# Effect of Perceptual Differences on Consumer Attitude and Purchase Intention of Organic Food: A Case Study of Online and Offline Purchasing of People in Bangkok, Thailand

Krisana Kitcharoen. Assumption University, Thailand krisana@au.edu

# Abstract

The increase in the consumption of organic foods has been one of the most obvious trends in the health-conscious society around the globe in the last decade. The sales of organic foods have grown by double-digit rates in many countries. The largest market for organic foods consumption is in the United States. In Thailand, the sale of organic foods is on the rise higher than the sales rate of conventional food. Premium pricing is a motivation for producers. Consumers prefer to pay more to get high quality food. At the same time, Thai consumers are actively engaged in online shopping on all kinds of commodities including organic food. Organic food has expanded its distribution channels to online shopping. Even though the consumption of organic foods is increasing in Thailand, but still little is known about the factors which affect consumer purchase intention toward organic foods. This study was carried out to explore factors influencing perceptual differences on consumer attitude and purchase intention of organic foods: a case study of online and offline purchasing organic food. These research-targeted populations are people who live in Bangkok and had an experience of consuming organic food. There are 404 respondents. Simple linear regression and multiple regression analysis were to analyze the data Findings reveal that Perceived Benefits is the most important variable that positively affects both the attitude and intention to purchase organic food at statistically significant level of 0.05. There is a significance mean difference derived between preference in offline purchasing group and online purchasing group using independent sample t-test for analysis.

**Keywords**: Organic food, Attitude, Perceived Susceptibility, Perceived Barriers, Perceived Benefits, Subjective norms, Purchase intention, Online purchasing, Offline purchasing

## **1. INTRODUCTION**

In the late twentieth century, the world has changed in its access to education and in people's perspective towards life. People prefer to purchase a high quality food for better life. As part of this change, there is an increase in the preference for organic food (Rana and Paul, 2017). This growth rate has been phenomenal and rarely seen in other industries. Moreover, a study by Rana and Paul (2017) on the behavior of consumers and their purchase intention towards organic food, have suggested that the reason for the rapidly shifting nature of the communities around the world on the preference of organic food is due to the on-going and constantly developing segment of health-conscious consumers. This trend of growth for organic food consumption has been there since 2000 from 17.9 (US billion) until 2010 at 59.1 (US billion), and continuous grow rapidly (Sahota, 2012).

This trend is global and Thailand is also gradually increasing its consumption of organic foods with a growing segment of health conscious consumers. It can be noted that the Thailand current market size is at 15.6 million USD, which is the 43<sup>rd</sup> largest organic product market in the world (Global Organic Trade, 2018). Currently, the leading companies in this industry are Capital Rice Co., Ltd, Green Net Coop and Nature's Path Foods Inc., with Capital Rice dominating at 45.1% of the market (Global Organic Trade, 2018).

Alongside with organic food growths Thai consumers have been engaging in online shopping behavior as well. This online shopping trend of all kinds of commodities has expanded to grocery shopping, fashion shopping and others. According to Statista (2018), the Thailand eCommerce market exceeded 3.7 Billion USD in 2018, and is expected to grow constantly 12.8% till the year 2022. As more and more people are engaging in online shopping in Thailand, it has become a very strong platform for businesses to start selling their products, and many traditional outlets have opened their online stores to accommodate this rapid rise in demand. Traditional shopping methods as indicated by Statista (2018) also suggested having slower growth rates. For instance, in 2014, the retail rates have dropped by 0.6%, and only in 2015 it picked up to 0.7% and to 4.3% in 2018. This growth rate is comparatively slower than online shopping rates, and that is precisely why many have started online stores.

