

A CAUSAL EFFECT OF CUSTOMER RELATIONSHIP MANAGEMENT, ATTITUDE, SUBJECTIVE NORM, PERCEIVED BEHAVIORAL CONTROL OF CUSTOMER AFFECTING PURCHASE INTENTION TO USING ANTI-AGING BUSINESS IN THAILAND

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Abstract

The purpose of this study was to empirically examine the effect of interrelationships between customer relationship management, attitude, subjective norm, and perceived behavioral control, and their effects on the intention to purchase anti-aging products and services. A mixed methods approach was used for collecting and examining the data. Quantitative data were collected from a sample of 460 respondents using an online survey, for structural equation modelling analysis. The sample was divided into two groups for separate analysis: (1) those who had experience with anti-aging products or services, and (2) those who had none. Qualitative data were obtained using in-depth interviews with 15 informants from Bangkok and from the four major regions of Thailand, to add insight to the quantitative results. The results

Keywords: Anti-aging business, customer intention, customer relationship management, theory of planned behavior

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showed a strong support for the proposed model, particularly in the experienced group, while some hypotheses were also supported in the group with no experience. Via the perceived behavioral control, attitude, and subjective norm, the customer relationship management could better influence the intention to purchase. This study can help managers to improve the design and effectiveness of their customer relationship management strategy. In order to improve the efficiency of customer relationship management, managers should design a strategy which strategically incorporates perceived behavioral control and the subjective norm of the customer.

INTRODUCTION

An aging population is a result of birth and mortality rate and has become an alarming situation in many areas of the world, including Thailand. With the incident of the ‘Million Birth Cohort’ during 1963-1983 (Prasartkul, 2013), the country is expecting a greater proportion of elderly persons during the 21st century. This will expedite the country to the stage of a ‘Super Aged Society’ once around one third of the population is older than 60 years old (Miankerd, 2016). Challenging tasks include preparation for adequate health care and early disease prevention. When this group enters the elderly age category, they will generate an enormous demand for various health services and other related welfare from the government (Foundation of Thai Gerontology Research and Development Institute, 2017). In this regard, the Ministry of Public Health in Thailand has formulated a strategic plan for the health service business to serve the aging society as a part of the Thailand 4.0 scheme. Anti-aging business is deemed to play a major role in the healthcare service.

Anti-aging is one dimension of the body care concept using knowledge from the scientific field of aging research. This stream of science concerns a holistic approach to obtaining optimal health, including the aspects of a healthy diet, proper exercise, relaxation, and maintaining a clear mind; it is health care from the inside. This approach creates a number of business opportunities.

Maintaining a long-term relationship with customers is crucial for the anti-aging business as it requires a long-term continual interface with customers. In addition, the service needs in the anti-aging industry are diverse, thus complicating the provision of appropriate products and services for different customers. Therefore, anti-aging business entrepreneurs must pay close attention to customer knowledge management (which is concerned with data about customers, data for customers, and data from customers) and customer knowledge management capability (which concerns the system involved in processing the customer related data), in order to maintain the customer base, as well as to acquire new customers. It is also important to

maintain close and continual interactions with customers, by listening to their needs and systematically analyzing these needs to improve customer services. Additionally, responding to customers in different market segments, the anti-aging business must customize its products and services in great detail in order to maximize customer satisfaction. These processes also demand efficient customer relationship management (Payne & Frow, 2005). Towards such an aim, insight into the factors influencing customers' purchasing decisions is indispensable.

This research was conducted to gain insight into customer relationship management (CRM) and customer purchasing behavior, through the lens of the theory of planned behavior (TPB) (Ajzen, 1991). As far as the literature is concerned, the linkage between CRM and purchasing behavior has never been investigated using the TPB before, despite its potential application to the concept.

The theory defines behavior as the intention to perform action which is also the need of the person to perform that behavior. Behavioral intentions can therefore predict behavior. That is, the more people are determined to perform a specific action, the more likely they will be to actually perform it. As a result, if entrepreneurs are able to understand and find important factors underlying the needs and intentions of customers, they will have a better chance to predict purchases.

The next section presents the

theoretical framework and the hypotheses derived from two important sets of literature: customer relationship management, and the theory of planned behavior. The research method is then explained, followed by the research results, discussion, conclusion, and managerial implications.

RESEARCH OBJECTIVE

This study aims to employ a sequential mixed method approach, from quantitative to qualitative, to explore and propose a model of causal relationships among customer relationship management, attitudes, subjective norm, perceived behavioral control, and intentions in the context of the anti-aging business in Thailand.

LITERATURE REVIEW

Anti-aging Business Context

In this study, anti-aging business refers to the holistic health care business which helps its consumers to have maximum health conditions through healthy eating, proper exercise, rest, and developing a clear mind. It is a form of internal health care, and a new business which has started to hold a major role in the health industry in Thailand. Presently, anti-aging business in Thailand operates through hospitals, medical clinics, and medical spas. Various business practices are being carried out, while the newness of the business provides limited knowledge about the purchasing decisions of potential

customers. Anti-aging business entrepreneurs must devise various strategies to effectively meet the needs of their customers, and understand customer service behavior in order to create a competitive advantage.

