

PURCHASE INTENTION OF ORGANIC FOOD PRODUCTS AMONG CONSUMERS IN THAI NGUYEN CITY, VIET NAM

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ABSTRACT

This study applied TPB model to analyze the purchase intention of organic food products among consumers in Thai Nguyen City, Viet Nam. A quantitative research was conducted through a survey of 298 valid cases of consumers in Thai Nguyen City. For the purposes of analysis, descriptive analyzes were chosen. The findings have implications for companies in the organic food industry, retailers, and market regulators. The study also provides guidelines and suggestions for retailers and marketers dealing in organic food products and aims to expand the organic food product market.

Keywords: Consumer, organic food, purchase intention.

INTRODUCTION

With increasing consumers' awareness about the environment, natural pathology, and the green world, eco-friendly products are becoming popular among consumers as they are more health-conscious and the environment protection. Organic food businesses must segment the market scientifically to maximize market share. People who believe in health benefits, care about protecting the environment, and want to improve their lifestyle can be potential consumers of organic food products. Moreover, consumers are willing to pay for green food consumption (Bradford, 1995).

Coddington (1993) also mentions a change in consumers' opinions. Consumers are increasingly concerned about the environmental impact on their health and safety. Their anxiety forces enterprises to incorporate environmental issues in their decision-making (Coddington, 1993). Moreover, food quality and health consciousness are the main attractions of consumers towards organic food. Besides, consumers are also aware that organic food is healthier, tastier, has no harmful effects, and has better quality than inorganic food (Dipeolu, 2009). Consumers buy organic food mainly for health benefits (Shepherd, 2005). Effective business campaigns play a prominent role in creating awareness in the minds of consumers, and they are willing to spend more money on green products (Gacia - Yi, 2015).

According to Wier & Calverley (2002), consumer interest in organic food products has increased significantly in many countries. Organic food products are also one of the fastest-growing food market sectors in Europe, North America, Australia, and Japan (Harper, 2002). Today, the consumption of organic products is closely associated with health concerns and social, economic,

and ecological sustainability. Experts in the food industry say that the organic food product trend has not peaked, and there is still a lot of growth potential (Ebrahimi, 2007).

Various factors have contributed to the growing popularity of organic food products. Possible causes are: (1) organic food products taste better than conventionally produced foods; (2) consumer's concern about health, nutrition, or environment; (3) consumer concerns about the use of chemicals and pesticides in conventional farming (Squires, Juric and Cornwell, 2001). Purchase intention is the first step in developing demand for organic food products. The consumer goes through all the stages when considering buying a product in the buying decision process. In the second stage (information-seeking phase of decision-making), their information-seeking is tied to perception because presenting the information to the customer creates awareness so that customers are aware of paying attention to what is available, where to buy and why (Armstrong and Kotler, 2010). How they trust information about the product will affect them in the later stages, i.e., evaluation of alternatives and purchase intention.

LITERATURE REVIEW

In 1991, after applying the theory of rational behavior (TRA) developed by Fishbein and Ajzen in 1975, to study human behavior in general and consumer behavior in particular. Fishbein and Ajzen have received much feedback from researchers about the weak point of the model, that is, people's perception of difficulties and obstacles in performing the behavior (Ajzen I. , *The Theory of Planned Behavior*, 1991). On that basis, Ajzen proposed the Theory of Planned Behaviors with the vital addition of the Perceived Behavioral Control (PBC) variable to the TRA model.

According to Fishbein and Ajzen, before performing a behavior, people (including consumers) will intend to perform that behavior first, thus different from other theories of human behavior. Accordingly, Ajzen's theory of planned behavior and, before that, Fishbein and Ajzen's theory of rational behavior consider and place the intention variable at the center of the model (Ajzen, 1991; 2012). Next, in turn, people's intention to perform a behavior is affected by attitude towards behavior, subjective norm (Ajzen, 2012; Ajzen and Fishbein, 2005). While attitude towards a behavior is a set of beliefs or comes from a person's assumptions about that behavior, the subjective norm is a collection or derived from common normative and normative beliefs. Fishbein and Ajzen define attitudes toward a behavior as "the degree to which an individual approves or disapproves of the behavior," which is different from more general attitudes such as attitudes toward an object or event; this is the attitude towards the behavior (Ajzen, 1991). In organic food research, the attitudinal variable is understood as the attitude towards purchasing organic food. However, some studies also mentioned attitudes to organic foods, the environment, attitudes to health, etc. Still, this attitude does not coincide with the attitudes mentioned in the model of Fishbein and Ajzen (Ajzen, 1991). Subjective norm is understood as "people's perception of social pressure to perform or not to perform a behavior." When people perform a specific behavior, they will perceive that they are judged by society, relatives, and people around them for achieving that behavior. These pressures will act to prevent them from doing so. Consumers will feel when they consume or do not consume organic products in purchasing organic food products. They all receive the judgment of those who, according to them, is essential to them. These judgments, if they feel criticized, disparaged, will tend to reduce their intention to buy organic food. On the contrary, if they feel supported and praised, consumers will increase their purchase intention of organic food products.