The organic food consumption in Thailand is on the rise, and so is the purchase intention towards organic food from online stores (SCB Economic Intelligence Center, 2016). There are various stores in Thailand that are selling organic food, such as OrgBox Thailand, SunShine Market, Green Net, Happy Farmers and others. However, the prices of these products are slightly higher than when purchasing from offline markets. Ueasangkomsate and Santiteerakul (2016) stated that Thai people often purchase organic foods from trusted local and designated markets. A lot of the times, it is hard to indicate the difference between organic food and traditionally manufactured food, and therefore labeling and certification are vital. Apart from the certification issue, consumers are having trouble trusting online shopping platforms. A lot of the large brands such as Tesco and others have opened online platforms for their groceries, and these are more likely to be trusted than brands that are new in the industry of online shopping. The problem in the online organic market is to an extent a distinction is between consumer's attitude and purchase intention of organic food. Previous studies have demonstrated lack of trust, credibility and payment methods as major sources that affect consumer's attitude towards online purchase, while others have indicated that attitude is improving. Yet when it comes to purchasing products such as groceries or food products that are hard to distinguish between organic or non-organic, then purchasing online becomes a major issue (Hamstra, 2018). A lot of people find it more convenient to order, when many of the big brands are providing them free shipping throughout the nation. Such advantage is needed to ensure that the business is successful. Therefore, Thai consumer's attitude is improving towards online shopping but halting in certain areas of online shopping category, with one of them being online food and grocery shopping. Nonetheless, the potentials are there and there is a strong competition in the market for traditional and online shopping, with many preferring one and the other at the same time, while others preferring just one and not the other.

Besides the type of food and beverages that are generally distributed online, SCB Economic Intelligence Center (EIC) 2016 reveals that high potential products enable businesses to differentiate and reach out to new customers about seasonal foods during special events and those that are consumed by specific groups, such as Organic, Halal and Gluten free food. Nevertheless, no matter what businesses there are , whether they are manufacturers, distributors or an online distributors, a good understanding of consumer behavior is very important, as these unique products require strong consumer confidence in product and service quality. (SCB Economic Intelligence Center, 2016)

## 2. LITERATURE REVIEW

#### 2.1 Perceived Susceptibility

Perceived susceptibility refers to subjective evaluation of risk of developing unhealthiness (Rosenstock, 1974). Perceived susceptibility is used in this study to determine consumers' perception related to the chances of being diagnosed with an illness or disease. People embrace healthy behaviors by perceiving their power of personal susceptibility. Therefore, when consumers who have more perceived susceptibility than others, the more likely that they take steps in order to prevent from those risks, or as in this study, consume organic food. According to Chen, Fox, Cantrell, Stockdale and Kagawa-Singer (2007), for instance, the perceived susceptibility encourages people to vaccinate, to protect their skin form skin cancer by using sunscreen cream, to consume healthy food for prevent diseases. According to Rosenstock (1974), the perceived susceptibility could be referred to as the opinion of risk related to contracting of a certain health condition or disease. In another study conducted by Witte (1992), the researcher combined both perceived susceptibility, and perceived severity (subjective opition regarding the consequences or seriousness of a certain disease or condition) and determined that together they form a perceived threat, which in turn leads towards influencing the manner in which an individual processes information related to his or her health. Moreover, it also helps in motivating an individual to engage in a specific behaviour. In 2015, Abraham and Sheeran stated that perceived susceptibility helps in the formation of more powerful perception among individuals, which in turn prompts an individual to adopt healthy behaviours. Therefore, keeping this aspect under consideration, it could be stated that the higher the perceived risk, the more likely it is that an individual will engage in behaviours which could help in reducing the risk.

#### **2.2 Perceived Benefits**

Perceived benefit is the consumers' belief that a health-related action or prevention will reduce the risk or severity of the impact. It refers to the individual's perception. Therefore, those who have a higher perceived benefit of organic food will select to consume healthy food believing that these will reduce their chances of developing a disease or an illness (Rezai, Teng, Shamsudin, Mohamed, & Stanton, 2012). According to Janz and Becker (1984), the

perceived benefits could be explained as the subjective opinion held by an individual with respect to the effectiveness of a behaviour leading towards reduction of the threat associated with a health condition. A major reason behind such behaviour is the acceptance of the fact that the actions are considered to be effective by the individual and he or she might link it with preventing the health condition, such action are essential in order to overcome the conflicting motives associated with avoidance along with certain other undesirable consequences which might emerge due to engaging within the health action (Rosenstock, 1974).