Customer Relationship Management: CRM

The concept of CRM, initially called ‘contact management’, emerged in the early 1980s mainly involving the compilation and documentation of all information regarding business organizations and their customers in order to maintain valuable customers (Tseng & Wu, 2014:79). Despite diverse definitions, the overlapping idea is that CRM concerns two-way communication channels which allow for improved understanding and response to customer needs, and a fundamental aim towards greater customer loyalty and increased profits in the long run (Ryals & Knox, 2001: 3; Payne & Frow, 2005: 168; Padmavathy, Balaji, & Sivakumar, 2012: 249). Some differences can be found in the practice guidelines, such as in support operations such as partnering with customers (Parvatiyar & Sheth, 2001), maximizing customer satisfaction or customer experience management (Silk, 2013; Padmavathy, Balaji, & Sivakumar, 2012), and building relationships with customers and potential customers. The key concept of CRM is that it is a holistic process consisting of customer acquisition, selection, retention, and collaboration

(Parvatiyar & Sheth, 2001; Tseng & Wu, 2014) to support, maintain, and manage customer relationships, increasing customer loyalty and generating higher profits.

An extensive literature review reveals that various scholars appear in various research streams, regarding the subject of CRM. In spite of their different terminologies, the meanings and concepts are similar. For example, customer awareness in Madison (2014: 45) refers to the knowledge that a customer has about the company, vendor, and product or service. It is similar to the term customer knowledge, used by Chen (2012: 91), Tseng & Wu. (2014: 78), Darzi (2016: 5) and Soltani & Navimpour (2016: 676). In general customer knowledge includes knowledge about customers, knowledge for customers, and knowledge from customers. Furthermore, Sansook (2010: 21) uses the term customer intelligence which refers to gaining knowledge and understanding about customers using technology to collect information from customers. Customer intelligence is therefore not different from the term customer knowledge management capability used by Chen (2012: 108) and Soltani & Navimpour (2016: 669), which identifies knowledge infrastructure capability as the application of organizational technology in data collection, analysis, and communication of information, to suit customers. Regarding the customer knowledge management capability discussed in Chen (2012: 108) and Tseng & Wu

(2014: 84), the function of the knowledge process capability that facilitates knowledge management can be found both inside, as well as outside the business organization. Other terms that have overlapping meaning are customer interaction, used in Chen (2012: 112), and customer retention, used in Tseng & Wu (2014: 80), with customer interaction having a broader meaning than customer retention. Customization is a term that is similarly defined throughout the literature (Sansook, 2010: 25; Chen, 2012: 114)

From the synthesis of variables regarding CRM which appear in various studies, this study proposes four main variables to be included in CRM. Specifically, these are customer knowledge, customer knowledge management capability, customer interaction, and customization.

Theory of Planned Behavior: TPB

The TPB (Ajzen, 1991) was an extension of the theory of reasoned action (Ajzen & Fishbein, 1980). The TPB postulates that individuals' intentions to perform a certain behavior are influenced by their attitude (in the present paper, this refers to their attitude towards using anti-aging products and services), subjective norms (i.e. importance of others' opinions and information), and perceived behavioral control (i.e. the extent to which consumers perceive that they can control their own behavior toward a certain action,

including resources and opportunities e.g. time, money, skills, ability, cooperation from others, etc.).

The TBP is used as one of the most recognized testing instruments for measuring the cognitive factors of consumers (Al-Swidi, Huque, Hafeez, & Sharif, 2014: 1561). The TPB has been applied to predict or explain behavior and intentions in relation to many health conditions. Never before, however, has the TPB been applied to the CRM model. It is argued in this paper that the TPB can enrich the CRM concept particularly in the context of the anti-aging business, as it incorporates the health and medical sense. Some empirical research that employs the TBP includes ideas such as organic food consumption (Arvola, Vassallo, Dean, Lampila, Saba, Lahteenmaki, & Shepherd, 2008; Donahue, 2017; Liang, 2014), consumption of dietary supplements (Noor, Yap, Liew & Rajah (2014), halal food consumption (Alam & Sayuti, 2011), and wellness courses (Lopez, 2017). The TPB is also used to describe customer behavior in many businesses (Han & Kim, 2010; Jalilvand, & Samiei, 2012; Leavell, 2016). The results of most studies support the benefits of the theory of planned behavior, i.e. behavioral intentions, an effective behavior predictor (Jalilvand, & Samiei, 2012: 595; Reddy, York & Brannon, 2010: 514).

This study includes the development of a theoretical framework by applying the TPB to investigate the causal relationship among the components of CRM in the

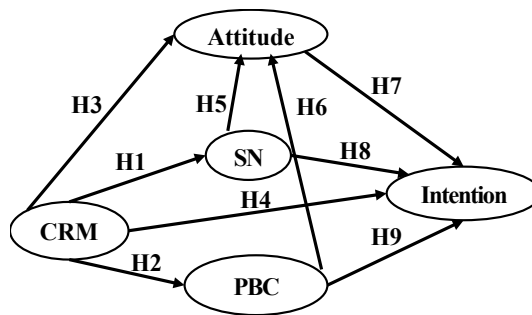


Figure 1 Research framework

anti-aging business context. The TPB model posits that behavioral intentions are the immediate antecedent of actual behavior (Ajzen, 1991). Intentions are determined by three conceptually independent predictors (also termed as social cognitive factors) labelled as attitude, subjective norms (SN), and perceived behavioral control (PBC) (Ajzen, 1991) (Figure 1).

