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Factors Influencing Consumer Purchase Intention toward Organic Food Products: an Empirical Study in Vietnam Market

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Factors Influencing Consumer Purchase Intention toward Organic Food Products: an Empirical Study in Vietnam Market

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ABSTRACT

Organic foods have drawn more and more attention from consumers. Consumers perceive organic food products are more nutritious, healthy, and environmentally friendly than conventional alternatives. This study seeks to investigate significant factors influencing purchase intention toward organic food products in developing and emerging markets, which have received less attention from scholars. By focusing on an emerging market, the study examines whether the consumer behavior for organic foods previously identified in developed countries is relevant in a context such as Vietnam. It also aims at examining the moderating role of trust and limit of availability on consumer attitude towards organic food purchase intention. The data were collected by using a customized and validated survey instrument from a sample of 305 organic food consumers in Vietnam. The findings suggested four factors (food safety, health benefits, nutritional value, lack of knowledge) that significantly influence the consumer attitude towards organic food products. Interestingly, environment-friendly and price barriers did not impact on consumer attitude towards organic foods, but price barriers impact directly on purchase intention. Additionally, the results show that trust in certifications moderate positively and limit of availability moderates negatively the relationship between consumer attitude and purchase intention. This study provides a better understanding of consumer attitude and purchase intention towards organic foods in developing countries. The findings of this study have several implications for organic food manufacturers, retailers, policymakers and, marketers that find to develop strategies aimed at increasing organic food product consumption in Vietnam.

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CHAPTER 1

INTRODUCTION

The introduction of the paper provides the background information about organic food market and gives insight to the field of research on the determinants of organic food purchase intention. Then it provides the food situation in Viet Nam, which is used to formulate the research problem and aim of the thesis.

1.1. Research Background

Along with the development of integration and globalization, nowadays production and business are facing serious problems related to environmental pollution, climate change, and the consequences of chemicals, growth substances, and genetically modified organisms. Besides concern about ecological environment issues, consumers are increasingly concerned about nutrition, health, and product quality (Wier et al., 2002). Hence, promoting and accelerating the adoption of more sustainable food behaviours is of utmost importance for enhancing environmental sustainability as well as individual and public well-being. Sustainable food behaviours include activities such as purchasing and consuming organic food, eating less unhealthy food, eating local food, and preparing food that has less wastage (Koning et al., 2015; Vermeir et al., 2006). Importantly, the promotion of these behaviours should be prioritized in developing and emerging countries which are facing serious environmental and a colossal increase in food consumption (Yadav and Pathak, 2016). The growth in population and income has driven consumer demand for food products, and this is especially true in developing and emerging countries, particularly for healthy, and environmentally friendly food (Mottaleb et al., 2018).

The organic market has recently increased considerably and is widely regarded as one of the biggest growth markets in the food industry (Hughner et al., 2007). The demand for organic food that used to be prominent in the developed countries has been significantly increasing (Nguyen et al., 2019; Yadav and Pathak, 2016). The topic of organic food consumption has captured great attention from scholars and practitioners (Nguyen et al., 2019). However, the earliest research related to organic food has been conducted in the context of developed economies, specifically in the US and Western Europe (Hughner et al., 2007; Arvola et al., 2008; Tarkiainen et al., 2005). There is a need to understand more about organic food consumption in the context of emerging markets, where organic food is still a relatively young

and emergent sector and the knowledge of consumer behaviour regarding organic food purchase is still limited (Nguyen et al., 2019; Yadav and Pathak, 2016). Given rapid and accelerating demand for and sales of organic food, understanding the critical factors that influence consumers purchasing intention for organic food is essential for producers, suppliers, marketing specialists, policymakers, and green restaurants to implement successful marketing strategies.

A considerable number of studies on organic food have focused on consumers' personal factors that motivate attitude and purchase behaviour associated with organic food (Aertsens et al., 2009). Key personal factors include values, environmental concern, knowledge, perceived quality, emotions, health consciousness, concerns with respect to nutrition, food taste, and food safety (Rana and Paul, 2017; Verhoef, 2005). Hughner et al. (2007) reviewed previous research and concluded that the motives of organic food consumers include concerns about health, the environment, food safety, and animal welfare, desires for supporting the local economy and a whole lifestyle, nostalgia for the past, and pursuit of fashion. However, there has been insufficient research focusing on factors that can help consumers create trust and a positive attitude toward organic food purchase intention, or exploring how a combination of these factors can increase organic food consumption. Scholars have argued that trust is a prerequisite for a successful business because consumers are hesitant to make purchases unless they trust the seller (Kim et al., 2008). Consumer trust maybe even more important in organic purchase intention than conventional ones. This is because the organic market is rather small and undeveloped in Viet Nam so that people generally have limited awareness and knowledge of organic foods. Since trust is essential to organic purchase intention, it is significant to identify the antecedents of consumer trust in the context of organic food consumption. On the other hand, organic food production and certification, there is no regulation scale for organic food certification in Viet Nam, most organic products are produced in Vietnam, certified to meet the standards by international organizations to export to European, American markets. Thus, it can be seen that organic products in the Vietnam market that have certificates are mainly products imported from abroad into Vietnam. The production has encountered many difficulties due to no certification, marketing of organic products is also facing challenges as these are also a new product. Moreover, there was almost no research focusing on factors that hinder consumers to organic food purchase intention such as lack of knowledge and limit of

availability. Most of the researches only focus on price barriers while other barrier factors also play an important role in deciding organic food purchase intention.

1.2. What is organic food?

According to the Free Encyclopedia Wikipedia: "Organic food is food produced by methods that comply with the standards of organic farming. Standards vary worldwide, but organic farming features practices that cycle resources, promote ecological balance, and conserve biodiversity. Organizations regulating organic products may restrict the use of certain pesticides and fertilizers in the farming methods used to produce such products. Organic foods typically are not processed using irradiation, industrial solvents, or synthetic food additives."

According to the United States Department of Agriculture (USDA) organic standards: "Organic is a labelling term that indicates that the food or other agricultural product has been produced through approved methods. These methods integrate cultural, biological, and mechanical practices that foster cycling of resources, promote ecological balance, and conserve biodiversity. Synthetic fertilizers, sewage sludge, irradiation, and genetic engineering may not be used".