#### **2.3 Perceived barriers**

Perceived barriers are personal beliefs of negative perspective of health-related s such as cost, pain, side effects, and time constraint that can be measured by perceived barriers. The behavioral change is determined by perceived barriers that are the most important factors according to Janz and Becker (1984). Thus, these barriers might lead towards prevention of engagement in such health promoting behaviour. It could be stated that in order to change the behaviour of an individual , the perceived benefits must outweigh the perceived barriers (McClendon, 2011). According to HBM , perceived barriers towards taking a certain action might include perceived danger or inconvenience as well as discomfort which an individual might have to incur through engaging in the behaviour. A simple example of this could be the lack of affordable health care or the perception held by an individual that taking a vaccine shot might cause a significant amount of pain. These factors may act as barriers in an individual being involved in positive health behaviour, as he or she might take the decision against receiving the vaccine.

#### 2.4 Cue to action or subjective norms

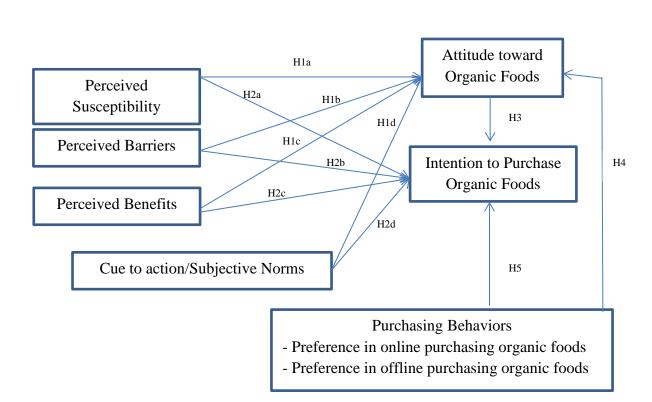
Cue to action or subjective norms are components that trigger behavior in health development (Rosenstock, 1974). The consumer's purchase intention in organic foods can be motivated by social pressure that can be measured via cue to action or subjective norms. The factors that influence consumers to purchase natural foods are family member's illness and parent's advice. Furthermore, the motivation from some persons such as doctor, older people, close friends, and lecturers can force consumers to purchase natural foods. Moreover, society, advertisements, media, encouragement, life quality, and health campaigns are the other important factors that motivate consumer's purchase intention (Rezai et al., 2012). The Health Belief Model states that a trigger or a cue is essential for prompting engagement in behavior that promotes healthy behavior among individuals. In a study conducted by Janz and Becker (1984), it was determined that cue to action could either be external or internal; external cues might include information coming from close sources or the health care provider, while internal cues could be pain and symptoms of a certain condition being experienced by an individual.

## 2.5 Attitude

Attitude is a psychological construct, which is attained through mental and emotional perspective of a person (Richard, 2016). In 1929, Allport stated that attitude can be formed from the past experiences, from present situations. According to Culbertson (1968), attitude involves two things as a set of acceptance that the behavior is either good or not and be liable to behave to the object whether to hold or eliminate it.

# **3. RESEARCH FRAMEWORK AND METHODOLOGY**

The conceptual framework of this study (Figure 3.) refers to the health belief model (HBM) adopted from theoretical framework of Rezai et al. (2012. It is used to propose the effect of perceptual differences on consumer purchase intention of natural functional food. The researcher identified the factors that have effect on Purchase Intention toward on organic food. There are four of independent variables: Perceived Susceptibility, Perceived Barriers, Perceived Barriers, and Cue to action/Subjective Norms that are the factors that effect Purchase Intention. Therefore, this conceptual framework is developed determine and examine the factors influencing attitude and purchase intention toward organic food in Bangkok.