Construct measures for CRM and TPB

A ten-item scale was used with a 7-point Likert-type scale ranging from strongly disagree (1) to strongly agree (7) for measures of CRM (e.g., “Do you think service providers should have a record of customer purchase history in order to properly analyze customer service?”). Items on attitude, subjective norm, perceived behavioral control, and intention to use an anti-aging business, were based on existing validated measures from previous literature (e.g., Ajzen, 1991, 2002; Arvola et al., 2008; Kim & Chung, 2011; Brouwer & Mosack, 2015). The measures were slightly

modified for use in a questionnaire appropriate to the anti-aging business setting. A 7-point semantic differential scale was employed to assess affective attitude (e.g. “For me, using anti-aging business for self-care instead of living the old life is” 1 = not contented, 7= contented), or cognitive attitude (e.g. “For me, using anti-aging business for self-care in the next year is” 1 = bad, 7 = good). The measure of Normative Influence, Informational Influence, External Perceived Difficulty, Internal Control Factors, and Intentions was assessed using a 7-point Likert-type scale ranging from strongly disagree (1) to strongly agree (7) (e.g. “I plan to use an anti-aging business”)

Many studies have examined the relationship between CRM and SN, such as Kudeshia & Kumar (2017); and Husin, Ismail, & Rahman (2016). These show the development of CRM by providing information about products and services, listening to customers' opinions through various communication channels such as reference groups, SN, and word of mouth, leading to acceptance and setting an example, so that new or

existing customers have confidence to use the product or service.

Another important component of the TPB is PBC. Most studies directly measure PBC, though there are a few studies that measure PBC indirectly through control beliefs and perceived power (Ajzen, 2002: 679; Montano & Kasprzyk, 2002: 71). According to a thorough literature review examining the relationship between CRM and PBC nothing has been found, presenting a gap in the research. As customer purchasing behavior is considered a human social behavior, the theory of planned behavior framework can be applied as a model in this study (Ajzen, 1991: 206).

Another important component of the TPB is attitude towards behavior, expressed as belief about the effects of a behavior or the reason for the behavior. Attitude can be measured from behavioral beliefs, and the evaluation of behavioral outcomes. Therefore, a person who holds a strong belief that positively valued outcomes will result from performing a certain behavior, will have a positive attitude toward that behavior. On the other hand, a person who holds a strong belief that negatively valued outcomes will result from performing the behavior, will have a negative attitude towards that behavior (Montano & Kasprzyk, 2002: 71). Studies that have investigated the relationship between CRM and attitudes include Maggon & Chaudhry (2019), and Madison (2014). The literature points out that CRM which includes good interaction with the voice of customers, can increase

customers' trust in buying products and services and generate a good image of the business.

In the current information age, digital technology is advancing rapidly. Businesses heavily focus on direct marketing (Kim, Park, Kim, Aiello, & Donvito, 2012), in order to quickly respond to customer needs. Direct marketing, via digital platforms can provide useful information as well as access to customers. The internet has been the primary platform in this regard, featuring various gateways such as electronic mail, mobile marketing, Facebook and other social media, even assisting traditional strategies such as phone calls, sales representatives, and special offers like discount coupons or distribution of sample products (Luding, 2003). Direct marketing uses the concept of customer lifetime value as the basis for maximizing profits (Kim, Park, Kim, Aiello, & Donvito, 2012). CRM is one strategy that helps to build good relationships, good impressions, and increase value throughout the customer's life (Lee, Ko, Tikkanen, Phan, Aiello, Donvito, & Raithel, 2014). Many scholars have studied the relationship between CRM and intentions in many aspects, such as Wu & Tsai (2008) who found that customer identification, one of the activities of CRM, influences intentions. If a business organization can identify and prioritize customer groups, it will increase the intention to buy products and services. Kang & Kim (2017) and Hakim, Susanti, & Ujianto (2017) found that CRM will

be able to receive information from customers and provide customer suggestions for improving products and services, and for reducing conflicts or negative complaints of the business. The following hypotheses are therefore proposed:

H1: *Customer relationship management is related to the subjective norm.*

H2: *Customer relationship management is related to perceived behavioral control.*

H3: *Customer relationship management is related to attitude.*

H4: *Customer relationship management is related to the intention to use anti-aging business.*

Many scholars have studied the relationship between SN and attitude, in recognition of the social pressure from various reference groups, such as close friends, co-workers, relatives, parents, and siblings, which leads individuals to approve or disapprove of performing a specific behavior (Han, Hsu, & Sheu, 2010; Han & Kim, 2010; Brouwer & Mosack, 2015). It has been found that SN influences attitudes towards various behaviors. Existing customers, who belong to a distinct reference group can make the surrounding people conform to their ideas, or persuade, tell, or make suggestions to potential customers, causing them to have a more positive attitude towards the products and services. Therefore, identifying the needs of customers and focusing on customer groups can act as a representative of the business organization, reducing the cost of finding new customers, expanding

profits from existing customers, and increasing the competitive advantage.