According Vietnam Organic Agriculture Association (VOAA): "Organic food is the certified organic food of PGS Vietnam (Vietnam Organic Agriculture Association), the Participatory Guarantee System (PGS) and is accepted by International Federation of Organic Agriculture Movements (IFOAM), along with regulatory standards, to monitor the way food is grown, harvested and processed to ensure that foods are grown without the use of pesticides and toxic herbicides, genetically modified ingredients, antibiotics or artificial growth hormones".

The most common definitions of organically produced foods emphasize the technology or production practices and principle used, and/or the 'organic philosophy' (e.g., Bourn and Prescott, 2002; FAO, 1999). Some definitions highlight dimensions such as 'biological' or 'natural production system' (Klonsky and Tourte, 1998) and 'green' or 'environmental friendliness' (Bhaskaran et al., 2006), while some other emphasize the limited use of artificial chemicals in organic production (e.g., FAO, 1999), or its general philosophy (e.g., Torjusen et al., 1999). Although there exist various definitions of organic food, it can be broadly defined as products which are "conventionally safe, produced using ecologically and environmentally sound methods that do not involve synthetic inputs such as pesticides and chemical fertilizers,

do not contain genetically modified organisms (GMOs) and do not processed with irradiation, industrial solvents, or chemical food additives (Paul and Rana, 2012). The majority of consumers believe that organic food is eco-friendly, healthier, safer, cleaner, more nutritious, tastier and safer as compared to conventional food (Smith and Paladino., 2010; Bryla, 2016; Hughner et al., 2007).

Organic food classification: People classify organic foods into four classes (vietnamorganic.vn) according to the percentage (%) of the organic content in which:

(1) "Fully organic" (100% organic): do not add any other chemicals.

(2) "Organic": over 95% of organic matter is used.

(3) "Made with organic ingredients": at least 70% organic is used.

(4) "Some Organic ingredients": below 70% organic ingredients are used.

1.3. Organic food market in Viet Nam

The limitations of the green revolution and agricultural industrialization have led many countries to return to organic agriculture (including Vietnam), making organic products increasingly improve their position and important in social life and the world market. The organic food market has become the fastest growing industry in Europe, North America, Australia and Japan (Makatouni, 2002). As the general trend in many parts of the world, in Vietnam, organic foods are increasingly popular. Many products of vegetables, fruits, meat manufactured by this method have been sold on the shelves of supermarkets and food stores in Ho Chi Minh City and Hanoi. As a developing country, with a large population and increasing people's living standards, the trend of consuming organic food has created favourable conditions for formation and development in Vietnam. In particular, in the context of the "dirty foods" issue causes anxiety that makes people more conscious as well as raise awareness in the purchase and use of clean foods. According to trend of organic food consumption report in 2017 by AC Nielsen, up to 86% of Vietnamese consumers prefer to choose organic products for daily meals because of its safety, nutrition, delicious taste. Data from the Vietnam Household Living Standards Survey (2012) demonstrated that Vietnamese people spend approximately half of their income on food and beverage products. Promoting sustainable food consumption has been among the country’s top priorities, aimed at addressing growing

concerns about its environmental problems, health and food safety issues. Many Vietnamese consumers associate sustainability with healthy food (Koning et al., 2015; Truong et al., 2012). The government has implemented several initiatives such as the Decree 109/2018/ND-CP on organic culture and food safety standards to foster the development of the organic food industry. Manufacturers and retailers have put great efforts in offering diversified organic food products (e.g., vegetables, grains and meat) as well as expanding their distribution network (Vietnam News, 2018).

1.4. Research purposes

The study's main purpose is to investigate the six factors affect consumer attitude towards purchase intention organic foods include food safety, health benefits, nutritional value, environment friendly, price barriers, and lack of knowledge. Its secondary purpose is to test whether or not trust in certifications that moderate the relationship between consumer attitude and purchase intention. It also aims at examining the moderating role of limit of availability in the influence of attitude on purchase intention toward organic food products. The findings of this study can provide valuable information for manufacturers, retailers, policymakers and, marketers that find to develop strategies aimed at increasing organic food product consumption in Vietnam.

This research is expected to contribute to enhancing our knowledge of important buying behaviour, organic food purchase intention, in an Asian emerging country where, to our best understanding, the topic has received only modest research attention. Especially, this study contributes to understanding better the impact of the factors specifically associated with the economic transformation in Asian emerging economies on organic food consumption behaviour. In this paper, following the introduction section, we first present literature review and research hypotheses. We then discuss the research methodology, followed by the research results and findings. Finally, we discuss the conclusions and provide implications. Future research directions are also suggested.

CHAPTER 2

LITERATURE REVIEW

The literature related to consumers' purchasing and consumption of organic food is presented as following. The Theory of Reasoned Action (TRA) model and Theory of Planned Behaviour (TPB) are applied as the basic theoretical framework. First, major factors related to the TRA model and TPB model which influence intention to conduct consumer's behaviour are emphasized. Second, the summary of factors influencing organic food purchasing intention from prior studies is given.

2.1. Theoretical framework

2.1.1. Theory of Reasoned Action (TRA)

The Theory or Planned Behaviour - TPB was first introduced Ajzen (1985) and is a development of the Theory or Reasoned Action - TRA developed by Fishbein and Ajzen (1975). The purpose of the Theory or Reasoned Action - TRA is to explain human behaviour on the basis of his intention to adopt a certain behaviour.

The Theory or Reasoned Action assumes that individuals behave in a rational manner in order to achieve favourable results, and to avoid disappointing others by confounding their expectations. According to this theory people's intention to behave in a certain manner is a predecessor variable of their actual behaviour. Moreover, the intention of the individual to behave in a certain way is determined by the attitude toward that behaviour and by the subjective norms (Hale et al., 2003).

