior.

Recommendations and Further study

The results of the research in business market in Thailand, Southeast Asia, and one of the four noteworthy markets for LINE application the overarching sees and worldwide patterns in the writing of the developing significance of MIM for organizations, particularly SMEs. They further approve a portion of the explanations behind the fast and expanding appropriation by firms of these web-based life instruments. In particular, in the restricted contextual analyses in this, solid and important outcomes were gotten by the organizations that utilized LINE@ in a customary and continuous way. The analysts' points and destinations were to ponder and break down the viability of the utilization of the portable texting apparatus LINE@ by SMEs and organizations not only in Thailand but also in Southeast Asia and even in Europe and America. LINE company will have to develop more features and functions for SMEs such as purchase history, stocks or products availability, financing, and accounting parts as well. Importantly, LINE company will have to create the computer version of LINE@ in order to create more accessibility of customers when they would like to use it. The investigation effectively demonstrated that the

LINE@ usage. Moreover, the conceptual framework was devel

outcomes from organizations utilizing LINE@ are expanded deals, expanded client commitment and correspondence, and by and large, improvement of other online endeavors just as disconnected showcasing and advancements endeavors. For further study, we will extend the geographic regions and number of respondents to be all inside Thailand not just in Bangkok. Likewise, we will think about the appropriate responses and components of outsiders to dissect for the exploration too. The respondents will be both of Thai and foreigners so as to comprehend and make the future improvement productively. To receive and see profoundly and more we will create the in-depth interviews such as focus group and personal interviews directly from LINE@ clients for further proposals, upgrades, and actualizes to have increasingly productive information and data for the exploration. Before beginning an interview, we will let and give the respondents time to utilize LINE@ application to perceive the stage and highlights of LINE@ by letting them accessing and reusing LINE@ before doing the polls, meetings, and focus group. For the examinations, we have to reach and cover all about the significant resolutions with respect to the clients and customers' need fulfillments of LINE@. LINE@ has been developing for SMS and MMS informing. However, LINE company has to continue developing to keep up the acceptable dimension of existing customers both B2B and B2C. In the fact that with given enough course of events which fits and ground-breaking social informing application. After that, they will remain and extend the possibility to grow LINE@ clients, except if some new advancements will be embraced by the world head in errand people. LINE@ has potentials to grow for the full-service business for SMEs and e-commerce business. Lastly, LINE@ should find their alliances to invest and develop more in the future globally such as Instagram.

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EFFICACY AND SAFETY OF PICOSECOND LASER USING COMBINATION OF 1,064 AND 595 nm FOR ACQUIRED BILATERAL NEVUS OF OTA-LIKE MACULES (ABNOM)

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Abstract

The acquired bilateral nevus-of-Ota-like macules (ABNOM) is a common pigmentary disorder that has been clinically described for only two decades. Various treatment modalities have been introduced to treat ABNOM. Among them, Q-switched lasers, such as Q-switched ruby lasers, Q-switched neodymium yttrium aluminium garnet (Nd:YAG) lasers, and Q-switched alexandrite lasers, have been most commonly used, showing varying responses and complication rates. Due to the histopathology, melanocytes of ABNOM are mostly located in the subpapillary dermis, clustered in groups, and dispersed perivascularly. From previous studies found that vascular targeting lasers for melasma have been shown to elicit clinical improvements in the lesions and to decrease recurrence rates thereof. Accordingly, we suggest that a similar treatment may be an effective therapeutic method for treating ABNOM.

Keywords: Acquired bilateral nevus- of- Ota- like macules (ABNOM) ; Picosecond; Laser; Hyperpigmentation

Introduction

The acquired bilateral nevus-of-Ota-like macules (ABNOM) is a common pigmentary disorder that has been clinically described for only two decades, documented for the first time in 1984 (Hori et al., 1984). Lesions of dermal melanocytosis do not respond to chemical peeling, as the lesional melanocytes locate in the dermis. Various treatments have been using, but never to a significant extent as to be satisfactory to the patient. ABNOM is usually refractory to conventional treatment. Owing to increased cosmetic concern and limited treatment options, ABNOM often frustrates both patients and clinicians. Various treatment modalities have been introduced to treat ABNOM. Among them, Q-switched lasers, such as Q-switched ruby lasers, Q-switched neodymium:yttrium aluminium garnet (Nd:YAG) lasers, and Q-switched alexandrite lasers, have been most commonly used, showing varying responses and complication rates. (Dae SK, Sung BC, 2016) Due to the histopathology, melanocytes of ABNOM are mostly located in the subpapillary dermis, clustered in groups, and dispersed perivascularly. Vascular targeting lasers for melasma have been shown to elicit clinical improvements in the

lesions and to decrease recurrence rates thereof. (Geddes ER, et al, 2016)

Accordingly, we suggest that a similar treatment may be an effective therapeutic method for treating ABNOM.

Materials and Methods

Material and Equipments

1. Picosecond laser machine (PICOCARE; WONTECH CO., Ltd., Daejeon, Korea)
2. VisioFace® 1000 D
3. Mexameter® MX18
4. Topical anesthetic cream (EMLA® cream: lidocaine 2.5% and prilocaine 2.5%)
5. Inform consent form
6. Ethical Approval Document
7. Research declaration form
8. Inform consent form
9. Clinical evaluation record form
10. OPD card

Intervention

The subjects will be treated the ABNOM lesions with picosecond-domain 1,064-nm Nd:YAG laser (PICOCARE; Wontech Co. Ltd., Daejeon, Korea) treatment at the treatment settings of a 4-mm spot size, 2-3 J/cm², one pass on the pigmentary lesions. And a



595-nm, a spot size of 2 mm, a fluence of 0.6-0.7 J/cm², and one pass along on the vascular lesions.

Study Procedures

1. All participants are recruited for screening examination by using inclusion and exclusion criteria
2. All participants are informed and educated about all aspects the study, including objectives, study method, pre-and post-treatment instruction, benefits of the study, and possible adverse effects.
3. Full physical examination and facial evaluation will be recorded in clinical record.
4. Standardized photographs of all participants are taken prior to the study(as baseline) and at each follow up visit at 4th, 8th and 16th weeks by using VisioFace® 1000D (Courage & Khazala, Cologne, Germany)
5. The melanin index will be recorded by using Mexameter® MX18
6. Numbed the subjects' facial skin by applying EMLA® cream (lidocaine 2.5% and prilocaine 2.5%) covered by an occlusive dressing for 45 minutes before being washed off.
7. All enrolled participants are randomly assign to undergo picosecond laser
8. All participants will be given a schedule of appointment at 4th, 8th, 16th weeks after treatment.
9. Effects and complications of Picosecond laser will be evaluated and recorded.
10. Statistical evaluation of all data will be done. Statistical Package for the Social Sciences (SPSS) version 22.0 was used for data analysis.
11. The study results are summarized and published.

Inclusion criteria

1. Healthy individual
2. Both of male and female with clinical diagnosis of acquired bilateral nevus of ota-like macules (ABNOM)
3. Fitzpatrick's skin types III-IV
4. Age between 25-55 years old
5. Volunteer participants require to sign an informed consent form of benefits, risks and possible complications of treatment and publication of photographs.

Exclusion criteria

1. Participants who had accepted any laser or injection treatment in 6 months
 2. Underlying disease that will affect participants' safety, or interfere the study interpretation, i.e. Skin cancer, Immunologic deficiency or autoimmune disease, connective tissue disease, diabetes mellitus, and psychiatric disease.
 3. Any active skin lesion i.e. infection or inflammation in the treatment area
- 1000D comparison by three blinded physicians and evaluated by using melanin index and the Global

4. Administration of drug which can cause photosensitivity
5. Administration of drug which can cause bleeding disorder
6. Past history of keloid or hypertrophic scar after skin surgery
7. Pregnancy

Results and Discussion

General characteristics of the sample

Twenty participants with Acquired Bilateral Nevus of Ota-like Macules (ABNOM) were enrolled in the study. Nineteen participants completed the study, 15 females and 4 males, and one participant lost to follow up after 8th week due to her personal reason. Their age range from 25-55 years (mean±SD: 37.63±8.62).

All of the participants were performed Picosecond laser using combination of 1,064nm and 595nm and completed sixteen weeks follow up in this clinical study.

The details of the demographic data were shown in table 1.

Table 1: Characteristic of volunteer (n = 19)

Characteristic	n	%
Gender		
Female	15	78.9
Male	4	21.1
Age y(
Mean±S.D	37.63±8.6	
min -max	25 -55	
Color of lesion		
Slate-gray	11	57.9
Blue	4	21.1
Brown	4	21.1
Skin type		
3	5	26.3
4	14	73.7

Clinical evaluation by physicians

All enrolled participants had been taking a standardized photograph with the VisioFace

Aesthetic Improvement Scales (GAIS) to determine the improvement at 4th, 8th and 12th week

The post-evaluated GAIS with median score were showed in table 2

Table 2: GAIS and mean GAIS (n=19)

Time	GAIS		Time	GAIS		p-value
	Mea n	S.D		Me an	S.D	
Week 4	0.42	0.61	Week 8	0.26	0.81	0.317
Week 8	0.26	0.81	Week 16	1.47	0.62	<0.001*

p-value from Wilcoxon Signed Ranks Test, * = The mean difference is significant at the 0.05 level.

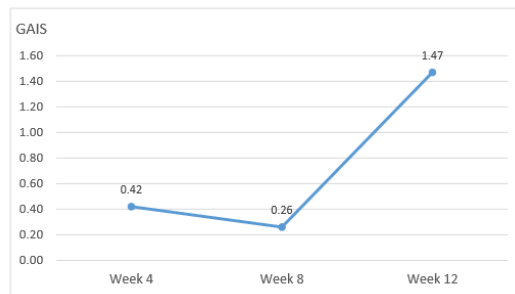


Figure1: Linear graph shows comparison of Global Aesthetic Improvement Scales (GAIS) by three blinded physicians.