In addition, in studying the use of the theory of planned behavior to explain consumer behavior, many scholars have studied the relationship between PBC and attitude, such as Arvolaa et al. (2008); Noor, Yap, Liew & Rajah (2014); and Brouwer & Mosack (2015), all of whom point out that PBC or perceived benefits in behavioral actions, result in good attitudes towards behavior. Therefore, public relations providing useful information to meet customer needs, customization of products and services, and offering excellent products and services, help to promote a good image of the business and make customers revisit. Thus, the related hypotheses are:

H5: *Subjective norm is related to attitude.*

H6: *Perceived behavioral control is related to attitude.*

Many studies have investigated the relationship between attitude and intentions, in order to explain purchase intent, such as Arvolaa et al. (2008); Alam & Sayuti (2011); Kim & Chung (2011); Noor, Yap, Liew & Rajah (2014); Liang (2014); Brouwer, & Mosack (2015); and Quevedo-Silva, Freire, Lima-Filho, Brandão, Isabella, & Moreira (2016). It has been found that a good attitude towards products and services, especially among customers who have direct experience regarding those products or services, will encourage purchase intentions.

Many studies have also explored the relationship between SN and

intentions, such as Arvolaa et al. (2008); Brouwer & Mosack. (2015); Kim & Chung (2011); and Teng & Wang (2015). The literature review shows that customers recognize the important want which encourages them to buy a product or service, and this encourages their intention to buy that product or service.

In addition, many scholars have studied the relationship between PBC and intentions, such as Brouwer & Mosack (2015); Kim & Chung (2011); Noor, Yap, Liew & Rajah (2014); Liang (2014); and Alam, & Sayuti (2011). These studies indicated that customers perceive that they have control, such as eating halal food, organic food, or vitamin supplements consistently, and that belief that they can control this behavior, will encourage their intention to buy a specific product or service. In this study it is assumed that:

H7: *Attitude is related to intentions to use anti-aging business.*

H8: *Subjective norm is related to the intention to use anti-aging business.*

H9: *Perceived behavioral control is related to the intention to use anti-aging business.*

METHOD

This study employed a mixed methodology approach with an explanatory sequential design consisting of a quantitative followed by a qualitative phase. While the quantitative results provide the structure and paths for the investigated constructs, the

qualitative results feature supplementary and verbal explanations from the informants.

Quantitative

The data used in the quantitative section of the study was collected using an online survey. The population consisted of Thai people aged 35-55 years old. This age bracket was selected even though they are not yet technically aged because they represent the largest group of potential customers who will soon enter the elderly status and may be planning to use, or not use the products and services. Their opinions and behaviors could be explained by the TPB. The survey was restricted to those who could be accessed via the internet. As the exact number of the population is unknown, the study used the unknown population sampling method of Comrey & Lee (1992) which prescribes 500 samples. Inclusion criteria for the sample were 1) Thai citizen of 35-55 years old living in Thailand during 2019, 2) used internet, 3) agreed to participate in the research, and 4) able to answer the questions correctly. The chosen sampling method employed stratified random sampling: 1) The sample area covers Bangkok and the 4 major regions of Thailand (North, South, Central, and North-Eastern) according to the criteria of the population and housing census (Population and Housing Census in Thailand, 2018). The samples were randomly selected for each region, making a total sample size of 500, with 100 from each region

and 100 from Bangkok. 2) 25 provinces were randomly selected, including 6 provinces from the North, 6 from the Northeastern, 5 from the Southern, and 8 from the Central region. 3) The sample size was calculated using a quota sampling method in each province. 4) Based on the framework and the literature, an online questionnaire was developed. The questionnaire URL was placed on social media networks requesting for cooperation from individuals within each sub-population in order to generate the samples required from the questionnaire responses. The online questionnaire consisted of 2 parts: (1) demographic data of respondents, and (2) five components of variables derived from the literature review, namely CRM, attitude, SN, PBC, and intentions to use anti-aging business. At this stage, the data collection process was designed using online media to ensure that the information from the online surveys truly represented the population based on the criteria of Gaiseric & Schreiner (2009: 26) as follows:

1) Sampling: Since there were no methods for randomized sampling among the internet user population, sending the online questionnaire via random sampling methods that use nonprobability sampling was the most suitable method for data collection (Kaye & Johnson, 1999: 326). According to the literature review, the technique of random sampling via nonprobability sampling can obtain more reliable data. The non-response

was bias tested (Kaye & Johnson 1999: 326).

2) Data were tested for content validation, reliability, and a confirmatory factor analysis was performed.

3) In order to obtain accurate information, the criteria for clearly selecting the sample were set. There were 2 screening questions to which the answers must be consistent before the response could be accepted as a qualified response ready for analysis. The instrument obtained ethical approval PPH No.005/2662 from the Phrae Provincial Health Office. Data analysis was performed using descriptive statistics, i.e. mean, standard deviation, and inferential statistics, using structural equations to explore the causal relationships among the investigated components.

Qualitative

The qualitative phase involved the use of multiple case studies to help explain the significant findings from the quantitative phase. An open-ended interview guide was developed, based on the overview of the survey data. Inclusion criteria of the sample were 1) Thai citizen of 35-55 years old living in Thailand during 2019, and 2) agreed to participate in the research. Interviewees were recruited using a purposive sampling approach. The survey data were studied with the sample chosen based on differing experiences, in an effort to ensure an adequate spectrum of representation for the thematic analysis. Informed

consent was signed at the time of the interview. The interviews lasted approximately 45-60 minutes.

For determining the sample size for the interview of customers who had experience of using the service, the sessions were conducted until no doubts were found or no new data was generated, a point known as data saturation. Saturation of data is caused when the collected data has the same emergence of regularities, or in other words most of the collected data has overlaps of the same issues (Creswell, 2003).