**Figure 3** Conceptual Framework

## **3.1 Hypothesis Testing**

The hypotheses of this research are based on the conceptual framework that shows the relationship between the components perceived susceptibility, perceived barriers, perceived benefits and cue to action/subjective Norms which influences consumers' purchasing intention toward organic food in Bangkok. There are eleven hypotheses that determine the relationship between the variables, consumer attitude and purchase intention of organic foods in different aspects. The hypotheses in this study are,

No.	Н	Hypotheses							
1	H1a	The perceived susceptibility (PS) has a positive significant effect on							
		consumers' attitude (ATT) toward organic food.							
2									
		attitude (ATT) toward organic food.							
3	H1c	The perceived benefits (PBN) has a positive significant effect on consumers'							
		attitude (ATT) toward organic food							
4	H1d	The subjective norms (SN) has a positive significant effect on consumers'							
		attitude (ATT) toward organic food.							
5	H2a	The perceived susceptibility (PS) has a positive significant effect on							
		intention to purchase (IP) organic food.							
6	H2b	The perceived barriers (PB) has a negative significant effect on intention to							
		purchase (IP) organic food.							
7	H2c	The perceived benefits (PBN) has a positive significant effect on intention to							
		purchase (IP) organic food.							
8	H2d	The subjective norms (SN) has a positive significant effect on intention to							
		purchase (IP) organic food.							
9	H3	The consumers' attitude (ATT) has significant effect on intention to							
		purchase (IP) organic food.							
10	H4	There is a significant mean different between purchasing behaviors on							
		consumers' attitude (ATT) toward organic food.							
11	H5	There is a significant mean different between purchasing behaviors on							
		Intention to purchase (IP) organic food.							

Table 1Defined Hypothesis

## **3.2 Research Methodology**

This research uses the quantitative approach to describe the hypothesis related factors impacting consumer purchase intention toward organic food in Bangkok. This research uses the non-probability sampling methods namely, convenience, snowball sampling techniques and quota sampling were applied to collect the data from the target respondents who live in Bangkok. A questionnaire was distributed to respondents using both online and offline channels. In addition, the quota sampling was also used to find out the mean difference of factors impact consumer purchase intention toward on organic foods in Bangkok arising from online purchasing and offline purchasing. The questionnaire was composed of 3 parts which are Screening question part, Likert scale part and Demographic part. The Five-Point Likert scale was applied to test all hypotheses by ranking from, 5 as 'Strongly Agree' to 1 as 'Strongly Disagree' to gauge the consumer's intention. The Simple Linear Regression and Multiple Linear Regression were employed to analyze the significant effect of the independent variables on the dependent variables. The Independent Sample T-Test was employed to analysis the significant mean difference between purchasing behaviors on Intention to purchase Organic Foods and the significant mean difference between purchasing behaviors on consumer's attitude toward organic foods.

#### 3.3 Measurement of variables

The target respondents of this research were people who live in Bangkok and consume organic food. The conceptual framework was developed to as an appropriate model based on the literature review.

## 3.4 Population and sample

This research was distributed through online and offline survey sent to target respondents who were people who live in Bangkok and have ever consumed organic food. Theoretically, at least 384 respondents are required to represent 67 million people of Thai population size with 95% confidence level (Krejcie & Morgan, 1970). The researcher obtained 436 respondents. After validating the sample by the screening questions, a total of 404 respondents were qualified and considered as target respondents of this study. Because the real the population and sample size is unknown, the researcher determined the population size of consumer who consume organic foods in Bangkok using the confidence level equal to 95 percent and the level of sampling error equal to 5 percent based on the formula of Cochran (1977).

## 3.5 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 So:  $n = (1.96)^2$   $4(\overline{0.05})^2$   $n = 384.16 \approx 400$ The sample size is 404 of consumer who consume organic foods in Bangkok.

## **3.6 Reliability test**

Reliability test was done at the pilot stage with 30 respondents. The Cronbach's Alpha Coefficient was considered to examine the reliability level of each group of items included in the questionnaire. All the test results of independent variables met the requirement standard with Cronbach's Alpha Coefficient more than 0.6 (Cronbach, 1951). Table 2 shows the Cronbach's Alpha Coefficient falls in the range between 0.687 to 0.857 which is higher than 0.6. This indicates that there is a high internal consistency of all research constructs. Therefore, it implies that the questionnaire developed for this study has achieved the standard required for reliability test.