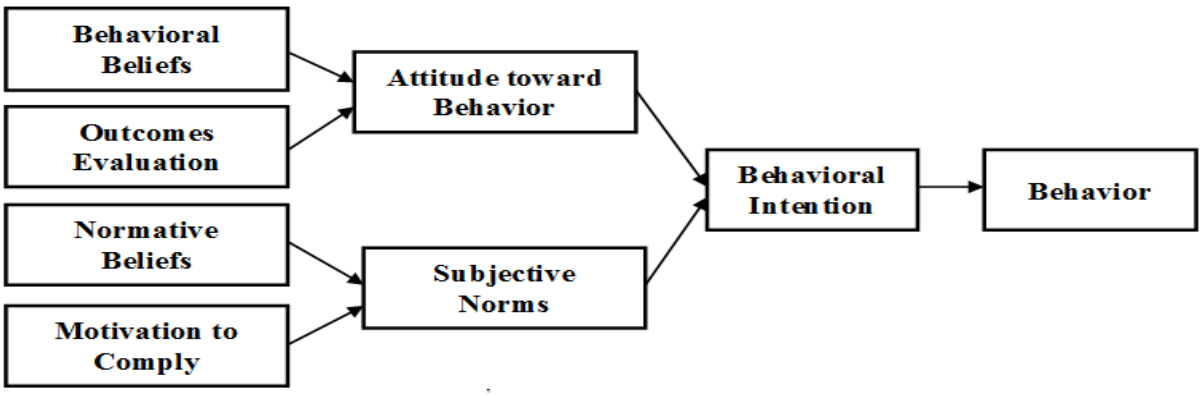

Figure 1: Theory of Reasoned Action _TRA (Fishbein & Ajzen, 1975)

The "attitude" component is represented by individual's beliefs which refer to behaviour's probability to generate the desired outcomes which can be evaluated as favourable or unfavourable (Hale et al., 2003).

Subjective norms represent individual's perception about the correlation between a certain type of behaviour and what reference groups are thinking about this behaviour (Fishbein and Ajzen, 1975).

Behavioural intention is a function of attitude and subjective norms:

BI = AB(W1) + SN(W2) (Hale et al., 2003, p. 260).

Theory or Reasoned Action lies behind the development of the Theory of Planned Behaviour (Ajzen, 1991).

2.1.2. Theory of Planned Behaviour (TPB)

Theory of Planned Behaviour (TPB) was introduced by Ajzen (1985) and it further develops the Theory of Reasoned Action by adding a new variable called *"perceived behavioural control"*. The new theory can better explain human's behaviour in specific contexts where the individual has no control over his behaviour (Ajzen, 1985; Ajzen, 1991). Perceived behavioural control refers to either the ease or the difficulty to adopt a certain behaviour, and it is determined both by past experience and anticipated impediments or obstacles (Ajzen, 1991, p. 183). The "*perceived behavioural control"* variable consists of the situational factors and the availability of opportunities and resources such as time, money, and knowledge, which reflect the real degree of control over behaviour. If the other variables remain unchanged, the intention to behave in a certain way is the central variable that determine the actual behaviour.

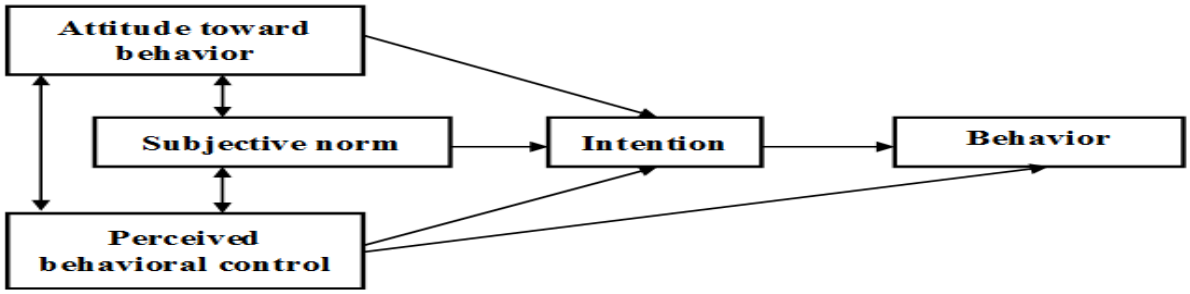

Figure 2: Theory pf Planned Behavior - TPB (Ajzen, 1991).

Many researchers have widely applied the Theory of Reasoned Action (TRA) (Ajzen and Fishbein, 1980; Fishbein and Ajzen, 1975) and the Theory of Planned Behaviour (TPB) (Ajzen, 1985, 1989, 1991) to explain organic food products consumption behaviour (Chen, 2007). The TRA suggests that a person's behavioural intention depends on the person's attitude towards the behaviour and subjective norm. Similarly, the TPB incorporates all the above components but includes another factor (i.e. perceived behavioural control) to explain the combined effect on an individual's behavioural intention. Both the TRA and the TPB identify behavioural intention as a critical antecedent of actual individual behaviour. The relationship between behavioural intentions and actual behaviour is based on the assumption that human beings attempt to make rational decisions based on the information available to them. Therefore, a person's behavioural intention to perform (or not to perform) a behaviour is the immediate determinant of that person's actual behaviour (Ajzen and Fishbein, 1980). Still, the TPB has been considered a more comprehensive behaviour theory compared to the TRA because the TPB incorporates more influential variables in the model, and provides more explanatory power in terms of predicting the adoption of information technology (Mathieson, 1991). However, because many behaviours pose difficulties of execution, it is necessary to consider the barriers to behavioural intention. Therefore, this study applies the external barriers as another critical factor influencing purchase intention.

2.2. Antecedents of attitude

Green or organic food with fewer chemical residuals has become more popular across the world (Yu et al., 2012). In China, the government has adopted a comprehensive food certification system to enhance and ensure safety with three levels for food production including safe food, green food, and organic food certification (Yu, 2012). McCarthy et al. (2015) indicated that the buying of organic food in China is motivated by environment, animal welfare and health concerns.

Through reviewing the related literature, attitude towards organic food attribute (e.g. taste, health, food safety, nutritional concerns, environment friendly, and animal welfare) have been identified as the key antecedent facilitating consumer decision making processes in relation to organic food consumption (Honkanen et al., 2006; Magnusson et al., 2003).