As mentioned above, after Fishbein and Ajzen proposed the theory of rational behavior (TRA), many researchers have said the factors that hinder or control human behavior. On that basis, in 1991, Ajzen conducted a review and supplemented the perceived behavioral control variable into the TRA model and gave this model a new name, the theory of planned behavior (TPB). According to Ajzen, this is an integral part of the theory of planned behavior and is the one that distinguishes it from TRA. Perceived behavioral control is defined as “A person's perception of the ease or difficulty of doing a behavior”. This factor affects the intention to perform the behavior and people's behavior. In the study of organic food, the cognitive factors that control behavior are mentioned by researchers through many factors: price, availability, etc. The theory of planned behavior is shown in Figure 1, as below:

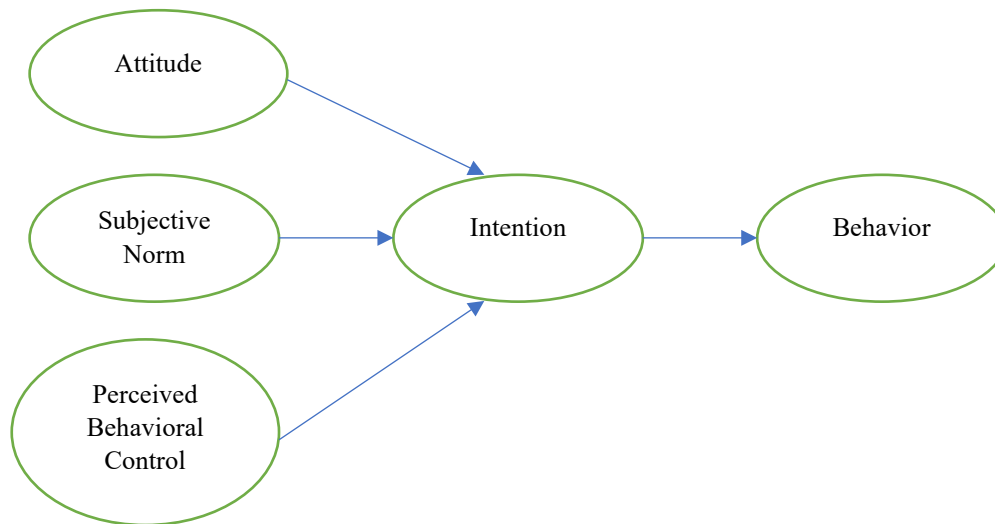


Figure 1. Theory of Planned Behavior (TPB)

Source: Ajzen, 1991

TPB assumes three conceptually independent determinants of intention. Firstly, the attitude towards the behavior and the degree of favorable or unfavorable evaluation of a person towards the behavior. The second is a social factor called subjective norm; it refers to the perceived social pressure to perform or not to perform the behavior. The third is perceived behavioral control. It refers to the ease or difficulty of performing the behavior.

Thus, the Theory of Planned Behavior is not only one of the theoretical frameworks widely applied to mere buying behaviors, but also widely used in explaining the consumption behavior of organic products of studies in many different countries (Arvola, 2008), including countries with developing and transition economies like that of Vietnam.

METHODOLOGY

Scales

The scales used in this study are inherited from previous studies. The purchase intention scales are inherited from the studies of Ajzen (1991) and Mai et al. (2018). It included eight dimensions. To measure factors, the study inherited and modified the scales of Mai et al. (2018) and huong (2014). The scales of attitude include six items; five items measure scales of subjective norm, and five items measure scales of perceived behavioral control. The responses were given on a five-level Likert scale ranging from 1 = strongly disagree to 5 = strongly agree.