Variables	Number of items	Cronbach's alpha
Perceived Susceptibility	2	0.700
Perceived Barriers	3	0.734
Attitude	3	0.687
Subjective Norms	3	0.777
Intention to Purchase	5	0.857
Perceived Benefits	2	0.782

Table 2Consistency of the scales test (N=30)

## **4. RESULTS AND DISSION**

#### 4.1 Data Analysis

The Simple Linear Regression (SLR) and Multiple Linear Regression (MLR) are used as a statistical tool to analyze the hypotheses. The hypotheses are divided into three groups based on the conceptual framework. The first group consists of four independent variables i.e. Perceived Susceptibility (PS), Perceived Barriers (PB), Perceived Benefits (PBN), Subjective norms (SN), and one dependent variable which is consumers' attitude (ATT) toward organic foods. The second group consists of four independent variables as same as the first group which are Perceived Susceptibility (PS), Perceived Barriers (PB), Perceived

Benefits (PBN), Subjective Norms (SN), and one dependent variable which is Intention to Purchase (IP) organic foods. The last group has only the independent variable that is the consumers' attitude, and one dependent variable which is Intention to Purchase (IP) organic foods. Multiple Linear Regression (MLR) is used as a statistical tool to analyze the first two groups and Simple Linear Regression (SLR) is used as a statistical tool to analyze the last group. Additionally, Independent Sample T-Test is used to analyze mean difference between online and offline purchasing behaviors on Intention to purchase (IP) Organic Foods and consumers' attitude (ATT) toward organic foods.

#### 4.2 Demographic Profile Summary

This part shows the demographic characteristics of the 404 respondents who live in Bangkok more than 6 months and have ever consumed organic foods. The demographic profile is summarized and shown in Table 3.

The preferences of purchasing behavior of the respondents are very similar to that of each other due to using a quota technique was intentionally applied to this study. Majority of the respondents prefer in offline purchasing organic foods are 56.2 % while 43.8 % prefer online purchasing of organic foods.

The majority of respondents were female which accounted for 63.4%, where as 36.6% are male. For the age proportion of respondents, the majority of respondents are between 26 to 30 years old with 48.8%, followed by 31 to 35 years old (25.5%), 36 to 40 years old (11.1%), More than 40 years old (10.1%), 21 to 25 years old (3%) and less than 20 years old (1.5%) respectively. Over than a half of respondents reported a Bachelor's Degree (52.5%)

followed by Master's degree or higher (46%) and 1.5 % were reported Vocational certificate or lower. Majority of respondents are office workers with 67.1% of total. The rest are entrepreneur, Government Employee/State Enterprise Employee, Housewife, Student, and unemployed with portion of 10.25%, 10.25%, 8.50%, 7.50%, and 5.00% respectively.

Lastly, more than half of respondents' income that in the range of 45,001-60,000 THB that accounted for 40.1%, 27.8%, 22.0%, 7.4% and 2.7% per cent reporting 30,001-45,000 THB, Above 60,000 THB, 15,000-30,000 THB and Less than 15,000 THB respectively.

Demographic	Characteristics (N = 404)	Frequency	Percentage
Purchasing	Preference in offline purchasing	227	56.2
Behaviors	Preference in online purchasing	177	43.8
Gender	Male	148	36.6
	Female	256	63.4
Age	Less than 20 years old	6	1.5
	21-25 years old	12	3.0
	26-30 years old	197	48.8
	31-35 years old	103	25.5
	36-40 years old	45	11.1
	More than 40 years old	41	10.1
Education	Vocational certificate or lower	6	1.5
Laucution	Bachelor's degree	212	52.5
	Master's degree or higher	186	46.0
Occupation	Government Employee/State		
-	Enterprise Employee	22	5.4
	Office worker	271	67.1
	Entrepreneur	71	17.6
	Housewife	16	4.0
	Unemployed	9	2.2
	Student	15	3.7
Income	Less than15,000 THB	11	2.7
	15,000-30,000 THB	30	7.4
	30,001-45,000 THB	112	27.8
	45,001-60,000 THB	162	40.1
	Above 60,000 THB	89	22.0