Hill & Lynchehaun (2002) state that personal factors like personality, values, lifestyles, attitudes, extrinsic, and intrinsic factors related with organic food packaging, taste, quality, price, safety, cultural values, and knowledge about organic food affects consumption decisions.

From literature review, I could summarize factors of consumer attitudes with six attributes including food safety, health benefits, nutritional value, environment friendly, lack of knowledge, and price barriers as the main antecedents facilitating consumer purchase intention towards organic food products.

2.3. Consumer's intention to purchase organic food

According to Ajzen (2002) the definition of human action intention is guided by the consideration of three factors: beliefs in behavior, belief in norms, and belief in control. The stronger beliefs are, the greater one's intention is. Kotler et al. (2010) showed that the intention to purchase is in the stage of evaluating a purchase plan based on the brand rating of the product and the consumer will purchase the brand's favorite product. However, there are two factors that can hinder your buying intention to become buying behavior: attitudes, and unexpected situations. Consumers may form buying intention based on factors such as: expected income, expected selling price, expected product performance. In this study, I use the concept of purchase intention of Elbeck et al. (2008) is defined: Purchase intention is described as the readiness of customers to purchase. Surveying buying intentions of consumers is also a basis for businesses to sell goods. Predict buying intention is the first step to predicting the actual buying behavior of customers (Howard, & Sheth, 1967).

According to Han, Hssu and Lee (2009), the intention to buy organic products is often associated with good word of mouth about the product, and the intention to pay more for organic products. Ramayah, Lee and Mohamad (2010) indicated that the intention to buy organic food is one of the specific manifestations of buying action. Rashid (2009) showed that the intention to buy organic food is an individual's ability and willingness to devote his or her preference to organic food rather than conventional food in consideration of shopping. In this study, I use the definition of Rashid (2009).

2.4. Factors influencing Organic Food Purchasing Intention from prior studies perspective.

The consensus of international research provides a clear picture of the reasons why people purchase organic food products. Although there may be differences in the order of preferences in the specific cultural, and demographic factors, the main reasons, are health, taste, nutritional value, product quality, and concern for the environment and environmental

degradation. These were supported by prior studies years ago (Tregear et al., 1994) and have been consistently supported by subsequent studies too (Hughner et al., 2007).

Lea & Worsley (2005) indicated that when compared to conventionally produced food products, consumers believe organic foods to be healthier, tastier, and better for the environment than conventional foods. Hoefkens et al. (2009) found that consumers perceive that organic vegetables have more nutritional value than those of conventional vegetables. Hack (1993) showed that the primary reasons for purchasing organic food products were linked to health and environment considerations. Food safety and nutritive value were viewed as very important factors among 80% of respondents in North America (Jolly et al., 1989).

According to Harper and Makatouni (2002) demonstrated that consumers have a positive attitude towards organic food products where one of the most commonly mentioned reasons for purchasing organic products was consumers' perception about organic products as healthier than conventional alternatives. Some studies found that motivation for healthy eating is one of the goals of consuming organic food (Chakrabarti, 2010; Nguyen, 2007). Nguyen (2007) pointed out that health has a significant influence on attitudes toward organic food. Vermeir and Verbeke (2004) found that consumers did not always purchase sustainable products as outcome of environmental concern or to benefit the community or due to personal beliefs but mainly to give priority to health, to be part of the social group, to differentiate from others, and to accomplish the need to try out new technologies. Koning et al. (2015) indicated that despite their concerns about the high price and poor labelling of safe and healthy foods like organic products, a number of Vietnamese consumers are willing to purchase and consume more organic food.

According to Krystallis and Chryssohoidis (2006) revealed that price is the most important criterion considered by consumers when purchasing food. Some studies found that the high price of organic food has been identified as the most relevant barrier to organic food purchase and consumption in prior studies (Bryła, 2016 and Verhoef, 2005). And price is a significant variable in organic purchases (Lea & Worsley, 2005; Magnusson et al., 2001; Padel & Foster, 2005). The high prices reduce the likelihood of consumers purchasing green products and result in consumers switching to other brands (Blend & Ravenswaay, 1999). According Smith et al. (2009) found that price also has direct influence in purchasing organic food among Hispanics descendant whose income is lower than other segments of society in the United States.

Winter & Davis (2006) showed that organic food is still hard to find in the market, especially in the third world countries. The percentage of organic food is only about 1-2% of total food sales worldwide. It has become more attractive in the province of North Sumatra, especially during the last ten-years organic food has begun to enter the market. However, the demand on organic food is still far behind compares to the demand to the non-organic food, at the same time the supplies for organic foods is also limited. Many studies indicated that availability of organic foods is another crucial barrier to organic foods purchase and consumption (Chryssohoidis & Krystallis, 2006; Lea &Worsley, 2005).

Yiridoe et al. (2005) found that many consumers identify organic products from the organic labels and/or organic logos attached, which consumers generally perceive as an assurance that the product is really organic. However, consumers are also skeptical about organic labels, certification institutions, and uniformity of standardization. According to a recent study found that lack of trust and confusing organic food certification is the main obstacle in Taiwan's organic agriculture development (Shih-Jui, Ching-Chun, Wei, & Yu-Hua, 2012). Below, I summarized the benefits and costs influencing organic food purchasing intention from previous studies (Table 1).