Table3: Comparison of melanin index between baseline and after treatment at 4th week, 8th week and 16th week (n=19)

Time	Melanin		Time	Melanin		Mean Difference	p-value
	Mean	S.D		Mean	S.D		
Baseline	273.36	56.52	Week 4	283.87	59.52	10.51	0.020*
			Week 8	280.54	53.51	7.18	0.108
			Week 16	264.08	55.40	-9.28	0.033*
Week 4	283.87	59.52	Week 8	280.54	53.51	3.33	0.430
			Week 16	264.08	55.40	-19.79	0.001*
Week 8	280.54	53.51	Week 16	264.08	55.40	-16.46	0.007*

p-value from Repeated Measurement ANOVA, * = The mean difference is significant at the 0.05 level.

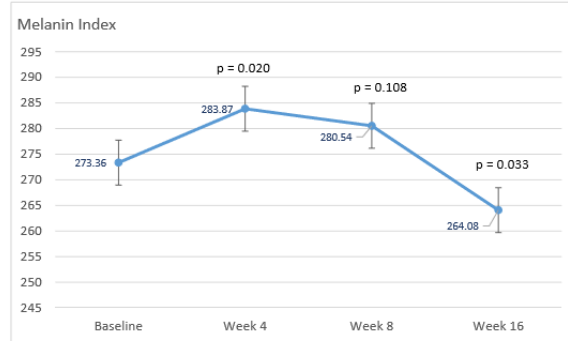
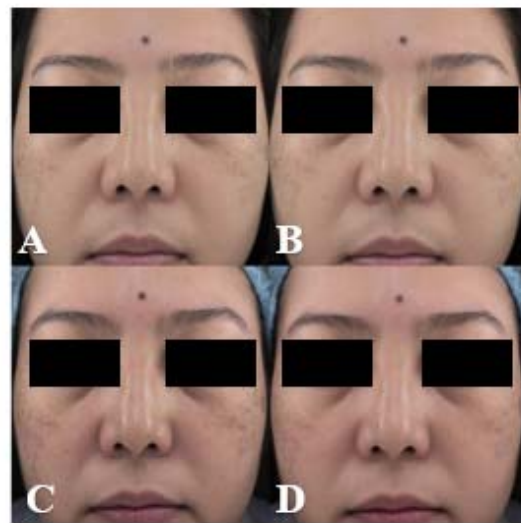


Figure2: The graph shows melanin index measured at baseline, 4th week, 8th week and 16th week after treatment

From table3 found that mean melanin index at baseline has statistically significant difference from 4th week and 8th week at p=0.020 and 0.033, respectively. At 4th week found that mean melanin index were increase from baseline equal to 10.51, and 16th week found that mean melanin index were decrease from baseline equal to 9.28.

At 4th week found that mean melanin index has statistically significant difference with 16th week at p=0.001, mean melanin index at 16th week decrease from 4th week equal to 19.79.

At 8th week found that mean melanin index has statistically significant different with 16th week at p=0.007, mean melanin index at 16th week decrease from 8th week equal to 16.46



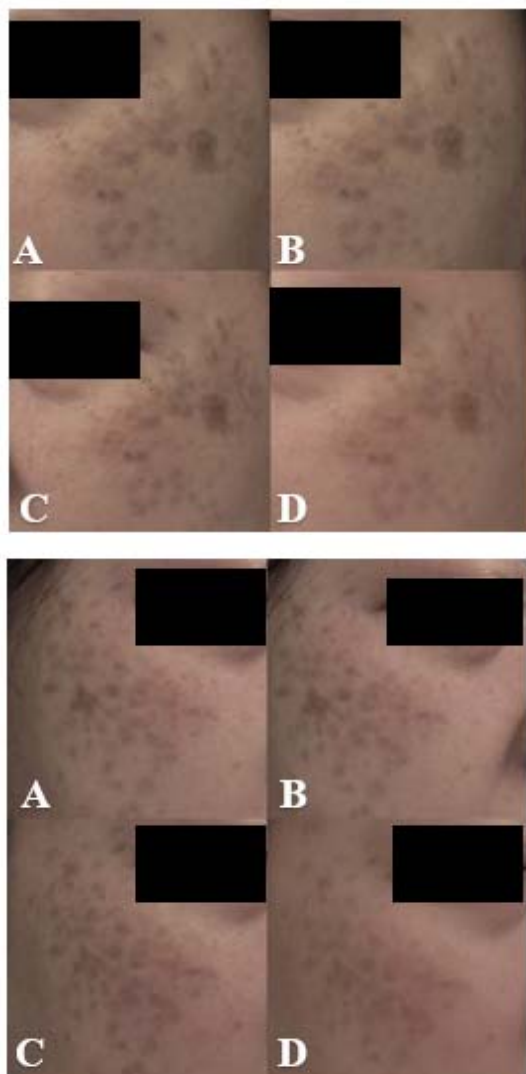


Figure3 (A) A 42-year-old female participant with ABNOM before treatment. (B) Color changes of ABNOM after first session of Picosecond laser treatment using combination of 1,064nm and 595nm at 4th week. (C) Color changes of ABNOM after second session of the treatments at 8th week. (D) 8 weeks after three sessions of treatments. Results were good, with a ~50% reduction in color.

Conclusions

ABNOM is one kind of pigmentary lesions that difficult to achieve the effective result. The use of picosecond lasers can be the effective modalities. Number of treatment sessions and intervals between Cho SB, Park SJ, Kim MJ, Bu TS. Treatment of acquired bilateral nevus of Ota-like macules (Hori's

treatments depends on physician's clinical judgement. The few studies examining shortened interval times and higher pulse treatments have shown comparable efficacy and safety to standard treatment regimens. Moderate erythema was often a desired end-treatment effect (end point) and number of passes and pulse count were based on the amount needed to achieve this effect.

In addition, post-inflammatory hyperpigmentation (PIH) after laser treatment also can occurs in first few sessions. One study attributed the noted PIH in histologic findings found that melanocytes of ABNOM are mostly located in the subpapillary dermis, clustered in groups, and dispersed perivascularly. The study noted a statistically significant correlation between the tendency of PIH after laser therapy and the number of melanocytes in the perivascular area in ABNOM and concluded that indirect vessel injury during the destruction of perivascular clustering of melanocytes by laser therapy could be responsible for increased PIH.

Furthermore, 595-nm long-pulsed dye lasers targeting vascular components have been found to elicit added improvement and long-lasting effects in melasma treatments. Also, a recent study showed that endothelial cells promote skin pigmentation through endothelin receptor activation. Therefore, interactions between vascular structures and perivascular melanocytes in ABNOM lesions could play important roles in hyperpigmentation.

In accordance with our study, the participants showed improvement in ABNOM lesions with picosecond laser therapy targeting vascular structures. We found that dilated vascular lesions were markedly decreased without destroying the adjacent skin.

Conclusion, we suggest that a combination of picosecond laser 1,064nm and 595nm can be a good option for treating ABNOM. The further study recommendation is studying in more population and the long-term follow up to see more clinical improvement.

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AN EXPLORATION OF FACTORS INFLUENCING FEMALE PASSENGERS' SATISFACTION AND BEHAVIORAL INTENTIONS TOWARD ON-DEMAND GRABBIKE MOTORCYCLE TAXIS USAGE IN BANGKOK AND PERIMETERS

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Abstract

This research will help to describe why female passengers decide to use GrabBike rather than normal motorcycle taxis. The aim of the study is to identify the factors influencing female passengers' satisfaction and behavioral intentions toward on-demand GrabBike motorcycle taxis usage in Bangkok and vicinities. A total of 408 female respondents were requested to respond via online. The findings indicate that factors influencing female passengers' satisfaction and behavioral intentions are: Image, Perceived Value, Perceived Ease of Use, Satisfaction, Perceived Safety and Trust. However, Perceived Usefulness has no significant influence on customer satisfaction. Moreover, Perceived Safety is the most important variable in this study.

Keywords: GrabBike, Female Passengers, GrabBike Motorcycle Taxis, Female passengers' Satisfaction, Female Passengers' Behavioral intentions, Perceived Safety, Perceived Ease of Use, Trust

Introduction

Thailand's traffic congestion is a major problem. Traffics during rush hours have pushed towards the existence of more and more motorcycle taxi drivers. Morning is believed to reach 91% extra travel time, while evening at 118% extra travel time. All these have pushed towards the use of motorcycle taxis as they are able to slip through shorter streets and congested roads (Fernquest, 2017; Lee, 2017). Motorcycle Taxis are known as "Win" in Thailand.

However, motorcycle taxi drivers in their orange vests are widely noted to have monopolistic power in the market. Some studies have revealed that they are closely tied to the mafia or criminal leaders in Thailand, allowing them to procure significant power in the market (Naveed, 2016).

In addition, according to the Nations (2017), a campaign was initiated in 2017, called the "Theung Wela Phuek" or time to intervene, to help protect the women that were being violated or sexually harassed in public transport. Motorcycle taxis are second to none as the majority of the victims take place on motorcycle taxis. With certain cultural dilemmas, many of these victims fail to report or are too afraid to report these incidents

In Thailand 4.0 era, businesses started developing mobile applications as a means to engage in providing customer services. GrabBike, where the concept of the traditional Thai motorbike taxi was

instilled onto an application, allowing normal users to be a part-time or full-time motorbike taxi drivers.

GrabBike, motivation to keep their passengers safe is one way to promote the use of Grab, especially for female passengers. Even though Thailand has experienced extensive online penetration, it has been still noted that GrabBike still lags behind Bangkok's ubiquitous motorcycle taxi (Bangkok Post, 2018).

When evaluating why this was the case, NIDA concluded that majority of the respondents believed that motorcycle taxis were more accessible and readily available everywhere, while some also indicated that due to their frequent use, they personally knew the drivers (Coconuts Bangkok, 2017). In contrast, GrabBike drivers are new to them, and therefore are more unsafe for commuting. This is still an issue that can affect the purchase intention to use GrabBike or motorcycle taxis. Thus, this study attempts at understanding what factors are affecting the female passengers' satisfaction and behavioral intentions towards on-demand GrabBike. The focus of the study is in Bangkok and its nearby vicinities.