In this study, saturation of the data was achieved after the 15th interview. Themes and subthemes were reported in the text along with corresponding CRM, and TPB constructs, research questions, and supporting quotes. The data analysis was performed using the content analysis after the audio records were transcribed. The main content with similar meanings were compiled and analyzed to answer the research questions.

RESULTS

Non-Response Bias Test

Of the 609 responses collected, 597 agreed to participate, 564 were from the targeted provinces, and 500 out of the 564 matched the inclusion criteria. The early 50 percentiles were compared with the last 50 percentiles used for the mean difference. The results show that the mean for every variable exceeded the 0.05 significance level for both groups

indicating that there was no mean difference in either group (Armstrong & Oventon, 1977). Therefore, the issue of non-response bias did not occur in this study. The Cronbach's alpha of the qualitative instruments ranged from 0.894-0.970, showing sufficient reliability.

Respondents' profile

An outlier check was performed to obtain the most appropriate data in the statistical estimation (Hair, Black, Babin, Anderson, & Tatham, 2014: 62); 460 (92%) valid responses were used for the empirical analysis. In the experience group, (N = 348) 30.75% of respondents were men and 69.25% of respondents were women, the highest number of participants were aged between 35 and 39 years old. The level of education for most respondents in the experience group was high, with 60.34% having a bachelor's degree; 56.61% of respondents were government officials or involved in state enterprise; the most common level of household income was ฿ 30,001 – 50,000. In the inexperienced group (N = 112) 38.39% of respondents were men and 61.61% of respondents were women; the highest number of participants was aged between 35 and 39 years old; most of the inexperienced group also had a high level of education, with 63.39% having a bachelor's degree; 55.36% of respondents were government officials or involved in state enterprise; the most common level of household income was

฿ 10,001 – 30,000. In this study, saturation of the data was achieved after the 15th interview. The 15 informants included 3 from the central region, 3 from the northeastern region, 4 from the northern region, 2 from the southern region, and 3 from Bangkok. Seven of these had experience of using anti-aging businesses; four had seen, heard, or heard but never used, while the other 4 had no exposure at all.

Data quality testing

Before assessing the measurement model, data were screened to avoid any violation of the assumptions of the structural equation model. In the experience group (N = 348), skew was between -0.936 and -0.271, and kurtosis was between -0.646 and 0.663, while for the inexperienced group (n = 112) skew was between -0.627 and 0.227, and kurtosis was between -0.63 and 0.546. According to Kline (2016: 76-77), as the skew index did not exceed ± 3 , and

the kurtosis index did not exceed ± 10 , the data has multivariate normality.

The results of the CFA are summarized in Table 1. The fit indices indicated that the model was relatively consistent with the data, with all fit indices better than the recommended values for assessment of reliability of the measures; composite reliability for each construct was calculated. All reliability values were greater than the suggested threshold of 0.70, indicating high internal consistency (Nunnally, 1978: 89). As a next step, the validity of the measures was assessed using factor loadings within the constructs, average variance extracted (AVE), and the correlation between constructs. As shown in Table 1, all AVE values were above 0.50, indicating adequate convergent validity. In addition, the AVE value for each factor exceeded the square value of each correlation between constructs, providing evidence of discriminant validity (Hair et al., 2014: 619).

Table 1
Construct summary statistics (N= 460)

Construct	No. of item	Item loading	AVE	Composite reliability	Model measurement fit
CRM	10	0.727-0.918***	0.708	0.960	Chi-square=24.680, Chi-square / df =1.452, p =0.120, CFI=0.998, GFI=0.990, NFI=0.994, RMSEA=0.031, SRMR=0.012
Attitude	8	0.886-0.921***	0.809	0.971	Chi-square=19.975, Chi-square / df =1.332, p =0.173, CFI=0.999, GFI=0.989, NFI=0.995, RMSEA=0.027, SRMR=0.008
SN	8	0.620-0.855***	0.604	0.924	Chi-square=18.715, Chi-square / df =1.701, p =0.066, CFI=0.997, GFI=0.990, NFI=0.993, RMSEA=0.027, SRMR=0.013
PBC	6	0.809-0.942***	0.754	0.948	Chi-square=9.889, Chi-square / df =1.648, p =0.129, CFI=0.998, GFI=0.993, NFI=0.995, RMSEA=0.038, SRMR=0.010
Intention	4	0.889-0.953***	0.882	0.967	Chi-square=3.322, Chi-square / df =1.661, p =0.190, CFI=0.999, GFI=0.996, NFI=0.999, RMSEA=0.038, SRMR=0.003

Note: *** $p < 0.001$

Structural model

Modeling comparisons

Before assessing the hypothesized paths, two models (i.e. the experience model and inexperience model) were independently tested. The results of the SEM revealed that both models were a good fit with the data (see Table 2). In particular, the experience model provided a good fit (Chi-square = 45.774, Chi-square/*df* = 1.430, *p* = 0.054, CFI = 0.995, GFI = 0.977, NFI = 0.984, RMSEA = 0.035, SRMR = 0.027). All paths were significant (*p* < 0.05). All predictor variables (i.e., CRM, attitude, SN and PBC) jointly explained about 75.3% of the total variance in customer intentions to use anti-aging businesses in Thailand (see Fig. 2). The inexperience model also

showed a satisfactory fit to the data (Chi-square = 51.054, Chi-square/*df* = 1.547, *p* = 0.023, CFI = 0.983, GFI = 0.930, NFI = 0.955, RMSEA = 0.070, RMR = 0.079). Some of linkages (SN) in the inexperience model were insignificant (*p* < 0.05) (see Fig. 3). The overidentified inexperience model was considered by trimming of the insignificant influence. The over identified inexperience model also showed a satisfactory fit to the data (Chi-square = 29.940, Chi-square/*df* = 1.426, *p* = 0.093, CFI = 0.990, GFI = 0.950, NFI = 0.966, RMSEA = 0.062, RMR = 0.112). All paths were found to be significant (*p* < 0.05), with the three antecedent variables explaining about 74.80% of the total variance in customer intentions to using anti-aging businesses in Thailand (see Fig. 4).