Table 1: Factors influence organic food purchase intention from previous studies

Sources form prior studies	Benefits	Costs (Barriers)
1. Nguyen et al. (2019), "Organic Food Purchases in an Emerging Market: The Influence of Consumers' Personal Factors and Green Marketing Practices of Food Stores", *International Journal of Environmental Research and Public Health*, 16, 1037.	Environmental concern. Food safety concern. Health consciousness. Organic food knowledge. Green marketing.	Price barriers
2. Ihsan et al. (2015) "Analysis of Consumer Behavior of Organic Food in North Sumatra Province, Indonesia", *Journal of Business and Management*, 4(1), 44-58.	Organic food knowledge. Environmental knowledge. Health knowledge. Culture. Organic food attribute. Subjective norm. Availability.	Price.
3. Nasir and Karakaya (2014), "Underlying Motivations of Organic Food Purchase Intentions", *Agribusiness*, 30(3), 290–308.	Environmental responsibility. Socially responsible consumption. Health orientation. Hedonic-Utilitarian Consumption.	
4. Teng and Wang, (2015),"Decisional factors driving organic food	Subjective norm. Trust. Information revealed on organic labelling.	

consumption", *British Food Journal*, 117(3), 1066 – 1081.	Perceived knowledge.	
5. Singh and Verma (2017), "Factors influencing Indian consumers' actual buying behaviour towards organic food products", *Journal of Cleaner Production*, 167, 473–483.	Health consciousness. Knowledge of organic food. Subjective norms. Availability. Socio-demographic factor.	Price
6. Nguyen et al. (2019), "Antecedents of purchase intention toward organic food in an Asian emerging market: A study of Urban Vietnamese consumers", *Sustainability*, 2019, 11, 1-16.	Health consciousness. Environmental concern. Organic label trust. Traditional self. Modern self. Subjective norm Perceived behavioural control.	
7. Paul and Rana (2012), "Consumer behavior and purchase intention for organic food", *Journal of Consumer Marketing*, 29(6), 2012, 412–422.	Demographic. Health Benefit. Availability. Ecological Awareness. Ecological Consumer Behavior.	
8. Nor et al. (2010), "Organic Food: A Study on Demographic Characteristics and Factors Influencing Purchase Intentions among Consumers in Klang Valley, Malaysia", *International Journal of Business and Management*, 5(2).	Safety and Health Aspects Environmental friendly. Organic food Worth. Availability of Organic Product Information.	

9. Monika et al. (2014), "Ethical behavior: factor influencing intention to buy organic products in Lithuania", *Economic and management*, 2014, 19(1).	Concern about health. Concern about product composition. Consumer ethics. Product available in market. Demographic characteristics	Price
10. Basha et al. (2015), "consumer attitude towards organic food", *International Accounting and Business conference*, 2015, 444-452.	Environmental concern. Subjective norms. Health concern and lifestyle. Product quality.	

In this chapter, I presented the concepts, summarized the basic theories about intention to adopt behaviours of Fishbein and Ajzen (1975) and Ajzen (1991), along with the factors influence their intention to buy organic food through articles, the documents are published widely in the world. This is the basis for me to build a research model for the topic in the next section.

CHAPTER 3

RESEARCH MODEL AND HYPOTHESIS DEVELOPMENT

3.1. Perceived benefits

3.1.1. Food safety

Food safety is important as a consumer search for food without chemicals, genetically modified organisms (Michaelidou and Hansan, 2008). Michaelidou and Hassan found that consumer concern about health is one of the most important factors influencing consumer's decisions when choosing to buy organic food. The safety concern is the most relevant factor explaining consumer attitude towards organic food purchase. Wilcock et al. (2004) point out that consumers often relate food safety issues with the use of pesticides, fertilizers, antibiotics, artificial additives, and preservatives in the food production process. Rana and Paul (2017) also found that organic production methods are considered as being free of these undesirable chemicals.

Rimal et al. (2005) revealed that concern of the product composition is the most important factor in having a main impact on the intention to buy organic food. Consumers choose to buy organic food products because they believe that the composition of these products is healthier and less dangerous (Hammit and Williams, 2006). Krystallis et al. (2006) confirmed that consumers who purchase organic foods are much more likely to pay more for these products simply because they believe organic food products are much healthier. Based on the discussion, the following has been hypothesized:

H1: Food safety has a positive impact on consumer attitudes towards purchasing intention for organic food.

3.1.2. Health benefits

Previous findings show that health benefit is one of the main reasons for consumers to purchase organic foods. Consumers have been increasingly concerned about health and nutrition in food (Dubé et al., 2014). Grossman (1972) revealed that health is a key motivator for the consumer to purchase organic food. Michaelidou and Hassan (2008) showed that health variables had a positive impact on consumer attitudes toward organic food products. They concluded that the promotion of a healthy lifestyle has a positive effect on choosing organic

foods. Consumers tend to purchase high-quality, nutritious, and healthy food. A study conducted by Makatouni (2002) found that health factors are the most important variables affecting consumer's willingness to buy organic foods. A consumer survey conducted by Tsakiridou et al. (2008) points out that 87.6% of respondents perceive organic foods are healthier than conventional alternatives. Although Tarkiainen and Sundqvist (2005) found that there is no statistically significant link between health concerns and consumer attitude towards purchasing intention for organic food. They concluded that health concerns make the weakest impact on the consumer decision to buy organic food. However, the majority of previous studies conclude a significant and positive relationship between these variables (Michaelidou and Hassan, 2008; Lee, H, 2016). Hence the following has been hypothesized:

H2: Health benefits have a positive impact on consumer attitudes towards purchasing intention for organic food.

3.1.3. Nutritional value

When comparing organic food with conventional food, there are many people indicated that organic food has more nutritive value than conventional food. For example, several of the studies reported that organic products have lower nitrate content, and higher dry matter and mineral content, compared to conventionally grown alternatives (Wolfson and Shearer,1981; Schuphan, 1974). Furthermore, while some studies reported higher vitamin C content in organically grown foods (Schuphan, 1974; Petterson, 1977). Hay (1989) concluded that consumers of organic food evaluate the quality of organic food and perceived them to be better in taste, quality, health, and nutritive value. According to Buzby and Skees (1994), freshness and nutritive value were the most important factors considered in organic buying behaviour. A study conducted by Wandel and Bugge (1997) revealed that majority of respondent ranked freshness first, followed by taste and then nutritive value. Hence the following has been hypothesized:

H3: Nutritional value of organic food has a positive impact on consumer attitude towards purchasing intention.

3.1.4. Environment friendly

Previous studies have shown that environmental considerations motivate consumer's positive perceptions and greater consumption of organic food products. For example, Schifferstein (1998) found that environmental friendliness is an important factor that effect organic food demand for Dutch heavy buyers. A survey conducted by Tojusen et al. (1999) revealed that 67% of respondents buy organic food products due to environmental considerations. Tsakiridou et al. (2008) indicated that Greek organic food consumers express more environmental concerns compared to non-organic buyers. Health-related issues are driving forces of consumer's interest in and consumption of organic food.