Literature Review

Theory of Reasoned Action and Theory of Planned behavior

As presented by the Theory of Reasoned Action (TRA), intention has been identified as a strong forecaster that is a resultant to a certain behavior

(Fishbein & Aizen, 1975). The intention that is aforementioned is determined greatly by a person's attitude to a specific behavior and norms that are in regards to how the rest of the community would perceive that action. TRA has also been used as a footing for the Technology Acceptance Model (Davis, Bagozzi & Warshaw, 1989). Subsequently, there has been a proposal for perceived usefulness and perceived ease of use to be applied as preceding variables with the purpose to use a particular technology. According to Venkatesh and Davis (2000) and Venkatesh, Morris, Davis, and Davis (2003), there is a possibility for some of the given variables to escape its reach regardless of the robustness of its model. These variables, as defined by Lin, Shih, and Sher (2007) includes social and cultural aspects or can also be the interrelationship between both variables.

Technology Acceptance Model

Initially proposed and observed by Davis et al. (1989), the Technology Acceptance Model (TAM) has been acknowledged as an important central model for the research. To supply footing for tracking the effect of external variables on attitudes, intentions, and internal ideologies is the primary objective of TAM. Widely utilized in researches involving information system, TAM was modified and applied to the development of the Theory of Reasoned Action. As stated in the Theory of Reasoned Action identified by Fishbein and Aizen (1975), it is said that an individual's action serves as function of that individual's behavioral intention. Strictly speaking, behavioral intention to utilize information system is likely to be directed to actual definite usage. The process of attitude formation, the circumstances, and the anticipated result deriving from the initial action could be the elements involved in shaping behavioral intention. As stated by the technology acceptance model, the extent to which an individual accepts the fact that utilizing a particular system would increase the efficiency in his or her work performance is labelled as "perceived usefulness". In

Thus, utilizing the TAM model can aid this project by allowing to propose main hypothesis to grasp the customer intention for females on using Grab Bike Services for Travel.

Image

Image can be associated with the thoughts of mind towards a specific product, service, brand, or even an individual person. Thoughts of mind can be influenced via anything from links of memories to impressions, and satisfaction needs to word of mouth actions (Upamannu and Sankpal, n.d.).

Perceived Value

An ascribed worth of a product/service can be a dynamic element which is affected by benefits received, sacrifices offered, or a combination of both

essence, perceived usefulness is the customers' judgment in relation to the result of the action (Davis, Bagozzi, & Warshaw, 1992). To the contrary, Perceived Ease of Use (PEOU) was described as the extent to which an individual accepted the idea that utilizing a specific information technology would supposedly be little to no effort. Multiple theories identify that factors influencing the acceptance of technology are concerned to how consumer's attitude and behavior are laid. One of those theory, 'Theory of Reasoned Action (TRA)' which was evolved to the TAM, has been utilized by theorist and multiple literature on defining the acceptance of technology by a consumer. According to TRA, a behavior induced by an individual/consumer is a result of an intention defined by existing social values and norms (Fathema, Shannon & Ross, 2015). In other words, TRA links the intention of persuading an action with attitude of the consumer. In every theory relating consumer behavior and technology, the perceived factors are fundamental. According to Davis et al., (1989), TAM applies the Perceived Ease of Use i.e. PEOU, which is defined as the belief of the user on how effectively can a system up bring higher output with less input of effort (Davis et al., 1989). The second fundamental factor is Perceived Usefulness (PU), which outlays the belief of an individual that using a particular set of application/system can enhance the job performance of that person within an organization. There can be seen a positive relationship between PEOU and PU, that progressing positively in one fundamental factor can boost the other. The TAM attempts to prove the existence of significant relationship between external factors like Attitude of the consumers (A), Perceived Ease of Use (E), Perceived Usefulness (U), and Behavioral Intention (BI) and the core factor; The acceptance of technology. TAM claims that the variable 'U' i.e. (PU) and 'E' i.e. (PEOU) leans to have higher proportional affects towards the acceptance behavior of the consumers

sacrifice and benefits made (Faryabi, Kaviani, & Yasrebdoost, 2012). Thus, what the consumers are received in terms of attributes, features, or benefits against what the consumers are offering on site for the product/service can define the perceived value.

Perceived Usefulness

Perceived usefulness can be defined as the extent to which the practice or application of a certain product or service can benefit their work performance or individual performance amongst the organization /society (Sumaedi et al., 2015). The higher benefits from using the product, the greater the expectations met for a consumer.

Perceived Ease of Use

The study by Davis et al., (1989) defined that perceived Ease of use can be understood as the degree to which an end-user or a customer is able to identify the mechanism or working of a product/service without inputting extensive research or effort.

Behavioral intentions

Ozdemir and Hewett (2010) depicted the quality of service and the quality of the relationship to be antecedents of behavioral intentions.

Trust

A study by Halliday (2004) had some interesting findings. It demonstrated that trust played a positive role towards behavior intention in terms of sub sequential perception of relationship quality, which is established after the customer is served.

Satisfaction

Albert, Njanike and Mukucha (2011) indicated that depending on the attribute of the brand or the staff representing the brand, the variable of customer satisfaction was distinctive between male and female. The study concluded that females were more prone to expecting better services than males, and that the courtesy or the level of righteousness of the staff or the brand was more important to females than to males.

Perceived Safety

Safety is an element that is strongly premeditated by consumers when traveling by taxi. In order to gain success in attracting customers to choose Grab service, safety inspection is a key factor that must be considered. For the assurance of the safety for customers using Grab, rules and regulations are set as a prerequisite. First and foremost, the driver for the Grab service must pass the driver examination. They must also be able to provide a certificate for liability insurance. Furthermore, the driver must not have any sort of criminal record. A study by Ceccato (2017), it was noted that customer satisfaction would be more of a likely probability when a female is given the guarantee of perceived safety.

Materials and Methods

Conceptual Framework

The conceptual framework has been developed from Jani and Han (2011), Sumaedi et al.,(2015) and Wan Nor Ainun et al.,(2016). It can be understood that the primary focus for satisfaction was based on image, perceived value, perceived usefulness and perceived ease of use, whereas the main variables for behavioral intentions were trust, satisfaction and perceived safety.

is female passengers who have been GrabBike customers with ages 20-60 years old. According to Royal Thai Government Gazette, it shows that in Thailand, the total population is approximately 66

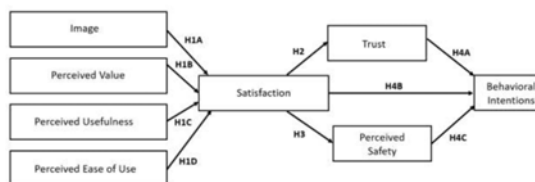


Figure 1: Conceptual Framework

Hypotheses

There are 9 hypotheses which was used to study the factors influencing passengers' satisfaction and behavioral intentions towards on-demand GrabBike motorcycle taxis usage in Bangkok and Perimeters as below.

H1A Image of GrabBike has significant influence on customer's satisfaction.

H1B Perceived value has significant influence on customer's satisfaction.

H1C Perceived Usefulness has significant influence on customer's satisfaction.

H1D Perceived ease of use has significant influence on customer's satisfaction.

H2 Satisfaction of the customer has significant influence on trust.

H3 Customer's satisfaction has significant influence on perceived safety.

H4A Trust has significant influence on behavioral intention.

H4B Customer's satisfaction has significant influence on behavioral intention.

H4C Perceived Safety has significant influence on behavioral intention.

Research Methodology and Measurement Variable

The data is collected via online method by using Google Forms. Snowball sampling method was also applied in the research. The questionnaire has 38 questions in total, 30 questions are adopted from previous research article. These questions are related to brand image, perceived value, perceived usefulness, perceived ease of use, perceived safety, trust, customer satisfaction and behavioral intentions. Five-point Likert Scale ranging from strongly agree (5) to strongly disagree (1) is employed to be a measurement as well as the nominal and ordinal questions.

Population and Sample

The target population is people who live in Bangkok and its vicinities and usually use or have ever used the services from GrabBike motorcycle taxis. The sampling unit the researcher selected from the target population

million in 2018, population in Bangkok Metropolis is the largest number at 5.6 million, 2.6 million are male, 2.9 million are female, and the rest of one thousand people are non-Thai nationality.



The sampling method that is applied in this study is non-probability sampling. The researcher applied Taro Yamane formula to calculate the sample size of GrabBike customers as follows:

$$n = \frac{N}{1 + N * e^2}$$

$$n = \frac{2,900,000}{1 + 2,900,000 * (0.05)^2}$$

$$n = 399.95$$

Where, n = sample size of the respondents

N = total target population size

E = confidence level at 95%

Total target population size of female GrabBike passengers in Bangkok is 2.9 million. Once the formula is applied, the sample size is very close to 400 samples. Therefore, 400 samples are valid for this research.

Pre-test

Reliability Test

Table1: Internal Consistency of the Scale Test (N = 30)

Variables	No. of Items	Cronbach's Alpha
Perceived Value	3	0.872
Image	3	0.952
Passengers' Satisfaction	4	0.938
Perceived Ease of Use	4	0.919
Perceived Usefulness	3	0.941
Trust	3	0.943
Perceived Safety	5	0.951
Behavioral Intentions	5	0.941

Cronbach's alpha value of greater than 0.6 means "valid and reliable" (Cronbach, 1951)

Result and Discussion

Descriptive Analysis

In this research, 408 respondents are collected via online. The table below shows demographic frequency and percentage of GrabBike female passengers

Table 2: Demographic Profile of Respondents in Terms of Age Range

	Frequency (f)	Percentage (%)
Age		
20 - 28 years old	251	61.5%
29 - 35 years old	108	26.5%
36 - 45 years old	43	10.5%
46 - 60 years old	6	1.5%

their destinations.