Table 2
Modeling comparison results—explanatory power and fit indices.

Fit indices and R ²	Suggested value ^a	Experience model	Inexperience model	Overidentified Inexperience model
Chi-square		45.774	51.054	29.940
<i>df</i>		32	33	21
Chi-square/ <i>df</i>	≤ 2 to ≥ 5	1.430	1.547	1.426
P-value	> 0.05	0.054	0.023	0.093
CFI	≥ 0.90	0.995	0.983	0.990
GFI	≥ 0.90	0.977	0.930	0.950
NFI	≥ 0.90	0.984	0.955	0.966
RMSEA	≤ 0.80	0.035	0.070	0.062
SRMR	≤ 0.10	0.027	0.053	0.081
Adjusted R ²				
Attitude		0.484	0.578	0.548
SN		0.076	0.000	
PBC		0.107	0.017	0.000
In		0.753	0.747	0.748

^a Suggested values were based on Kline (2016)

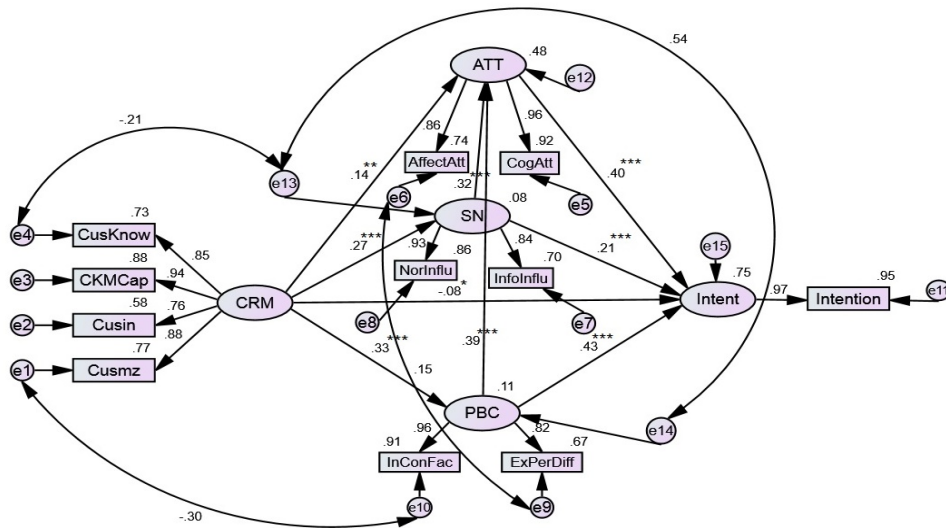


Fig. 2 The experience model results (N = 348)

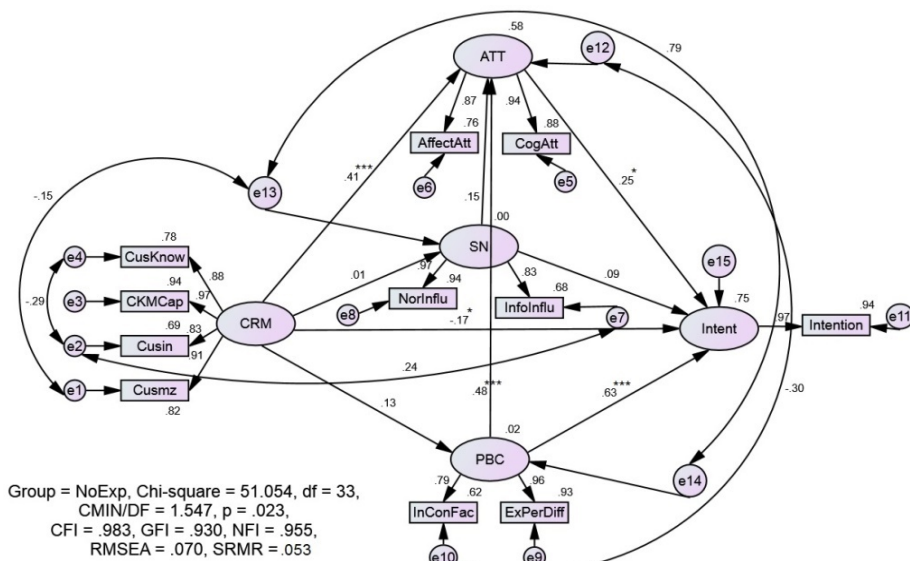


Fig. 3 The inexperience model results (N = 112)