Sample size

400 surveys were distributed in this study, and 330 were returned (71.2%). Of the returned surveys, 298 surveys were useable for analysis. The study sample staff were between 18 and 65 years old, with over 61% female and nearly 39% male. Educational level was varied, with 46.97% having completed college education or university graduates, and 14.11% having master's degree. Regarding the household income, nearly 40% of the respondents had income from 15 million VND, and nearly 25% had 20 million VND or more. Table 1 shows the results of Demographic variable statistics.

Table 1. Demographic characteristics of the respondents.

Profile	Frequency	Percent
Sex		
Male	114	38.25
Female	184	61.75
Age		
Under 20	65	21.81
From 21 to under 40	76	25.50
From 41 to under 60	145	48.66
Upper 60	12	4.03
Education level		
Not yet graduated from high school	19	6.37
Graduated from high school	97	32.55
Graduated from college/university	140	46.97
Postgraduate education	42	14.11
Household Income (million VND/month)		
Under 5	10	2.98
From 5 – under 10	24	8.05
From 10 – under 15	77	25.84
From 15 – under 20	116	38.92
From 20 or more	71	24.21
Total	298	100.00

FINDINGS

Current situation of organic food consumption in Thai Nguyen City

Five supermarkets are selling organic food products in Thai Nguyen City: Minh Cau supermarkets, Vincome, Thanh Do, Lan Chi mart. The supermarkets are active in the business of every product, which has organic food products such as rice, vegetables, meat, etc. Besides food products, supermarkets also provide other products such as consumer goods, electronics, fashion, etc. The total organic food market value of the five supermarkets in Thai Nguyen city was nearly VND 200 billion/year and accounts for most organic food consumption market share (Figure 2). Besides, consumer spending on health in Thai Nguyen City was showing signs of increasing, averaging over 5% of income, especially up to 47% of consumers in Thai Nguyen city were increasingly interested in healthy, fresh, and natural food products (Thai Nguyen Provincial Statistics Office, 2021).

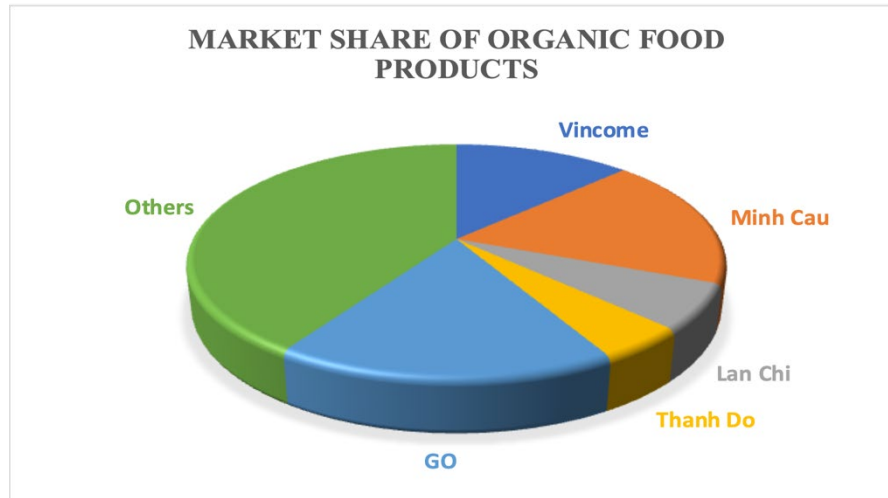


Figure 2. Market share of organic food products in Thai Nguyen City

Source: Economic Department of Thai Nguyen City, 2021

The value structure of consumed organic food products

Organic food products at supermarkets in Thai Nguyen city were more abundant and had various products than most supermarkets in the other towns and districts. The supermarket had many different organic food products such as fruits, vegetables, meat, rice, milk, etc.