According to Table 2, it indicates that 61.5%, 26.5%, 10.5% and 1.5% of respondents are 20-28 years old, 29-35 years old, 36-45 years old and 46-60 years old respectively.

Table 3: Demographic Profile of Respondents in Terms of Status

	Frequency (f)	Percentage (%)
Status		
Single	390	95.6%
Married	18	4.4%

The majority of respondents is single with 95.6% and 4.4% are married.

Table 4: Motorcycle Taxis Passengers' Profiles in Terms of Frequency of Use

	Frequency (f)	Percentage (%)
Frequency of using motorcycle taxis		
5 times or below / month	238	58.3%
6-15 times /month	101	24.8%
More than 15 times /month	51	12.5%
Daily	18	4.4%

According to frequency of using motorcycle taxis, 58.3 % of respondents used 5 times or below per month, followed by 24.8% of respondents used 6-15 times per month. 12.5% of respondents used motorcycle taxis more than 15 times per month, and the rest of 4.4% used the service daily.

Table 5: Motorcycle Taxis Passengers' Profiles in Terms of Average Distance per Time in Using Motorcycle Taxis.

	Frequency (f)	Percentage (%)
Average distance per time in using motorcycle taxis		
1-2 kilometers	159	39%
More than 2 but not exceed 5 kilometers	185	45.3%
More than 5 kilometers	64	15.7%

In regards to average distance per time in using motorcycle taxis, the majority of them (45.3%) took motorcycle taxis more than 2 but not exceed 5 kilometers; followed by 39%, they took motorcycle taxis for 1-2 kilometers; and the rest of 15.7% took more than 5 kilometers to reach

	Frequency (f)	Percentage (%)
Time duration of using GrabBike		
Early morning – 9.00 am.	148	36.3%
09.01 am. – 03.00 pm.	151	37%
03.01 pm. – 08.00 pm.	63	15.4%
08.01 pm. – 11.00 pm	46	11.3%

Table 6: Motorcycle Taxis Passengers' Profiles in Terms of Time Duration of Using GrabBike.

Majority of respondents used the service at 09.01 am. – 03.00 pm. (37%), followed by 36.3% used the service in early morning – 9.00 am. 15.4% used GrabBike services at 03.01 pm. – 08.00 pm. The rest of 11.3% of respondents used the services at 08.01 pm. – 11.00 pm.

Table 7: Motorcycle Taxis Passengers' Profiles in Terms of Average Fare of Using GrabBike.

	Frequency (f)	Percentage (%)
Average fare of using GrabBike		
Below 50 baht	134	32.8%
50-100 Baht	182	44.6%
101-180 Baht	83	20.3%
181-250 Baht	9	2.2%

The majority of respondents (44.6%) spent their money on GrabBike fare at 50-100 baht in average, followed by 32.8%, they paid for GrabBike fare at below 50 baht. 20.3% of respondents paid 101-180 baht, and only 2.2% indicated that they paid average at 181-250 baht.

Inferential Statistics

Table 8: Correlation Matrix (Dependent Variables: Passengers' Satisfaction (PS) and Behavioral

Variables	Mean	SD	BI	PV	IM	PS	PEOU	PU	T	PST
BI	3.8348	0.68774	1							
PV	4.1961	0.50921	0.450*	1						
IM	4.1341	0.66472	0.568*	0.450*	1					
PS	4.3032	0.58441	0.666*	0.741*	0.542*	1				
PEOU	4.3061	0.66250	0.544*	0.548*	0.461*	0.611*	1			
PU	4.1282	0.60075	0.699*	0.676*	0.585*	0.675	0.776*	1		
T	4.1725	0.58131	0.743*	0.604*	0.673*	0.692*	0.594*	0.764*	1	
PST	4.0529	0.61332	0.758*	0.475*	0.612*	0.684*	0.418*	0.623*	0.743*	1

* All variables have Correlation that is significant at 0.05 level (1-tailed)

As per Table 8, the correlation matrix reveals that there is a strong positive correlation between variables at p-value 0.05. According to level of correlation strength (Evans, 1996), the relationship of the variables can be identified based on the value in Pearson Correlation table. Below are the range to identify relationship between variables.

- 0.00 – 0.19: "Very weak"

- 0.20 – 0.39: "Weak"
- 0.40 – 0.59: "Moderate"
- 0.60 – 0.79: "Strong"
- 0.80 – 1.00: "Very strong"

The overall variable has a value that is greater than 0.6, therefore, it can be implied as a strong positive relationship. There are two prominent pairs in the matrix representing strong relationships, are those Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) with 0.776 correlation, and Trust (T) and Perceived Usefulness (PU) at 0.764 correlation.

Table 9: The Summary Table of Hypothesis Testing

Research Hypotheses	P-value	Beta	VIF	Results
H1A Image of GrabBike has significant influence on customer's satisfaction.	0.000	0.180*	1.534	Supported
H1B Perceived value has significant influence on customer's satisfaction.	0.000	0.499*	1.864	Supported
H1C Perceived Usefulness has significant influence on customer's satisfaction.	0.127	0.087	3.648	Not Supported
H1D Perceived Ease of Use has significant influence on customer's satisfaction.	0.000	0.186*	2.521	Supported
H2 Customer's satisfaction has significant influence on trust.	0.000	0.692*	1.000	Supported
H3 Customer's satisfaction has significant influence on perceived safety.	0.000	0.684*	1.000	Supported
H4A Trust has significant influence on behavioral intentions.	0.000	0.335*	2.596	Supported
H4B Customer's satisfaction has significant influence on behavioral intentions.	0.000	0.162*	2.189	Supported
H4C Perceived safety has significant influence on behavioral intentions.	0.000	0.398*	2.548	Supported

* represents standardized coefficient (β) with P-value ≤ 0.05

As a result, Image (IM), Perceived Value (PV), and Perceived Ease of Use (PEOU) have significant influence on Customers' Satisfaction (CS) at the Standardized Coefficients (Beta) 0.180, 0.499 and 0.186 respectively. It means that Perceived Value (PV) has the strongest influence on Passengers' Satisfaction (PS). The p-value of these three independent variables are less than 0.05, which means H1A, H1B and H1D are supported. Therefore, it can be concluded that Image (IM), Perceived Value (PV), and Perceived Ease of Use (PEOU) have positive relationship with Customers' Satisfaction (CS). In contrast, Perceived Usefulness (PU) has no significant influence on Customers' Satisfaction. The p-value of Perceived Usefulness is more than 0.05, which means H1C is not supported.

Customers' Satisfaction (CS) has significant influence on and positive relationship with Trust (T). Besides, based on standardized coefficient (β), the impact level of Customers' Satisfaction (CS) on Trust (T) is 0.692. P-value is lower than 0.05; therefore, H2 is supported.

Customers' Satisfaction (CS) has significant influence on and positive relationship with Perceived Safety (PST). Furthermore, based on standardized coefficient (β), the impact level of Passengers' Satisfaction (PS) on Perceived Safety (PST) is 0.684. P-value is lower than 0.05; therefore, H3 is supported.

Trust (T), Customers' Satisfaction (CS), and Perceived Safety (PST) have significant influence on

Behavioral Intentions (BI) at the Standardized Coefficients (Beta) 0.335, 0.162 and 0.398



respectively. It means that Perceived Safety (PST) has the strongest influence on Behavioral Intentions (BI).

The p-value of these three independent variables are less than 0.05, which means H4A, H4B and H4C are supported. Hence, it can be concluded that Trust (T), Customers' Satisfaction (CS), and Perceived Safety (PST) have positive relationship with Behavioral Intentions (BI).

Multicollinearity issue is indicated by variance inflation factors (VIF), VIF of all independent variables are lower than 5.00. Therefore, the multicollinearity issue is not a critical problem in this research.

Conclusion

The ultimate aim of this research is to evaluate the factors and see how they influenced female passengers' satisfaction and behavioral intentions toward on-demand GrabBike motorcycle taxis usage in Bangkok and vicinities. It was presumed that via the improvement of these variables, GrabBike can upgrade the quality of services that were being offered by concentrating on variables influencing customer satisfaction, and eventually leading to behavioral intentions.

The results from Multiple Linear Regression (MLR) shows that customers' satisfaction is affected by three factors, which are Image, Perceived Value and Perceived Ease of Use, while customers' behavioral intentions to use GrabBike is affected by three factors, which are Trust, Customers' satisfaction, and Perceived Safety. As well as that, Single Linear Regression (SLR) is applied to test the influence of satisfaction on Trust. It is found out that satisfaction have positive influence on Trust. SLR is also applied to test the effect of satisfaction on Perceived Safety. The result shows that satisfaction has positive influence on Perceived Safety. For the correlation matrix of each variable, firstly, when comparing the first 4 set of variables that included customers' satisfaction: Image, Perceived Value, Perceived Ease of Use and Perceived Usefulness, the Multiple Linear Regression test (MLR) was conducted. It was indicated in the findings that H1A of Image, H1B of Perceived Value and H1D of Perceived Ease of Use were all significant and that they played a role in influencing the customers' satisfaction level amongst female GrabBike users. Interestingly, perceived usefulness was not a factor of significance; therefore, H1C was not supported. This is probably because the use of motorbike taxi in Thailand is very common and that the online presence and the consumer's adaptation to the use of applications is also solid; thereby, the usefulness was not a relevant factor

type of vehicles, conditions, models, the routes they follow, the minimum fuel efficiency standard, and that the car at hand must also not be over 5 years. On

considering there were various other competitors in the market with minimal switching cost (Bangkok Post, 2018).

In testing the 2nd set of hypothesis revolving around satisfaction and its influence on trust of its customers, H2 is supported. What this demonstrates is that Customers' Satisfaction (CS) has significant influence on Trust (T). This is consistent with the past studies where authors such as Halliday (2004) interpreted, trust is an antecedent of total satisfaction, while, Kim and Han (2008) have taken customers' satisfaction as equivalent to trust.