# Table 3Demographic Profile

Variable	Mean	SD	IP	PS	PB	SN	PBN	ATT
IP	3.5604	.86350	1.000					
PS	3.5334	.84065	.476*	1.000				
PB	3.5240	.66780	.091*	.253*	1.000			
SN	3.0520	.89509	.488*	.412*	.332*	1.000		
PBN	3.4072	.95659	.589*	.546*	.368*	.498*	1.000	
ATT	3.9135	.75377	.580*	.479*	.180*	.441*	.569*	1.000

Table 4Correlation Matrix

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

Refer to the Pearson's Correlation Matrix in Table 4, all variables have positive correlations among each other with P-value less than 0.05. The overall relationship between variables has positive relationship in the range 0.091-0.589. While Perceived Benefits (PBN) has strong positive relationship with Intention to purchase (IP) at 0.589 correlation and Attitude (ATT) has strong positive relationship with Intention to purchase (IP) at 0.580 correlation. However, some variables have weak positive relationship which is Perceived Barriers (PB) and Intention to purchase (IP) at 0.091, Perceived Barriers (PB) and Perceived Susceptibility (PS) at 0.253, Subjective Norms (SN) and Perceived Barriers (PB) at 0.332 correlation.

#### 4.3 Inferential Analysis and Multicollinearity Validation

To study the effect and significant mean difference of hypotheses, the Multiple linear regression analysis (MLR) was applied. The Simple linear regression analysis (SLR) was used to test the hypotheses. The Independent Sample T-Test was used to test the mean difference of hypotheses on this research. The Variance Inflation Factor (VIF) investigated the critical multicollinearity problem in this study at VIF > 5 (Ringle, Wende & Becker, 2015).

Table 5
Multiple Linear Regression Result (H1a – H1d), Dependent Variable: Attitude

Hypothesis	Variable	Standardized Coefficient (β)	VIF	Result
H1a	Perceived Susceptibility	.207*	1.482	Supported
H1b	Perceived Barriers	079	1.199	Not Supported
H1c	Perceived Benefits	.392*	1.711	Supported
H1d	Subjective norms	.186*	1.425	Supported
R Square		0.390		
A	djusted R Square	0.384		

Note: \* represents standardized coefficient ( $\beta$ ) with P-value  $\leq 0.05$ .

Table 5 reveals the result of  $R^2 = 0.390$ , meaning that 39% of all four independent variables in this first group i.e. Perceived Susceptibility (PS), Perceived Benefits (PBN), Subjective norms (SN) could well explain the dependent variable, consumers' attitude (ATT) toward organic food, at significant level of 0.05 or 95% of confidence level. The P-values of the independent variables, PS, PBN, and SN, are less than 0.05 indicate that H1a, H1c, and H1d are supported whereas H1b is not supported because of P-values greater than 0.05.

As a consequence, PS, PBN, and SN have statistically significant positive effect on consumers' attitude (ATT) toward organic foods at the Standardized Coefficient ( $\beta$ ) 0.133, 0.340 and 0.312 respectively whereas PB does not have a statistically significant negative effect on consumers' attitude (ATT) toward organic foods. The variance inflation factors (VIFs) were verified to validate the multicollinearity problem. All VIFs were less than 5.00 which shows that there is no critical multicollinearity problem in this research.

#### Table 6

Multiple Linear Regression Result (H2a – H2d), Dependent Variable: Intension to Purchase

Hypothesis	Variable	Standardized Coefficient (β)	VIF	Result
H1a	Perceived Susceptibility	.181*	1.482	Supported
H1b	Perceived Barriers	202*	1.199	Supported
H1c	Perceived Benefits	.433*	1.711	Supported
H1d	Subjective norms	.265*	1.425	Supported
R Square		0.452		
A	djusted R Square	0.44	6	

Note: \* represents standardized coefficient ( $\beta$ ) with P-value  $\leq 0.05$ .