Note: *** $p \leq 0.001$, ** $p \leq 0.01$, * $p \leq 0.05$

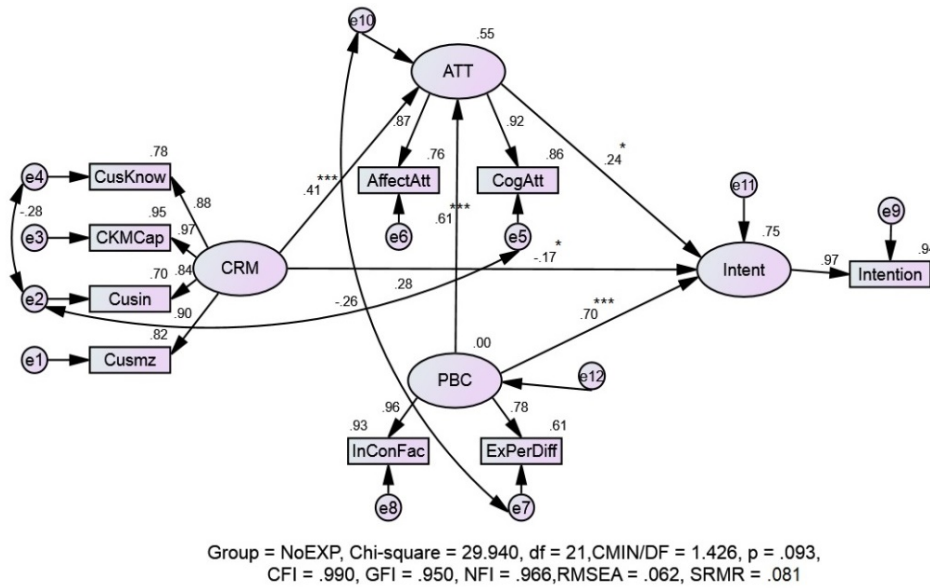


Fig. 4 The overidentified inexperience model results (N = 112)

Note: *** $p \leq 0.001$, ** $p \leq 0.01$, * $p \leq 0.05$

Hypotheses testing

The experienced-group models for hypotheses 1 to 9 were tested. The regression paths from CRM to SN (H1, $b = 0.275$, $t = 4.652$, $p < 0.001$), PBC (H2, $b = 0.327$, $t = 5.791$, $p < 0.001$), attitude (H3, $b = 0.140$, $t = 2.983$, $p < 0.01$) and intention to use anti-aging business (H4, $b = -0.081$, $t = -2.281$, $p < 0.05$) were significant. Thus, hypotheses 1, 2, 3 and 4 were supported. These findings were consistent with expectancy-value theory and previous studies in various settings (Kudeshia & Kumar, 2017; Husin, Ismail, & Rahman, 2016; Maggon & Chaudhry, 2019; Montano & Kasprzyk, 2002; and Luding, 2003), except H4 which was

significantly negatively correlated. The in-depth interviews found that businesses focusing on finding new customers by direct contact, such as sending e-mails, mobile marketing (i.e. Line, Facebook, Instagram and other social media), phone calls, and direct salesmen, might cause customers to feel unimpressed and even disturbed. The informants also suggested that service providers be able to aptly respond to customer inquiries, not depending on managers all the time. So, CRM by providing information about products and services, impressing customers throughout their customer experience, listening to the voice of customers, influenced by reference groups with real examples, social pressure, and

word of mouth, all lead to acceptance. Promoting customers to understand and recognize the difficulty or benefits of anti-aging, opportunities for behavior, providing information that is easy to understand, and easy to remember, will all enhance customer motivation to purchase products and services, and create a good attitude towards anti-aging business. The regression paths from SN to attitude (H5, $b = 0.322$, $t = 5.410$, $p < 0.001$), were supported. These findings were aligned with the expectancy-value theory and previous studies in various settings (Ajzen, 1991; Han, Hsu, & Sheu, 2010; Han & Kim, 2010). The findings imply that identifying customer needs, focusing on a customer that can be a business representative, managing reliable business information on the internet, and being selective in the choice of service provider can make a good image and help a business to gain a competitive advantage. It helps the business to maximize profits from existing customers by reducing the cost of finding new customers. The regression paths from PBC to attitude (H6, $b = 0.391$, $t = 6.473$, $p < 0.001$) were supported. These findings were in line with the expectancy-value theory and previous studies. Based on the expectancy-value theory, the findings imply that promoting public relations, providing useful information, meeting customer needs, customizing products and services, and offering excellent products and services, cause customers and potential customers to use the business (Ajzen, 1991;

Bhanthumnavin, 1987; Katz, 1960; Arvolaa et al., 2008). The regression paths from attitude to the intention to use anti-aging business (H7, $b = 0.398$, $t = 7.894$, $p < 0.001$), SN to the intention to use anti-aging business (H8, $b = 0.208$, $t = 4.458$, $p < 0.001$), and PBC to the intention to use anti-aging business (H9, $b = 0.429$, $t = 8.544$, $p < 0.001$) were all supported. These findings aligned with previous studies (e.g., Ajzen, 1991; Arvolaa et al., 2008; Kim & Chung, 2011; Liang, 2014). The path also indicated that an increase in favorable attitude, SN, and PBC, all raise intentions to use anti-aging businesses.