Thirdly, testing the 3rd set of hypothesis which was related to Perceived Safety, a crucial part of this study, considering it revolves around the intention to use GrabBike on female passengers, while the ongoing female harassment in these public transportation has been increasing rapidly in Thailand. H3 is supported. What this demonstrates is that the Passengers' Satisfaction (PS) variable has a significant influence on Perceived Safety (PST). Safety is an element that is strongly premeditated by consumers when traveling by motorcycle taxis. In order to gain success in attracting customers to choose GrabBike service, safety inspection is a key factor that must be considered by Grab. With that said, Grab should continue to work on the safety of its passengers, and although this study focuses on female, male passenger's safety should also be taken into consideration. A good safety protocol by Grab and a strong brand awareness on this element can allow customers to increasingly focus on the use of Grab.

The last set of hypotheses test was revolving around the impact of Trust, Customers' Satisfaction and Perceived Safety towards Behavioral Intentions. A Multiple Linear Regression (MLR) test was conducted due to the presence of more than two variables. Moreover, the beta test of standardized coefficient indicated that Perceived Safety (PST) has the highest value of 0.398, thereby demonstrating a crucial finding in this study, considering perceived safety was a major focus on this paper.

Implication for Practice

What the findings have indicated that Perceived Safety is the most important variable that affected customers' satisfaction and behavioral intentions amongst female passengers. With that in mind, the Grab services should focus on the use of improved safety protocols. According to Ngo (2015), it is also essential for a car registered by Grab to meet all conditions, with the inclusion of the

top of the numerous conditions, there are also requirements for evaluation and monitoring. Moreover, passengers are linked with the drivers via their phones.



This way, customers are able to assess the profile of their drivers before accepting the service. They are also given the opportunity to rate the drivers in hopes to make the quality of the service being offered better. Safety therefore, also plays a role towards the behavioral intentions of the consumers, and determining if the consumers would engage in that behavior or not.

Other variables such as Image, Perceived Value, Perceived Ease of Use, Satisfaction and Trust were also significant, and therefore Grab should focus on promoting their brand more to provide a better image for the company and allow customers to value them and trust them. Trust is very important and therefore online reviews and constant monitoring of their drivers should be implemented by Grab to ensure the highest safety standard. The usefulness can be further improved by focusing on developing improved GPS tracking system and safety alarms for women who feel like they are being harassed. This system would notify the relevant individuals without targeting a panic amongst the drivers through smartphone and the application, which can further put the customer's safety at higher risk. By having such a protocol, the drivers would also fear from attempting harassment or other criminal activities. This all in all would improve the perceived value of the consumers. This system was tested by Bhatt, Menon and Khan (2015), and it was noted to deter possible harassment. Additionally, Grab should create call-center-hot-line by embedding a button in Grab application (one click) in order for passengers to make direct emergency calls when any emergency cases taken place.

In conclusion, adapting these findings to improve GrabBike services can further upgrade its brand reputation and image in Thai society which can also maximize customers' satisfaction and increase revenue by having more GrabBike users.

Recommendations

For future research, more variables have to be considered. Presently, the study incorporated 9 variables based on academic findings and supports; however, it could take into consideration for other variables e.g. perceived price, promotions, accessibility, application quality, dress code and other variables that also play prominent roles in the usage of GrabBike services. In order to further improve the brands' presence in Thailand's market, it is important to study more on marketing – related variables in different geographical areas or regions because the passengers' personalities, attitudes and beliefs are varied from place to place, which can help in promoting the brand, and at the same time increase the possible usage, revenues and profits earned by the company.

Limitations

The limitation of the research would be based on the sensitive subject of perceived safety and its association to Thai culture, where the respondents might not be interested in or be less willing to provide an honest response to certain questions. Another limitation is regarding the theoretical models that are being used, which may not be fully applicable in Thai society. Besides, the GrabBike users' personalities, lifestyles, education levels, occupations and salary levels are not focused and included in this research; in which this might lead to unhealthy research conclusion when identifying and investigating upon the research outcomes. Lastly, the lack of price as the factor is a major limitation in this study, which is one of the predominant factors affecting the choice of transport in Thailand.

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Factors Driving Serviced Apartment in Bangkok – Perspective of Serviced Providers and Customers

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Abstract

The research investigated the factors that drive serviced apartment in Bangkok as growing fast in hospitality sector. Important factors that influence the decision to stay in a serviced apartment of residents and the growth of serviced apartments in the serviced providers' point of view. In this study, the researcher used interview technique to collect data from 11 interviewees including owners, managers and residents from six serviced apartments in Bangkok. The qualitative data were analyzed by using keywords-in-context analysis. The researcher realized that most of the data will have similar indicated factors. Growth of serviced apartment has important factors that is mentioned on this study which is people select the accommodation by providing many facilities, price and contract, satisfaction and location.

Keywords: Bangkok Serviced apartment, price, location, residents

Introduction

Bangkok has faced a fast growing hospitality development pipeline with a wide range of projects from local and international developers and operators accommodations out of which 169 serviced apartment units were completed in 3Q 2018. As a result, serviced apartment units in Bangkok totaled 21,316 and more than 3,500 units under construction are slated for completion in 2019-2020. The area is rapidly becoming a global hot spot for the service apartment, branded residence and extended stay sector, with activity levels ramping up considerably. All serviced apartment units seek to retain current lessees as well as attract more new clients amid intense competition in the market. (Phattarachai, 2018) serviced apartments, serviced apartments operating model, key considerations, merits and demerits of serviced apartments and the serviced apartment's global outlook. Marcus (2015), serviced apartments in Sweden: Is there a growth opportunity?

This paper explored and give some insight to those questions, identify opportunities and challenges, give an overview of the current situation of the long- stay market in Sweden, and finally provide rationale for whether there are growth opportunities for this segment or not managers of three of the largest operators of serviced apartments

The research used qualitative method to collect the data by using literature review, survey, and interview. The number of overnight travelers spent in serviced

Firstly, the role of population's characteristic and basic elements of choosing the accommodations.

apartments (including hostels and cabins) has increased by about 26 % between 2003 and 2012.

Phatcharin (2008), Factors influence the selection of serviced apartments by female business travelers Travelers considered location', service', 'precious experience', 'safety and security facilities' and 'amenities' as the top five most important factors of serviced apartment selection. Female business travelers who were staying in serviced apartments of the Ascott Group in Bangkok for at least one month.

The research used qualitative method to collect the data by using interview. These long-term residents were asked to respond to a questionnaire by rating the importance of each factor which affects their decision making on serviced apartments. ies of long-stay accommodation in Thailand

This investigates a current position of long-stay accommodation market in Thailand. To understand the market, the relationship between long-stay accommodation development and tourism trends are conducted. In addition, all relevant tourism alternatives for supporting long-stay tourism in the market will be exemplified.

The research used qualitative to collect the data by using theoretical framework based on literature review, relevant stakeholders interviews and is complemented by available qualitative data. The visitor will be more enjoyable and increase possibilities of spending their long stay or even retirement in Thailand.

Conceptualization

Secondly, the role of price is drawn to show expected future tourism trend.

Moreover, since satisfaction is one key basic element of tourism so long- stay accommodation ownerships are exemplified. Lastly, some people have low budget or fixed time to stay in the serviced apartment so contract is one of the factors of choosing, the study conceptualization model is illustrated as shown below.



Figure 3.1: Conceptualization Model by Author
This figure introduces studies related to objectives. Four components are presented in this figure.

Providing many facilities, a serviced apartment usually provides various facilities to serve the needs of business travelers and the vacationers.

Price and Contract is one of important tools which attracts customers to purchase their products.

Satisfactions, brand is defined as the institutionalized preferences of a client for a product or service based solely on a brand name or logo that they are satisfied.

Location, it is the one of important factors for travelers when deciding on choosing serviced apartments.

Methodology

The research is about finding factors which drive serviced apartment growing fast so the researcher focuses on people who stay in serviced apartment both serviced providers and customers. They always be in serviced apartments so they can clarify the reasons to answer this concept. First, calling the serviced apartment to ask for the permission from operators in front office. The researcher selected the qualified randomly sampling owner, manager and residents by asking assistance from the front office managers of each apartment to help identifying the desired target respondents. The researcher eventually focused on 11 people from 6 serviced apartments for interview in Bangkok.

The collected data were analyzed using both qualitative method. Qualitative data were analyzed manually by first summarizing the information gathered, followed by categorization and coding into emerging themes and presenting in a

narrative form. The results were as to facilitate easy interpretation and understanding of the information by the users.

Data analysis

The research was analyzed by using keywords-in-context analysis. The data was brief from the full interview transcript and the interesting keywords was underlined in each answer. As the respondents have the different opinions and perspectives. After the researcher defined the codes, the researcher will be able to interpret the data by grouping and comparing them in order to make the findings to be more obvious which needs to following the research objectives.

Serviced providers and managers indicate that providing of many of facilities makes the serviced apartments become more preference and grow faster. Some serviced apartments are provided the cleaning service for free and customers have to pay in some kind of services.

As they come from other provinces and other countries so they have to fine the apartment near their workplace and university to make they feel like home and convenience in transportation. Serviced apartments offer many services such as cleaning service, maintenance service, and security service. The staffs always help them to fix all the broke things like air condition, television and etc.

The services and facilities in the serviced apartments bare most likely satisfied. Customers are satisfied with the facilities which the accommodation are provided. Most of the facilities are provided such as internet connection, fitness, laundry service, cleaning service, sauna, steam, gym



swimming pool, library, meeting room, multi propose room, basketball court, kids playground, transportation, washing machine, kitchen tools, toilet essentials, refrigerator, television and furniture in common.