Table 2. The percentage of items in organic food products

Unit: %

Product	Vincom	GO	Lan Chi	Thanh Do	Minh Cau
1. Vegetable	46.90	45.51	46.76	50.10	52.45
2. Fruit	18.80	19.33	18.79	20.87	21.98
3. Meat	4.80	6.10	3.80	2.10	1.98
4. Milk	9.20	9.50	8.90	8.18	7.88
5. Rice	9.50	10.12	11.20	10.12	9.11
6. Others	10.80	9.44	10.55	8.63	6.60

(Source: Collected from supermarkets)

According to the survey results, organic vegetables accounted for the highest proportion in Thai Nguyen city, about 45-50% of the market. Therefore, it can be seen that organic vegetables were much more prevalent in Thai Nguyen. Next was a fruit, with a rate of about 18% to 22% of the total consumption value in the area—products such as meat, milk, and rice account for a low proportion. Because consumers in Thai Nguyen city have not changed much in consuming organic food products, therefore, supermarkets also focus on selling safe food products than organic food products. However, GO and Minh Cau was two supermarkets with a consistent allocation mechanism, especially GO supermarket. At the same time, GO supermarket also took advantage of the diversity and richness of products to attract customers. Specifically, organic vegetables and

meat were imported from organic farms from Da Lat to attract high-income customers. For middle-class customers, it supplied products from farms in Ba Vi, Son Tay, Thai Nguyen, etc. Therefore, product diversity can create competitive advantages for GO supermarket in the market.

Analysis of factors affecting purchase intention of organic food products

Table 2. The percentage of items in organic food products

Items	Mean	Std. Deviation	Interpretation
Attitude			
1. Buying organic food products is a good idea.	4.26	0.707	Excellent
2. Buying organic food products is the right thing to do.	4.25	0.681	Excellent
3. In my opinion, buying organic food products is wise.	4.21	0.70	Excellent
4. Buying organic food products is beneficial.	4.23	0.62	Excellent
5. Buying organic food products is essential	4.18	0.734	Good
6. Buying organic food products is favourable	4.31	0.694	Excellent
Mean total Score	4.234	0.514	Excellent
Subjective norm			
1. My family uses organic food products.	4.188	0.728	Good
2. My friends and colleagues think that I should eat organic food products.	3.987	0.845	Good
3. My vital people believe that using organic food products brings good health.	3.997	0.793	Good
4. I buy organic food products because society thinks it is "a good choice."	4.195	0.683	Good
5. I buy organic food products based on media information	4.138	0.798	Good
Mean total Score	4.101	0.615	Good
Perceived behavioral control (PBC)			
1. I believe I have the resources and ability to buy organic food products.	4.07	0.852	Good
2. Buying organic food products is within my financial control.	4.091	0.740	Good
3. When I want to buy, it's not easy to buy organic food products.	4.222	0.665	Excellent
4. I can buy organic foods if I want	4.198	0.728	Good
5. I have time to consider buying organic food.	4.138	0.798	Good

➤ Attitude

Attitude towards organic food products played an important role in consumer purchase intention. Table 2 describes consumers' attitudes towards organic food product of consumers in Thai Nguyen city. The attitude variable had the highest mean total score among variables. With the variable At5 had the smallest mean of 4.18 and the variable At6 had the largest mean of 4.31. According to consumer reviews, organic food was rated as necessary, useful and advisable with the average value of item "Buying organic food products is beneficial" was 4.23, of item "Buying organic food products is the right thing to do" was 4.25, and of item "Buying organic food products is a good idea" was 4.26. It shows that Thai Nguyen city consumers tend to support the behavior of buying organic food products. They considered it to be a positive change and the right choice.

➤ Subjective norm

Statistical results showed that subjective norm variables were evaluated lower than At variables. The largest mean was 4.195 (I buy organic food products because society thinks it is "a good choice"), and the smallest was 3.987 (My friends and colleagues think that I should eat organic food products). Thus, all respondents were from 18 years old, so they were aware of their behavior following social standards and values. The standard deviation of the highest variables was 0.845, and the lowest was 0.683.

➤ Perceived behavioral control

Perceived behavioral control variable was rated higher by consumers than subjective norm on average scores. The lowest was PBC1 (I believe I have the resources and ability to buy organic food products) with 4.07 points, and the highest was PBC3 (When I want to buy, it's not easy to buy organic food products) with 4.222 points. Thus, most consumers had the ability to buy organic food if they want. The standard deviation of the PBC variables was also smaller than the standard deviation of the Sn variables. As such, survey respondents were relatively unanimous in assessing the perceived behavioral control towards organic food products.

Analysis of purchase intention for organic food products

Through the intention to buy organic food of consumers in Thai Nguyen city, it can be seen that consumers have shown a clear supportive attitude towards buying organic food (Table 3).