After the overidentified inexperience model, hypotheses were tested. Hypotheses 1, 2, 5 and 8 were not supported. Two interviewees from the inexperience-group explained there were no reference groups as they always made decisions by themselves, especially those concerning health. They believed that neither gym nor fitness facilities were necessary; healthy activities could be done anywhere. However, the regression paths from CRM to attitude (H3, $b = 0.413$, $t = 5.384$, $p < 0.001$), and to the intention to use anti-aging business (H4, $b = -0.172$, $t = -2.441$, $p < 0.05$) were supported, and in line with the expectancy-value theory and previous studies (Maggon & Chaudhry, 2019; Montano & Kasprzyk, 2002; Luding, 2003). The in-depth interviewees of the inexperience-group explained that businesses focusing on finding new customers by direct contact, such as sending e-mail, mobile marketing, phone calls, and direct salesmen

might cause customers to feel annoyed, and some might even cause negative perceptions or rejection resulting from “turn-off”, the desire to walk away, fear, or lack of trust. The findings imply that the CRM encouraged good attitudes among the inexperience-group. So, CRM that provides information about products and services, creates moments of truth throughout the customer journey, and which listens to the voice of customers, will enhance customer motivation in purchasing products and services, and good attitudes towards anti-aging business. The regression paths from PBC to attitude (H6, $b = 0.614$, $t = 7.921$, $p < 0.001$) were supported. These findings were consistent with the expectancy-value theory and previous studies (Ajzen, 1991; Bhanthumnavin, 1987; Katz, 1960; Arvolaa et al., 2008). The findings imply that promoting public relations, providing useful information, meeting customer needs, allowing for customized products and services, and offering excellent products and services induce potential customers to use the products and services. The regression paths from attitude to the intention to use anti-aging business (H7, $b = 0.244$, $t = 2.512$, $p < 0.05$), and PBC to the intention to use anti-aging business (H9, $b = 0.696$, $t = 8.145$, $p < 0.001$), were supported. These findings aligned with previous studies (e.g., Ajzen, 1991; Arvolaa et al., 2008; Kim & Chung, 2011; Liang, 2014). The findings also indicated that an increase in favorable attitude and PBC in potential customers will increase in

the intention to use anti-aging business.

DISCUSSION AND CONCLUSION

This study made a clear distinction between two sample groups in relation to anti-aging business, i.e. groups of experienced and inexperienced customers. Members of the experienced group were those having used, seen, heard, or acknowledged the products/ services of anti-aging businesses. Strong support was found for the models particularly in the experienced-group model. All nine hypotheses in the experienced-group were supported with statistical significance at the level of 0.05. CRM that can render sufficient information, provide smart and special services with consistent standards every time, and maintain a high spirit in taking care of customers, can make customers feel special (being someone), and induce a higher intention to use products and services. All such processes are driven by emotional experiences at every customer's touch point. Presentation of products and services that are customized to meet the needs of customers have a greater chance of success. All of these must be executed while giving a good impression and non-invasion of privacy. In light of consumer behavior, the CRM system must be efficiently designed to recognize and understand the customer's needs, identifying the factors determining customer

behavior, PBC, attitude, and SN. However, a point of caution is direct marketing, which requires private communication which can appear to be a breach of privacy, such that great sensitivity is required in order to provide continuity in the situation and create moments of truth to occur throughout the entire journey of each customer (Luding, 2003).

Regarding the inexperience group, hypotheses 3, 4, 6, 7 and 9 were supported. The three variables i.e., CRM, attitude, and PBC were supported with statistical significance at the level of 0.05. When potential customers receive an efficient process, and an effective channel for complaints, suggestions, comments, and needs of potential customers, this generates good feelings of the interaction, creating a good image of anti-aging business, and also attracting attention to the business and customization of products and services to meet the needs of customers, making customers feel a positive assessment of the aging business. The customer should be informed that using the service is not too complicated. This can increase the level of intention, and effort to use the anti-aging business. In the theoretical perspective, the results of this study support the theory of planned behavior. Ajzen (1991: 188) indicated that the variables in predicting behavioral intentions may change according to behavioral characteristics, sample group and the situation of the study. In the aspect of consumer behavior, it is found that CRM is one strategy that

entrepreneurs can apply by recognizing their customers, in order to understand customer needs, and listen to suggestions from potential customers. This can create a positive attitude among the potential customers and increase the opportunity to provide services to this group.

One limitation of this study is that differences between rural and urban areas were not included in the analysis. This leaves room for future research to add such parameters, along with other variables such as cultural and economic conditions of the investigated locations.

MANAGERIAL IMPLICATIONS

This study sought to provide a deeper understanding of the causal relationships among the components of the CRM and proposed a causal model using the TPB. In the experienced- group, the findings of the study suggest that anti-aging business entrepreneurs can apply the knowledge gained from the research findings to properly develop a CRM system that effectively focuses on PBC, attitude, and SN. CRM that fails to take into consideration behavioral factors such as interrupting customer's free time, and direct calls to customers during their working day, may generate a negative image of the business. The manager should focus on creating an initial impression and respect personal rights and privacy. Service providers, especially those who have direct contact with customers must be properly trained in

professional and skillful manners. Having full information and maintaining expertise in their products and services, offering efficient services and products, answering customer questions clearly, and listening to the voice of customers, are all key to the success of anti-aging business. In the inexperienced group, the findings of this study suggest that creating a positive attitude toward anti-aging business and avoiding a negative image of the business, increase the customer's intention to use said business, and this should remain a prioritized strategy. Using new media for promoting the visibility of the business should be used with caution; focus should be placed on first impressions and customer privacy.

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