Most of residents are employees that choose serviced apartment near their workplaces, these people have

Conclusions

Growth of serviced apartment has important factors that is mentioned on this study which is people select the accommodation by providing many facilities, price and contract, satisfaction and location. Serviced apartment provides many facilities such as swimming pool, gym, cleaning service, washing machine and bigger room than hotel and condominium in the cheaper price for long-staying. The entrepreneurs have to find the right location for investment therefore the location is the one of factors leads services apartment's growth. This objective will be mention about the reasons for fastest growing of serviced apartments in hospitality industry in Thailand. The finding is related to the study of Phattarachai, T., (2018), Market report Bangkok serviced apartment Q3 which stated that Bangkok has exceed 70% occupancy rates of serviced apartment units

for all locations and in some locations are reached nearly 90%. For expats in Bangkok, the central business district is continuing select as the most popular area, the convenience of facilities and transportation area has the average occupancy rate exceeds 80%. Recommendations

The recommendations on this research are for some which is growing occupancy rate in Bangkok. Nowadays, infrastructure is not cover all area in Bangkok so in some area is not worthy for stating the business. So the government should assist the private sector by building more infrastructure to reach the destination. If the government help them so the growth of serviced apartment and tourism industry will be sharply increasing.

is for people who want to study on factors which drive serviced apartment in Bangkok grow fast in apartments boom.

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The research topic was selected because of my interest in the rapidly growth of serviced apartments in Bangkok. The period of starting the study is January, 2019 until March 22, 2019. I am very grateful to my adviser Dr. Adrash Batra for giving

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ability about to rent this kind of apartment because they must spend money to this staying, subsidiary workers or expats choose this kind of accommodation because of convenience and feeling like home. Foreigner does not have ability to buy a house or any property so they choose the place that suite to their lifestyles.

This objective is to evaluate the reasons why people choose serviced apartments as their accommodation. This finding is related to Phatcharin, P., (2008) on factors influencing the selection of serviced apartments by female business travelers to be stated on this research that the number of the female business travelers has risen and played a major role in today's business market. Travel researchers and marketers have gradually recognized this rising potential market sector. There is no exception with serviced apartment segment, which is targeted at business travelers as the principle clients. This study was undertaken to identify important determinants for female business travelers to select serviced apartments.

To understand people opinion on their choice for accommodation is related with Sue, F. & Jones, L. L., (2001) Serviced apartments in the UK – a growth sector? Which mentioned that the attractive serviced apartment is they offer the comfort and facilities of a hotel, with the privacy and facilities of being home. There is no official classification for this type of accommodation as an equivalent star-rates hotel. In their analysis, they focused on the serviced apartment sector in Bangkok, classifying each scheme by the nature of the quality and services of the accommodation.

For the entrepreneurs should study on the factors that influent or impact to starting the serviced apartment to protect the risks on their business. They should know what people want to attract customers, if they study on what most of people want which means the owners can predict for the number of residents in the market.

This research

the present. They will acknowledge what people want in order to make serviced

his recommendations and valuable times to teach me to complete my individual research for master's degree in hospitality and tourism management. Moreover, I would like to thank my family and friends who understand and always support me during the data collecting period until this project successfully.

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Daytime Sleepiness and Impaired Sleep Quality among Medical Residents: Prevalence Rate and Their Contributing Factors

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Abstract

BACKGROUND: Sleep is a normal physiologic mechanism of a person that is required to accomplish every day. Physician, one of the shift-working professions, has been affected by sleep deprivation resulting in a deterioration of working performance. In Thailand, there is currently no work hour regulation for medical residents. Thus, this study aimed to explore the current situation of sleepiness and sleep quality among them as well as the corresponding factors of excessive daytime sleepiness and poor sleep quality.

METHODS: A self-report online questionnaire was delivered to medical residents aged 25-35 years of five departments: internal medicine, surgery, orthopedics, pediatrics, and obstetrics and gynecology in the academic year 2018. The questionnaire comprised of five modules: demographic data, working data, sleep data and its related factors, the Thai version of the Epworth Sleepiness Scale (ESS), and the Thai version of the Pittsburgh Sleep Quality Index (PSQI).

RESULTS: A total of 107 responses were completed and included in this study. Of all responses, 50 (47%) were male, and 57 (53%) were female. Median age was 28 years (interquartile range = 27-29). Median working hours per week was 87 hours (interquartile range 71-100). Ninety-seven respondents (91%) felt that they were not getting enough sleep. Ninety-six respondents (99% of 97) felt that not getting enough sleep caused compromised working performance. Excessive daytime sleepiness (ESS score > 10) was observed in 67 respondents (63%). Factors associated with excessive daytime sleepiness were none to be found after processing the simple logistic regression analysis. Poor sleep quality (global PSQI score > 5) was observed in 69 respondents (66%). Following the multiple logistic regression analysis, factors associated with poor sleep quality were male gender, sleep hours on an overnight shift of less than four hours, and having nightmares.

CONCLUSIONS: Residents encountered a great number of work hours, long continuous working streaks, and short sleep duration. Many of them felt that their working performance was compromised due to not getting enough sleep. About two thirds of them had excessive daytime sleepiness and poor sleep quality. Any feasible actions within medical schools should be done to ensure both patients' and residents' safety.

Keywords: Physicians, Sleep deprivation, Sleep hygiene, Work performance

Introduction

Sleep is an everyday routine of a person occupying one third of a day. It is regulated by two mechanisms: circadian rhythm and sleep-wake homeostasis. These mechanisms are influenced by light, so night shift workers might have trouble falling asleep. Both chronic sleep deprivation and poor sleep quality can increase the risk of disorders such as cardiovascular, metabolic, and psychiatric disorders (National Institute of Neurological Disorders and Stroke, 2018).

Physician, as one of the shift-working professions, has been affected by sleep deprivation resulting in a decreased work performance, an increased risk of accidents and, a compromised patient care

(Asfour, Asfour, McCormack, & Attia, 2014; Howard, 2005). In the United States, the Accreditation Council for Graduate Medical Education (ACGME) has proposed a regulation of duty hours to be limited to 80 hours per week (88 if needed) in order to reduce medical residents' working hours and increase sleeping time (Accreditation Council for Graduate Medical Education, 2017). The ACGME expected that doing so will be beneficent to both physicians' and patients' health and safety. Surprisingly, the FIRST Trial experimented regarding restrictive and less-restrictive scheduling resulted in no differences in patients' morbidity or mortality as well as residents' education quality between the two scheduling policies (Bilimoria



et al., 2016). In Thailand, there was an announcement of The Medical Council of Thailand (2017) which week. However, this was not a mandatory limit, and there has been no legal regulation of weekly working hours for medical interns or residents. Until present, a number of physicians and residents in Thailand have to work an overnight shift continuously after and/or prior to a regular day shift.

Several sleep-related measurements had been studied. Excessive daytime sleepiness is a factor focused by many studies because it is usually caused by sleep deprivation, obstructive sleep apnea, and sedating medications. It had the highest prevalence in adolescents, aged persons, and shift workers (Pagel, 2009). It reflects sleep-related symptoms during the day. At night, how well people sleep is defined as sleep quality. Good sleep quality can confer the opposite symptoms and consequences of sleep deprivation. Good sleep quality is defined as having shorter sleep latencies, fewer awakenings, reduced wake after sleep, and higher sleep efficiency (Ohayon et al., 2017).

The previous studies exhibited that academic physicians had a prevalence of excessive daytime sleepiness ranging from 29-75%. Excessive daytime sleepiness was associated with female gender, a change in body weight, training in the first year, napping habitually, subjective sense of not getting enough sleep, hours of work per week, hours slept per night, taking night calls, number of night duties, having nightmares, number of cigarettes per day, and amount of daily tea consumption (Alami, Ghanim, & Zyoud, 2018; Belayashi et al., 2013; Esen, Mercan, Kaçar, & Toprak, 2017; Ozder & Eker, 2014).

Poor sleep quality was found in 55-57% of academic physicians and associated with hours of work per week, shifting work schedule, number of duties, number of cigarettes per day, amount of daily coffee consumption, and raised stress (Esen et al., 2017; Manmee, Janpol, Arsayot, & Ainwan, 2017).

From the information described above, this study aimed to explore the prevalence of excessive daytime sleepiness and poor sleep quality and their associated factors among Thai medical residents.

Materials and Methods

A self-report online questionnaire was sent to Thai medical residents aged between 25-35 years of five departments: Internal medicine, surgery, orthopedics, pediatrics, and obstetrics and gynecology in the academic year 2018. The questionnaire comprised of five modules: Demographic data, working data, sleep data and its related factors, the Thai version of the Epworth Sleepiness Scale (ESS), and the Thai version of the Pittsburgh Sleep Quality Index (PSQI).

Demographic data included gender, age, marital status, number of children, weight, and height. Weight and height were then calculated to body mass index (BMI) which is equals to the weight in kilograms divided by

stated that medical interns in the public hospitals should not work after-hour for more than 40 hours per height in meters squared.

Working data included training department, year of training, place of training (inside/outside Bangkok), work hours per week, and the number of overnight shifts per week. Calculated work hours per day were revealed by dividing work hours per week with seven.

Sleep data and related factors include medical illnesses, sleep hours on an overnight shift, sleep hours without an overnight shift, longest continuous waking hours, subjective sense of getting enough sleep, subjective sense of compromised working performance due to not getting enough sleep, habitual napping (yes/no), use of cigarettes, alcohol consumption, energy drink consumption, coffee consumption, tea consumption, use of illicit drugs, and current medication.

The Thai version of ESS was adopted into an online questionnaire to assess daytime sleepiness. The Epworth Sleepiness Scale (ESS) is a questionnaire that has been widely used to assess daytime sleepiness. It comprises of eight questions. Each question is rated from 0 (*would never doze*) to 3 (*high chance of dozing*). Total scores are ranging from 0-24 where a total score of more than 10 predicts excessive daytime sleepiness (John, n.d.). The Thai version was developed and validated with the internal consistency Cronbach's alpha coefficient of .87 (Banhiran, Assanasen, Nopmaneejumrulers, & Metheetrairut, 2011).