Table 3. Descriptive statistics of purchase intention

Items	Mean	Std. Deviation	Interpretation
1. I would buy organic food products in the near future	4.1	0.6	Excellent
2. I plan to buy organic food products in regular basics	3.86	0.945	Very Good
3. I usually intend to buy organic food whenever possible	3.87	0.95	Very Good
4. I intend to buy organic food products for my long-term health benefits	3.73	1.027	Very Good
5. I intend to buy organic food products because I am concerned about food safety	4.14	0.77	Very Good
6. I intend to buy organic food products because I am concerned about the environment	3.987	0.845	Very Good
6. I intend to buy organic food products because they are certified quality	3.997	0.793	Very Good
7. I intend to buy organic food products because they have the guarantee labels of reputable accrediting organizations	4.195	0.683	Very Good
<i>Mean total Score</i>	3.99	0.547	Very Good

Source: Analysis results from the author's survey data

Purchase intention of organic food products among consumers in Thai Nguyen city was measured through 8 items (Table 3) based on an adjustment of the questionnaire developed by several previous studies. Eight observed variables from PI1 to PI8 recorded the answer options ranging from 1 to 5. Consumers chose the most value at 4, and the average level of the answer options was from 3.86 (I plan to buy organic food products in regular basics) to 4.195 (I intend to buy organic food products because they have the guarantee labels of reputable accrediting organizations).

Consumers also said that they intended to buy organic food because it is safe, healthy, good for the environment, or because it had a better quality assurance certificate than conventional food. This was expressed in the average value of item "I intend to buy organic food products because I am concerned about food safety" was 4,14, of item "I intend to buy organic food products for my long-term health benefits" was 3,73, of item "I intend to buy organic food products because I am concerned about the environment" là 3,987 and of item "I intend to buy organic food products because they are certified quality" was 3,997.

Besides, consumers in Thai Nguyen city also confirmed that they will buy organic food in the near future or whenever possible. This was reflected in the average point of the item "I would buy

organic food products in the near future” was 4,1 and of item “I usually intend to buy organic food whenever possible” was 3,87.

From that, it can be concluded that the intention to buy organic food products regularly is an easily accepted idea for consumers in Thai Nguyen city.

CONCLUSION

The objective of this study was to analyze the influence of attitude, subjective norm and behavioral control on the purchase intention of organic food products among consumers in Thai Nguyen city, Viet Nam. To do this, we collected data and submitted them to descriptive analysis.

The study offers some academic contributions. The first is the focus on organic food product. This topic, from the consumer’s perspective, is not much explored in Viet Nam, even with the growing market for these products. The second contribution is the combination of attitude, subjective norm, perceived behavioral control and purchase intention in a single prediction model. And the third is the evidence of scales validity for these factors, regarding organic food products in Viet Nam.

Attitude. The results showed that attitude had a positive relationship with intention to buy organic food. Attitude represents what consumers like and dislike. Purchase decisions are often based on consumer attitudes. In this study, attitudes depended on the health benefits, safety, and chemical residue levels of organic foods. Therefore, businesses in the organic food market needed to provide quality products, organic ingredients exactly as on the organic label to attract consumers. Many previous studies on organic food have also reinforced this point of Ajzen and Fishbein, such as Mai et al. (2016), Hung et al. (2016), and Mai et al. (2018).

Perceived behavioral control. The results showed that PBC has a negative relationship with purchase intention of organic food product. This result supported previous studies by authors such as Vassallo et al. (2015), Mai et al. (2016), and Mai et al. (2018). However, this result is not consistent with Ajzen's hypothesis when building the TPB model to predict general human behavior. When they feel they have enough ability and resources to buy organic food, their intention to buy organic food will increase. It may be because of the current food shortage due to the current Covid-19 outbreak in Thai Nguyen. Even though consumers can and resources to buy organic food products, it is also very difficult to buy them. Therefore, enterprises need to diversify their sources of supply to ensure there is no disruption in supply.

Subjective norm. Consistent to the previous studies such as Mai et al. (2018), ..., the research found that subjective norm was positively and significantly related to intention. In collectivistic cultures such as Viet Nam culture, people tend to perceived themselves as interdependent with their group and tend to strive for in - group rather than personal goals. This is matched with the findings of this study that subjective norm is important in influencing consumers' purchase intention, especially in Viet nam, a collectivistic country. This suggests to manager’ ways to increase purchase intention of consumers. They can use advertising as a tool to encourage customers. Government policies on organic food businesses also affect consumers' purchase intention. Thus, in addition to measures to directly affect consumers, organic food traders need programs to change customers' perceptions of organic food products.

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