The outcome from the Table 6 reveals  $R^2$  at 0.452, which interprets that Perceived Susceptibility (PS), Perceived Barriers (PB), Perceived Benefits (PBN), Subjective norms (SN) can represent 45.2% of all independent variables that effecting intention to purchase (IP) organic foods at significant level of 0.05 or 95% of confident level. The P-values of all independent variables, PS, PB, PBN, and SN, are less than 0.05 indicate that H2a, H2b, H2c, and H2d are supported.

Perceived Benefits (PBN) has the most positive effect on intention to purchase (IP) organic foods with Standardized Coefficient ( $\beta$ ) at 0.433, followed by Subjective norms (SN) and Perceived Susceptibility (PS) at 0.265 and 0.181 respectively. Meanwhile, PB has statistically significant negative effect on intention to purchase (IP) at the Standardized Coefficient ( $\beta$ ) -0.202. The multicollinearity problem was also investigated and found no issues similar to the previous group.

 Table 7

 Simple Linear Regression Result (H3), Dependent Variable: Intension to purchase

Hypothesis	Variable	Standardized Coefficient (β)	VIF	Result
H3	Attitude	.580*	1.000	Supported
R Square		0.337		
Adjusted H	R Square	0.335		

Note: \* represents standardized coefficient ( $\beta$ ) with P-value  $\leq 0.05$ .

Table 7 showed the result of  $R^2$  was 0.337 means, 33.7% of Intention to purchase can be explained by Attitude (ATT). At significant level of 0.05 where the p-value of variable is less than 0.05 indicate that H3 is supported. Attitude (ATT) has statistically significant effect on Intention to purchase organic food with a Standard Coefficient of beta coefficient at 0.580.

Group Statistics							
Purchasing Behaviors	Ν	Mean	Std. Deviation	Std. Error Mean			
Preference in offline purchasing	227	3.7581	.70801	.04699			
Preference in online purchasing	177	4.1128	.76563	.05755			

 Table 8

 Group Statistic for H4, Dependent Variable: Attitude

Table 9
Independent sample T-Test (H4), Dependent Variable: Attitude

Attitude	Levene's Test for Equality of Variances		t-test for Equality of Means				Result
Attitude	F	Sig.	t	df	Sig. (2-tailed)	Mean Different	Result
Equal variances assumed	2.487	.116	-4.821	402	.000	35476	Supported
Equal variances not assumed	2.487	.110	-4.775	363.206	.000	35476	Supported

Table 8 shows that there is a significant difference in Preference in offline purchasing on consumers' attitude (ATT) toward organic foods (M= 3.7581, SD=0.70801) and Preference in online purchasing (M= 4.1128, SD=0.76563). Conditions; t (402) = -4.821 p = 0.000 (Table 9).

This implies that there is a significant mean difference between purchasing behaviors, offline and online purchasing, on consumers' attitude (ATT) toward organic food.

 Table 10

 Group Statistic for H5, Dependent Variable: Intention to purchase

Group Statistics							
Purchasing Behaviors	Ν	Mean	Std. Deviation	Std. Error Mean			
Preference in offline purchasing	227	3.2969	.83557	.05546			
Preference in online purchasing	177	3.8983	.77873	.05853			

Intense to purchase	Levene's Test for Equality of Variances		t-test for Equality of Means				Descrit
	F	Sig.	t	df	Sig. (2- tailed)	Mean Different	Result
Equal variances assumed	1 440	220	-7.394	402	.000	60139	Supported
Equal variances not assumed	1.449	.229	-7.458	389.429	.000	60139	

 Table 11

 Independent sample T-Test (H5), Dependent Variable: Intention to purchase

Table 10 shows that there is a significant difference in Preference in offline purchasing for Intention to purchase organic foods (M= 3.2969, SD=0.83557) and Preference in online purchasing (M= 3.8983, SD=0.77873). Conditions; t (402) = -7.394 p = 0.000 (Table 11). This implies that there is a significant mean difference between purchasing behaviors, offline and online purchasing, on Intention to purchase (IP) organic food.