Squires et al. (2001) showed that organic food buyers express interest in protecting the ecology and natural production process. Empirical studies conclude that environmental concerns have a positive influence on attitude towards organic food purchases in both developed and developing countries such as Australia (Smith et al., 2010), Taiwan (Chen, 2009) and India (Yadav, 2016). Based on the above discussion, the following hypothesis has been developed:

H4: Environment friendly has a positive impact on consumer attitude towards purchasing intention for organic food.

3.2. Perceived barriers

3.2.1. Lack of knowledge

Consumer's awareness and knowledge about organic food products play an important role in their organic food buying decision (Yiridoe et al., 2005). According to Magistris et al. (2008), the lack of knowledge about organic food as a barrier to organic food purchase. According to Demeritt (2002) also revealed that insufficient knowledge and awareness of organic foods are considered important barriers to purchasing organic foods. That is, consumers would not consider buying organic food products if they lacked the knowledge. Consumers tend to have limited knowledge and awareness of organic foods and their production processes, and consequently lack confidence and understanding of the implications of their food purchasing decisions (Vermeir and Verbeke, 2006). Thus, awareness and knowledge about organically produced foods are essential in the consumer buying decisions.

Some critical findings of these studies on consumer awareness and knowledge about organic foods indicates that while there is a general consumer awareness around the world, consumers (within the same country) have inconsistent interpretation about what is 'organic'. This awareness is high especially in Europe where organic market is relatively well developed when compared to developing and undeveloped countries. For example, in a survey consumer in California conducted by Jolly et al. (1989) indicated that respondent associated organic produced with no pesticides, no fertilizer, no growth regulators and residue free products. In the UK study conducted by Hutchins and Greenhalgh (1997) there was no difference in consumers' understanding of 'organic' among organic and non-organic buyers. Both felt that organic food products have no pesticides, no chemical fertilizers, and are natural and healthy. Therefore, hypothesis H7 is stated as follows:

H5: Lack of consumer's knowledge of organic food has a negative impact on attitude towards purchasing intention.

3.2.2. Price barriers

Certified organic food products are generally more expensive than conventional alternative for a number of reasons. Therefore, price becomes important factor in the organic food marketing. However, different studies give different opinions. According to Gan et al. (2008), a higher price has a negative impact on the willingness of consumer buying organic products. In a survey carried out by Xie et al. (2015), about 82% of the respondents indicate that high price premium is the reason for not buying organic products. A high price also results in consumers willing to switch to other products (D'Souza et al, 2006). According to Van Doorn and Verhoef (2015) that the high price of organic food products negatively affects consumer-perceived value (i.e., cost versus benefits) of such a product. Tanner and Kast (2003) find a strong and negative correlation between price barriers and consumer purchase of different organic foods. However, some consumer groups have a more positive attitude towards organic food products and they show a willingness to buy such as product despite the high price (Raman, 2005; Tanner, 2003). They evaluate organic food performance about its ability to deliver economic value. If the price paid for organic food is justified in terms of benefits derived from the product, then they willing to pay a premium price of organic food (Padel et al, 2005). From this discussion, the following hypotheses are developed:

H6: Price barriers have a negative impact on consumer attitudes towards purchasing intention for organic food.

H7: Price barriers have a negative impact directly on consumer purchase intention for organic food.

3.3. Attitudes Towards Purchasing Intention for Organic Food

According to the TPB, attitude is founded on behavioral beliefs about outcomes and evaluations of those outcomes and is the individual's overall evaluation of the behavior. Consumer's attitudes towards purchasing organic food denotes their favorable or unfavorable evaluation towards buying organic food. Magnusson et al. (2001) indicated that consumers who hold positive attitudes towards organic food believe that purchasing organic food is important and is a good choice. Similarly, many researches on organic food consumption have demonstrated a positive and significant relationship between consumer attitudes and purchase intention (Padel and Foster, 2005; Honkanen et al., 2006). In a study conducted by Aertsens et al. (2011) show a significant positive relationship between consumer's attitudes about organic food consumption and the proportion of organic food consumed by them. Additionally, Meyer et al. (2015) indicates a significantly positive relationship between attitude towards buying organic food and purchase behaviour among German consumers.

Coleman et al. (2011) also demonstrated by using Theory of Reasoned Action (TRA) model to find the relationship between attitude and intention to buying organic products. They said that to become consumer of organic food has to have good attitude before purchasing organic food. Thus, the following hypothesis can be derived:

H8: Consumers' attitude has a positive impact towards purchasing intention for organic food.

3.4. The moderating effect of trust on consumer attitude and purchase intentions

Kramer (1999, p.571) trust has been viewed as "a state of perceived vulnerability or risk that is derived from individual uncertainty regarding the motives, intentions, and potential actions of others on whom they depend". According to Gefen (2004) trust has been considered a common mechanism for decreasing perceived transaction risk by increasing expectations of a positive outcome and perceived certainty regarding the expected behaviour of the trustee.

Hart and Saunders (1997) further revealed that trust is one of the most effective methods of reducing consumer uncertainty.

In the organic food market, consumer trust is a delicate issue because consumers cannot know whether a product is organic, even after consumption (Janssen and Hamm, 2012). Because of the importance of trust in organic food consumption, trust in organic foods, as well as their vendors and certifications, labels are a major effect on consumer attitudes and subsequent behaviour. Product labelling with organic certifications logos is used to signal consumer that a product is a certified organic product.

- *Certification*

According to McDonald (2001) a certification stamp or logo provides a guarantee to the consumer that the product has been produced organically. Barrett et al. (2002) indicated that organic certification is based on aspects related to the preservation and regeneration of ecosystems and people. Production must be accomplished without the use of pesticides and other chemical materials. The study of Janssen & Hamm (2012) revealed that wrong and insufficient knowledge about the production processes and the certification standards can lead the consumer to perceive no difference between a certified and a non-certified product. That is, certification sources and certification systems affect consumer trust and purchase intention.