The Thai version of PSQI was also adopted into an online questionnaire to assess sleep quality. The PSQI is a questionnaire for assessing the quality of sleep in the past month and developed to be a standardized measure of sleep quality, discriminate good/poor sleepers, and provide an assessment of sleep disturbances. It is composed of 19 self-rated questions and five roommate/bed partner-rated questions, framing seven components: subjective overall sleep quality, sleep latency, sleep duration, habitual sleep efficiency, sleep disturbances, usage of sleeping medication, and daytime dysfunction attributable to sleepiness. Only self-rated questions are calculated in the total score. Scores are rated from 0-3; from no difficulty to severe difficulty in going to sleep. Scores of the seven component are added to yield one global score ranging from 0-21 (Buysse, Reynolds, Monk, Berman, & Kupfer, 1989). The Thai version of PSQI was developed with the Cronbach's alpha coefficient of .837. A cut-off point of > 5 suggests poor sleepers (Sitasuwan, Bussaratid, Ruttanaumpawan, & Chotinaiwattarakul, 2014). This study modified the Thai PSQI by removing question 10 (roommate/bed partner-rated questions) because it is not used to calculate the global PSQI score.

Ethics

This study is an anonymous online survey. This

study did not collect any personal data or any data that can be inferred to any respondent, medical school, or hospital in particular. Ethical considerations were reviewed and approved by the Ethics Committee of Mae Fah Luang University.

Statistics

Continuous data were reported as mean and standard deviation if the data had a normal distribution, and as median and interquartile range if the data did not have a normal distribution. Normality of the data was tested with the Kolmogorov-Smirnov test. Categorical data were reported as frequency and percentage. The prevalence rates of excessive daytime sleepiness and poor sleep quality of medical residents were calculated. Univariate analysis to compare subjects between those residents with or without excessive daytime sleepiness using the simple logistic regression model was tested. Multivariate data analysis includes variables such as poor sleep quality and any associated factors related to excessive daytime sleepiness was tested and reported with crude and adjusted odds ratio with a 95% confidence interval using stepwise multiple logistic regression model. The *p* value of less than .05 was set as a significant value.

Results

After the distribution of the questionnaire, there were 241 responses from medical residents. Eventually, 107 were completed while 134 were partially done or undone. Three responses were excluded from the weekly work hour calculation because of the unreliable answers. Two responses were also excluded from the PSQI calculation because of the similar reason. Of 107 responses, 50 (47%) were male, and 57 (53%) were female. The median age was 28.0 years (interquartile range = 27.0-29.0). The majority of them were single (*n* = 91, 85%) and had no children (*n* = 104, 97%). The mean weight was 63.2 kg (*SD* = 13.8). The mean height was 166.5 cm (*SD* = 8.73). The mean BMI was 22.6 kg/m² (*SD* = 3.66). Demographic data are shown in Table 1.

Table 1: Demographic data

Statement	Respondents (<i>n</i> = 107)
Gender (<i>n</i> (%))	
Male	50 (46.7)
Female	57 (53.3)
Age (years) (<i>Mdn</i> [<i>Q1-Q3</i>])	28.0 [27.0-29.0]
Marital status (<i>n</i> (%))	
Single	91 (85.1)
Married	14 (13.1)
Divorced	1 (0.93)
Separated	1 (0.93)
Number of children	
0	104 (97.2)
1	3 (2.80)

Weight (kg) (<i>M±SD</i>)	63.2±13.8
Height (cm) (<i>M±SD</i>)	166.5±8.73
BMI (kg/m ²) (<i>M±SD</i>)	22.6±3.66

M = mean, *Mdn* = median, *N* = sample size (full sample), *n* = sample size (subsample), *Q1* = first quadrant, *Q3* = third quadrant, *SD* = standard deviation. Of 107 respondents, 31 (29%) were training internal medicine, 20 (19%) surgery, 9 (8%) orthopedics, 24 (22%) pediatrics, and 23 (21%) obstetrics and gynecology. Fifty-eight respondents (54%) were training in Bangkok, while 49 (46%) were training outside Bangkok. The number of the first- and second-year residents was 38 (35%). The number of the third-year residents was 22 (21%), and the number of the fourth-year residents was 9 (8%). The median work hours per week was 86.5 (interquartile range = 70.5-100.0). The median calculated work hours per day was 12.4 (interquartile range = 10.2-14.3). Almost all respondents (*n* = 105, 98%) had at least one overnight shift. The median overnight shifts per week was 2.00 (interquartile range = 2.00-3.00). Working data are shown in Table 2.

Table 2: Working data

Statement	Respondents (<i>n</i> = 107)
Training department (<i>n</i> (%))	
Internal medicine	31 (29.0)
Surgery	20 (18.7)
Orthopedics	9 (8.41)
Pediatrics	24 (22.4)
Obstetrics and gynecology	23 (21.5)
Place of training (<i>n</i> (%))	
Bangkok	58 (54.2)
Outside Bangkok	49 (45.8)
Year of training (<i>n</i> (%))	
1	38 (35.5)
2	38 (35.5)
3	22 (20.6)
4	9 (8.41)
Work hours per week (<i>n</i> = 104) (<i>Mdn</i> [<i>Q1-Q3</i>])	86.5 [70.5-100.0]
Calculated work hours per day (<i>n</i> = 104) (<i>Mdn</i> [<i>Q1-Q3</i>])	12.4 [10.2-14.3]
Overnight shifts (<i>n</i> (%))	
Yes	105 (98.1)
No	2 (1.87)
Number of overnight shifts per week (<i>n</i> = 105) (<i>Mdn</i> [<i>Q1-Q3</i>])	2.00 [2.00-3.00]

Abbreviations as in Table 1.

The median sleep hour on an overnight shift was 3.00 (interquartile range = 2.00-4.00). The median sleep hour without an overnight shift was 6.00 (interquartile range = 6.00-7.00). The median longest continuous waking hour was 24.0 (interquartile range = 12.0-40.0). Ninety-seven (91%) of respondents were feeling not getting enough sleep. Ninety-six (99% of 97) felt that

not getting enough sleep caused compromised working performance. Fifty (47%) napped habitually. Sixteen (15%) had medical illnesses. The commonest medical illness found was allergic rhinitis ($n = 4$). The commonest medication used by the respondents were levothyroxine ($n = 3$) which was used in the treatment of Hashimoto's thyroiditis, hypothyroidism, and thyroid cancer. Sedating medication reported were cetirizine and pseudoephedrine used to treat allergic rhinitis and sertraline used to treat major depressive disorder. Only 5 (5%) smoked cigarette regularly. Thirty-four respondents (32%) drank alcohol regularly. Seventy-two (67%) drank coffee regularly. Seventy-four (69%) drank tea regularly. A small number of respondents ($n = 9$, 8%) drank energy drinks regularly. No one used illicit drugs.

Table 3: Sleep data and related factors

Statement	Respondents ($n = 107$) (n (%))
Sleep hours on an overnight shift ($n = 105$) (Mdn [$Q1$ - $Q3$])	3.00 [2.00-4.00]
Sleep hours without an overnight shift (Mdn [$Q1$ - $Q3$])	6.00 [6.00-7.00]
Longest continuous waking hours (Mdn [$Q1$ - $Q3$])	24.0 [12.0-40.0]
Getting enough sleep	
Yes	10 (9.35)
No	97 (90.7)
Compromised working performance due to not getting enough sleep	
Yes	96 (99.0)
No	1 (1.03)
Habitual napping	
Yes	50 (46.7)
No	57 (53.3)
Having nightmares ($n = 105$)	
Yes	50 (47.6)
No	55 (52.4)
Sleeping pills ($n = 105$)	
Yes	6 (5.71)
No	99 (94.3)
Medical illness	
Yes	16 (14.9)
No	91 (85.1)
Taking medication regularly	
Yes	14 (13.1)
No	93 (86.9)
Cigarette	
No	102 (95.3)
Yes	5 (4.67)
Less than once a week	1 (20.0)
Once or twice a week	1 (20.0)
Three or more times a week	3 (60.0)
Alcohol	
No	73 (68.2)
Yes	34 (31.8)

Less than once a week	1 (88.2)
Once or twice a week	4 (11.8)
Coffee	
No	35 (32.7)
Yes	72 (67.3)
Less than once a week	2 (2.78)
Once or twice a week	6 (8.33)
Three or more times a week	64 (88.9)
Tea	
No	33 (30.8)
Yes	74 (69.2)
Less than once a week	12 (16.2)
Once or twice a week	29 (39.2)
Three or more times a week	33 (44.6)
Energy drinks	
No	98 (91.6)
Yes	9 (8.41)
Less than once a week	5 (55.6)
Once or twice a week	3 (33.3)
Three or more times a week	1 (11.1)
Illicit drugs	
No	107 (100.0)

Abbreviations as in Table 1.

Residents in this study had the mean ESS score of 12.0 ($SD = 4.47$). Sixty-seven (62%) respondents were experiencing excessive daytime sleepiness as defined by having ESS score of >10 . The mean ESS score was significantly higher than a cut-off point of 10 ($t(106) = 4.69$, $p < .001$). The ESS data are shown in Table 4.

Table 4: Epworth Sleepiness Scale score

Statement	Respondents ($n = 107$) (n (%))
ESS score ($M \pm SD$)	12.0 \pm 4.47
≤ 10	40 (37.4)
> 10	67 (62.6)

Abbreviations as in Table 1.

Residents in this study had a mean global PSQI score of 6.81 ($SD = 2.84$). Poor sleepers, defined as having global PSQI score > 5 , were comprised of 69 (66%) of respondents. The mean global PSQI score was significantly higher than a cut-off point of 5 ($t(104) = 6.54$, $p < .001$). As obtained from the PSQI questionnaire, the median sleep latency (time to fall asleep) was 10.0 minutes (interquartile range = 5.00-15.0). The median sleep efficiency was 90.9% (interquartile range = 83.33-100.00). Fifty-five respondents (52%) had bad dreams at least once a month. Almost all respondents ($n = 99$, 94%) did not use sleeping pills. Subjective sleep quality was the poorest domain of the PSQI ($Mdn = 2.00$, interquartile range = 1.00-2.00). The PSQI data are shown in Table 5 and Table 6.