# 5. CONCLUSION, LIMITATION, AND RECOMMENDATIONS

#### **5.1 Discussion and Conclusion**

This research was conducted as an empirical study to identify the effects of perceptual differences on consumer attitude and purchase intention of organic foods of Thai respondents in 2018. The study was also extended to investigate the mean differences of purchasing behaviors between offline and online purchasing organic food of people in Bangkok, Thailand, which influence the actual attitude and purchase intention. The conceptual framework was adopted from theoretical framework of Rezai et al. (2012) to propose effect of perceptual differences on consumer purchase intention of natural functional food. The results obtained by using Multiple Linear Regression, Simple Linear Regression and Independent Sample T-Test was use to analyze data and provide a conclusion for this study.

Perceived susceptibility, Perceived Benefits, and Subjective norms have statistically significant positive effects on intention to purchase organic food whereas perceived barriers have statistically significant negative effect on intention to purchase organic food. The results revealed that the most influential factors on intention to purchase organic food were perceived benefits followed by subjective norms, perceived barriers and perceived susceptibility. Perceived Benefits is the most crucial variable that effects on the intention to purchase organic food. This concludes that perceived benefits are required to improve the purchase intention of respondents who consume organic foods in Thai society. These findings are supported by the studies of Rezai et al. (2012) and of Verbeke (2005) which show that perceived benefits of functional food were the main factor that influence purchase intention. Consumers need to realize the benefits of consuming organic food, that these are the products that could better their health and provide health benefits. Before a consumer builds a positive attitude toward organic and synthetic food, there is a need to build a positive perception. Therefore, marketers need to provide appropriate information underscoring the benefits that come along with consuming organic food to meet consumer need.

Perceived susceptibility, Perceived Benefits, and Subjective Norms have statistically significant positive effect on consumers' attitude toward organic foods. Perceived Benefits is the most important variable that influences the consumers' attitude toward organic food as well as the purchase intention of organic foods. Perceived barriers has no significant negative effect on consumers' attitude toward organic food. In contrast, perceived barriers have significant negative effect on purchase intention of organic foods. Moreover, Attitude has a statistically significant effect on Intention to purchase organic foods. These findings are consistent with the study done in New South Wales; Australia by Patch, Tapsell, and Williams (2005) that showed that having a positive attitude has a strong influence on the intention. As noted from this study, attitude is the crucial factors which will influence consumers' intention to purchase organic foods. It can be noted by the business firms involved in organic food marketing because it determines the key factors which influence consumer purchase intention toward organic foods. From this information, the business firms can classify the problem and take the action to meet consumer needs.

The analysis of mean differences between purchasing behaviors, offline and online purchasing, on consumers' attitude and mean differences between purchasing behaviors, offline and online purchasing, on Intention to purchase organic foods concludes that there is mean difference between offline and online purchasing organic food, both on attitude and purchase intention

#### **5.2 Recommendation**

Practitioners and business firms should put more attention on the benefit of organic food consumption through dynamic strategies, marketing communication and advertisement. These will help the business firms get better opportunities to meet consumer expectation and generate sales. To be top of mind of consumer who consumes organic foods should create more than brand information, but need to focus on the value or benefits. Marketing communication such as marketing campaign should separate targeting between groups that prefer online and offline purchasing, use messages related to their purchasing behavior. When launching a campaign, there should be two different modes of campaign for different behaviors of purchasing group to their attitude and Purchase intention. Online campaigns can use celebrity endorsers with good profile to promote the positive brand perception and also to focus on how the value or benefits of organic food for them. The Offline campaign can provide more comprehensive information and knowledge to provide the benefits of organic food and thus create a good attitude. Booths or exhibitions are good venues for offline campaign.

#### **5.3 Limitation and Future Research Directions**

The research used integrated model such as the health belief model (HBM) adopted from theoretical model. This is a limited construct to create the new model. Other independent variables might influence the purchase intention of organic foods might have to be considered in future studies. Additionally, future research study may consider respondents coming from outside Bangkok City in order to obtain at broader conclusions.

In addition, this research used quota sampling to determine the mean difference between purchasing behaviors on Intention to purchase organic food, the researcher recommends to use quota sampling to study other demographic factors such as gender, income toward the purchase intention organic foods in order to obtain the deeper information.

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