- *Organic food labels*

Many organic consumers identify organic foods based on the organic labels and/or organic logos attached. Several studies have found a positive relationship between consumer purchase decisions and organic product labelling (Ø ystein et al., 2001; Chang et al., 1991). Alvesleben (1997) showed that organic labelling signals quality to consumers, and is an important tool to help them identify and develop positive attitudes towards purchase organic foods. Organic labelling expresses the importance of informing consumers to make rational purchase decisions (O'Fallon et al., 2007). More accurately, organic food labels help transform the credence characteristics of such products into search attributes, thus allowing the consumer can better evaluate quality before deciding to purchase the product (Caswell, 2000). Therefore, deceptive or insufficient labelling can convey the wrong signals to prospective buyers.

The study of Angulo et al. (2005) demonstrated that consumer confidence in food labels is deemed the most important factor among the influences on buying willingness. Alagoz and

Hekimoglu (2012) discovered that trust enhances attitudes towards food ordering. Accordingly, trust can be stated to significantly and positively affect both attitudes and purchase intentions for organic foods. Therefore, providing sufficient and credible information on organic food labels and certifications is important to enhance consumer trust and attitudes towards purchase intention organic food products. Particularly, in the context Vietnam, where many consumers seem still to be confused about whether a product is organic and the organic labels and certifications are genuine as claimed it is expected that the more consumers trust in organic labeling and certification, the more they have a positive attitude toward organic food purchase intention. Therefore, this study hypothesizes the following:

H9: Trust positively moderates the relationship between attitude and purchase intention for organic food.

3.5. The moderating effect of limit of availability on consumer attitude on purchase intention

Some studies indicated that availability has a positive impact on attitude toward purchase intention for organic products. Lea and Worsley (2005) have demonstrated that consumers would like to see an increase in the availability and range of organic products. The majority of consumers would purchase organic food if it was more readily available. Davies et al. (1995) suggested that the availability of a product is one of the prime factors which encourage consumer purchase organic foods.

Conversely, several studies have demonstrated that the lack of organic food availability in the store is considered one of the obstacles to consumer buying (Beardworth et al., 2002; Davies, 1995). Magnusson et al. (2001) found that consumers easily switch to another product if the product is not available in the market. Makatouni (2002) also found similar findings that one of the barriers to consumption of organic products is available itself. Most studies indicated that limited availability and difficulties in accessing organic food products are major hindrances to purchasing environmentally sustainable products (Padel and Foster, 2005; Young et al., 2010). The study of Young et al. (2010) reported that limited availability had a negative impact on consumer attitude and purchase behaviour towards organic food. In a survey conducted by Zundel and Kilcher (2007) indicated that the main difficulty to access organic food products is due to the lack of markets and market information in many developing countries. Similar to many developing countries, the limit of availability will have a negative

impact on Vietnamese consumer attitudes and purchase intention of organic products. Based on the discussion, the following has been hypothesized:

H10: Limit of availability negatively moderate the relationship between consumer attitude and purchase intention.