The univariate analyses between associated factors and excessive daytime sleepiness showed no association between them at a 95% confident interval (Table 7). Nevertheless, the univariate and multivariate analyses

of the associated factors and the global PSQI score demonstrated that male gender, sleep hours on an overnight shift of < 4 , and having nightmares were significantly associated with poor sleep quality at a 95% confidence interval (Table 8). Pearson correlation between the total ESS scores and the global PSQI scores yielded $r(105) = .12, p = .241$; hence, no correlation between them was observed at a 95% confidence interval.

Table 5: Pittsburg Sleep Quality Index score

Statement	Respondents (<i>n</i> = 105) (<i>n</i> (%))
Global PSQI score (<i>M</i> ± <i>SD</i>)	6.81±2.84
≤ 5	36 (34.3%)
> 5	69 (65.7%)

Abbreviations as in Table 1.

Table 6: Pittsburg Sleep Quality Index score by domain

Domain	<i>Mdn</i> [<i>Q1-Q3</i>]
Sleep duration	1.00 [1.00-2.00]
Sleep disturbance	1.00 [1.00-1.00]
Sleep latency	1.00 [0.00-1.00]
Daytime dysfunction	1.00 [1.00-2.00]
Habitual sleep efficiency	0.00 [0.00-1.00]
Sleep quality	2.00 [1.00-2.00]
Use of medication to sleep	0.00 [0.00-0.00]

Abbreviations as in Table 1.

Discussion

After collecting the self-reported questionnaire from medical residents all over the country, we were able to expose a vast of interesting data on the current residency training. The participants had a mean BMI of 22.6 kg/m² (*SD* = 3.66). This value is significantly less than 23 ($t(106) = -1.07, p = .143$) which determined the normal range (BMI 18.5-22.9 kg/m²) as defined by Department of Health Ministry of Public Health (2018). Obesity and obesity-caused obstructive sleep apnea that may cause sleep disruption and excessive daytime sleepiness might be less presented. The median work hours per week was 86.5 (interquartile range = 70.5-100.0) which is higher than the limit of the ACGME regulation. Long work hours of residents can lead to sleep deprivation and sleep quality, resulting in reduced performance and safety to both physicians and patients (Mansukhani, Kolla, Surani, Varon, & Ramar, 2012). Dividing each response by 7, the median work hours per day became 12.4 (interquartile range = 10.2-14.3). In fact, there is a difference between regular working days and at the weekend. Residents are mostly required to work regularly from Monday to Friday and attend extra morning rounds on the weekend. Start time and end time of each day are varying depending on the work load. Furthermore, there is an overnight shift running consecutively between two regular day shifts. An overnight shift is an on-call shift rotated between the

responsible residents. Apart from weekdays, a day shift and a following overnight shift scheduled on the weekend are usually worked by the same person. This study stated clearly that responders should answer the number of overnight shifts. The continuity of working is demonstrated with the median continuous waking hours of 24.0 (interquartile range = 12.0-40.0). The number might not be accurate because it had a range of 2-78 hours. The unrealistically low number (2 hours) might be the consequence of the ambiguity of the question. Both sleep hours with and without an overnight shift were less than seven (with shift: Wilcoxon signed-rank $z = -8.72, p < .001$; without shift: Wilcoxon signed-rank $z = -5.17, p < .001$), whereas the recommended sleep duration for an adult aged 26-64 years is 7-9 hours a day (Hirshkowitz et al., 2015). The majority of respondents were not getting enough sleep while sensing that sleep deprivation affected their working performance. Coffee and tea seemed to be the two most popular beverages. The questionnaire used did not differentiate between conventional tea and the popular bubble tea. All forms of tea are thought to be caffeinated drinks.

From the examination of daytime sleepiness, 62.6% of the respondents had excessive day time sleepiness (ESS score > 10). The prevalence was similar to the range 29-75% in residents from the other countries (Alami, Ghanim, & Zyoud, 2018; Belayashi et al., 2013; Esen et al. 2017; Ozder & Eker, 2014). The mean ESS score of our study population was also significantly more than 10. Excessive daytime sleepiness can cause accidents, poor academic performance, and poor professional performance (Pagel, 2009). Poor sleep quality (global PSQI score > 5) was also presented in up to 66% of responses. This is greater than the previously reported prevalence of 55-57% in residents (Esen et al., 2017; Manmee et al., 2017).

The previously studied associated factors of excessive daytime sleepiness that we included in the univariate analysis were female gender, training in the first year, napping habitually, subjective sense of not getting enough sleep, hours of work per week, hours slept per night, taking night calls, having nightmares, number of cigarettes per day, and amount of daily tea consumption. We found no association between them. Results from the previous studies also varied from study to study (Alami, Ghanim, & Zyoud, 2018; Belayashi et al., 2013; Esen et al., 2017; Ozder & Eker, 2014). Despite that, residents who had sleep hours on an overnight shift of less than 4 hours exhibited a substantial difference in proportions of who had and did not have excessive daytime sleepiness. Its *p* value nearly approached .05. Habitual napping and having nightmares data were also in the same fashion. When comparing various studies, one should keep in mind that residents of the studied five departments in Thailand are

mostly working in continuous shifts, while some departments or some other countries might require higher proportion of semicontinuous (continuing shifts no more than 24 hours each day).

Table 7: Univariate analysis to determine factors associated with the ESS score ($n = 107$)

Factors	ESS score > 10 (n (%))	ESS score ≤ 10 (n (%))	p
Female gender	38 (56.7)	19 (47.5)	.35
First year of training	26 (38.8)	12 (30.0)	.36
Work hours > 60 per week ($n = 104$)	59 (89.4)	32 (84.2)	.44
Sleep hours on an overnight shift < 4 hours ($n = 105$)	50 (75.8)	24 (61.5)	.12
Subjectively sense of not getting enough sleep	62 (92.5)	35 (87.5)	.39
Napping habitually	36 (53.7)	14 (35.0)	.06
Having nightmares ($n = 105$)	38 (57.6)	17 (43.6)	.17
Cigarette smoker	3 (4.48)	2 (5.00)	.90
Tea consumer	46 (68.7)	28 (70.0)	.88

The chi square test was used to determine association between related factors and the ESS score.

Table 8: Univariate and multivariate analysis to determine factors associated with the global PSQI score ($n = 105$)

Factors	Univariate		Multivariate	
	Global PSQI score > 5 n (%)	Global PSQI score ≤ 5 n (%)	Adjusted OR [95% CI]	p

The sleep quality, likewise, expressed no association with the previously associated factors including work hours, cigarette amount, and coffee amount. On the other hand, from the univariate and multivariate analyses, a significant association between poor sleep quality and male gender, sleep hours on an overnight shift < 4 hours, and having nightmares were expressed. Gender difference in sleep quality has not been explained, but it is different from a PSQI study in

Male gender	37 (53.6)	12 (33.3)	.048 *	3.6 [1.32, 9.79]	.012 *
First year of training	25 (36.3)	12 (33.3)	.77		
Work hours > 60 per week ($n = 104$)	58 (87.9)	31 (86.1)	.79		
Sleep hours on an overnight shift < 4	54 (78.3)	18 (52.9)	.008 *	3.56 [1.33, 9.57]	.012 *
Subjectively sense of not getting enough sleep	66 (95.7)	29 (80.6)	.012 *		
Napping habitually	37 (53.6)	11 (30.6)	.024 *		
Having nightmares	44 (63.8)	11 (30.6)	.001 *	4.74 [1.79, 12.5]	.002 *
Cigarette smoker	4 (5.80)	1 (2.78)	.49		
Tea consumer	51 (73.9)	27 (58.3)	.18		
Coffee consumer	49 (71.1)	21 (58.3)	.19		

*Denotes significance at 95% confidence level
OR = odds ratio

The chi square and multiple logistic regression model were used to demonstrate the association between sleep quality and various factors.

a community sample where female sex was associated with higher PSQI scores (Buysse et al., 2008). Sleep duration was obtained from part 2 of the questionnaire, not from the PSQI. However, its association with poor sleep quality is not surprising because sleep duration is one of the domains included in the PSQI. A direct association can be inferred. On the other hand, nightmare data were obtained from the question 9.8 of the Thai PSQI. The association is undoubtedly valid.

Even though the average global PSQI score was poor, sleep latency was significantly less than the recommended latency of no more than 30 minutes by Ohayon et al. (2017), Wilcoxon signed-rank $z = -6.53$, $p < .001$. Sleep efficiency was significantly more than the recommended efficiency of at least 85% by Ohayon et al. (2017), Wilcoxon signed-rank test $z = -3.95$, $p < .001$. Having good sleep latency and efficiency mean that poor sleep quality observed may be the consequence of the others factors. Residents may benefit from increasing sleep duration.

Finally, there was no correlation between the ESS scores and the global PSQI scores observed. It was out of line with the previous studies (Buysse et al., 2008; Esen et al. 2017).

The current study is one of the first studies of daytime sleepiness and sleep quality among resident physicians in Thailand. On account of being an online questionnaire, this study had an advantage of access. It captured responders from both inside and outside Bangkok, thus variety of responders can be assumed. Anonymous data collection gave responders an opportunity to reflect their genuine information. Still, several limitations should be recognized: Its sample size was small, and its response rate was low. A high number of unfinished and undone questionnaires might be due to the insufficient distribution and the length of the questionnaire. Residents who did not have problems corresponding to the topic might not be interested in completing the questionnaire. Some variables might be subject to recall bias. Future studies on this topic should recruit as many residents as possible and may consider examining other aspects of physicians' life.

Conclusions

Residents encountered a great number of work hours, long continuous working streak, and short sleep duration. Many of them felt that their working performance was compromised due to not getting enough sleep. About two thirds of them had excessive daytime sleepiness and poor sleep quality. Any feasible actions within medical schools should be done to ensure both patients' and residents' safety.

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