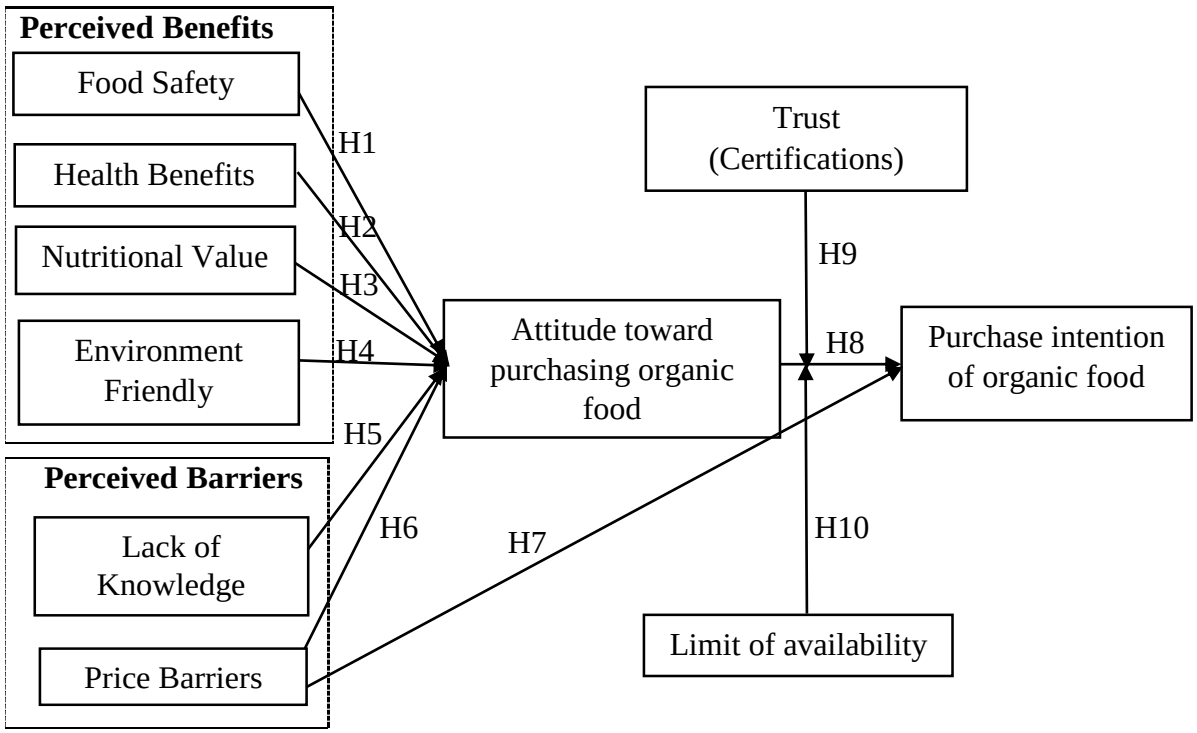

Figure 3: Research Model

CHAPTER 4

RESEARCH DESIGN AND METHODOLOGY

4.1. Research design and measure.

To test the proposed hypotheses, empirical data have been collected through a structured questionnaire; the items in the questionnaire were adopted from previous studies such as Gil et al. (2000), Chen (2009), Chakrabarti (2010), and Effendi et al. (2015), Michaelidou and Hassan (2008). The items were rated by using five point Likert scales anchored by 1 = strongly disagree and 5 = strongly agree. The questionnaire contained two main sections, which were original designed in the English language and translated into Vietnamese version by the common method. The questionnaire includes 51 questions: 44 main items to measure variables and seven questions about the information of respondents. The questionnaire includes measurement items of food safety, health benefits, nutritional value, environment friendly, price barriers, lack of knowledge, availability, trust, attitude, and purchase intention. Food safety was evaluated using 6 items, was modified from studies of Michaelidou and Hassan (2008), Ueasangkomsate and Santiteerakul (2016). Health benefits was evaluated using 4 items from the studies of Gil et al. (2000), Effendi et al. (2015), Teng and Lu (2016). Nutritional value was evaluated using 3 items from the studies of Chakrabarti et al. (2010). Environment friendly was evaluated using 5 items from the studies of Gil et al. (2000), Ueasangkomsate and Santiteerakul (2016), Wee et al. (2014). Price barriers were evaluated using 5 items from the studies of Tanner and Kast (2003), Chen (2009), Verhoef (2005). Lack of knowledge was evaluated using 4 items from the studies of Wang et al. (2019). Attitude was evaluated using 5 items from the studies of Arvola et al. (2008), Dean et al. (2012), Ihsan et al. (2015), Teng and Wang (2015). Purchase intention was evaluated using 5 items from the studies of Ihsan et al. (2015), Teng and Wang (2015), Nasir and Karakaya (2014) (Table 2). Trust was evaluated using 4 items from the studies of Krystallis and Chryssohoidis (2006), Siegrist (2000). Availability was evaluated using 3 items from the authors' development.

In the questionnaire, the participants were asked to answer the questions which measure the latent constructs of the proposed model. At the end of the questionnaire, the were required to provide their demographic information such as experience to use organic food product, age, gender, marital status, educational level, occupation, monthly income. Before distributing the formal questionnaire, I conducted a pilot test to evaluate the quality of the measurement items

in the questionnaire. The interview was conducted by calling video through Facebook with 25 Vietnamese respondents participated in the pilot test. After the pilot test, some of the wording of the questions was revised in order to reduce ambiguity.

Table 2: Adoption of questions details

Variable	Concept	Reference sources
Food safety	Food safety refers to the conditions and practices that preserve the quality of food to prevent contamination and food-borne illnesses (USDA).	Michaelidou and Hassan (2008), Ueasangkomsate and Santiteerakul (2016)
Health benefits	Health benefits: A positive effect on a person's health gained from food. Organic products reduce public health risks to everyone by minimizing their exposure to toxic and persistent chemicals on the farm and in food, the soil in which they work and play, the air they breathe, and the water they drink (Organic Trade Association, OTA).	Gil et al. (2000); Effendi et al. (2015), Teng and Lu (2016).
Nutritional value	Nutritional value as part of food quality is the measure of a well-balanced ratio of the essential nutrients carbohydrates, fat, protein, minerals, and vitamins in items of food or diet in relation to the nutrient requirements of their consumer (Free Encyclopedia Wikipedia).	Chakrabarti et al. (2010).
Environment friendly	Environment friendly relate to the use of organic food may be reduced, minimal, or no harm	Gil et al. (2000), Ueasangkomsate and

	upon ecosystems or the environment (Free Encyclopedia Wikipedia).	Santiteerakul (2016), Wee et al. (2014).
Lack of knowledge	Lack of knowledge indicated that insufficient knowledge and awareness of organic foods and their production processes (Vermeir and Verbeke, 2006).	Wang et al. (2019)
Price barriers	The organic food is more expensive than conventional food and price barrier makes it difficult for them to buy and use organic food (Kast, 2003).	Tanner and Kast (2003); Chen et al. (2009), Verhoef (2005).
Attitude	The intention to buy organic food is an individual's ability and willingness to devote his or her preference to organic food rather than conventional food in consideration of shopping (Hale et al., 2003).	Arvola et al. (2008), Dean et al. (2012), Ihsan et al. (2015), Teng and Wang (2015).
Purchase intention	The intention to buy organic food is an individual's ability and willingness to devote his or her preference to organic food rather than conventional food in consideration of shopping (Nik Abdul Rashid, 2009).	Ihsan at al. (2015), Teng and Wang (2015), Nasir and Karakaya (2014).
Trust	Trust have been viewed as a state of perceived vulnerability or risk that is derived from individual uncertainty	Krystallis and Chryssohoidis (2006); Siegrist (2000).

	regarding the motives, intentions, and potential actions of others on whom they depend (Kramer, 1999).	
Limit of availability	Limit of availability shows that difficulties in accessing to purchasing organic food products (Young et al., 2010).	Author's development.

4.2. Data collection

The main purpose of this study is to investigate the factors such as food safety, health benefits, nutritional value, environment friendly, lack of knowledge, price barriers that affect attitude towards consumer purchase intentions; moderating role of trust and limit of availability on consumer attitude and purchase intention. The research model developed on the basis of the hypothesis needs to be validated empirically using a quantitative research model. To do this, questionnaire was used to collect data from the Vietnamese respondents aged 18 and over, who have bought organic food. The participants have to fill out the questionnaire developed to measure the research variables, as well as to collect demographic information. The surveys containing 51 questions were designed by Google form tool and were distributed via-online through social media such as Facebook, Kakao Talk, Instagram. A total of 352 questionnaires were collected and valid questionnaires were 305.

CHAPTER 5

DATA ANALYSIS AND RESULTS

After collecting activities, all the available data were entered into software program. Prior to analyzing data, it was sure that there was no mistake occurring in accessing data. In measurement scales test, data were initially evaluated by Cronbach's Alpha were performed to assess construct validity and reliability. The selected criteria are Cronbach Alpha coefficients greater than 0.6 (Hair et al. 2006) and the total correlation coefficients are greater than 0.3 (Nunally & Burstein, 1994). These items were analyzed by exploratory factor analysis (EFA) with Principal components method for extraction and Promax method for rotation to evaluate the validity of the measurement model. To test research hypotheses, I use structural equation modelling (SEM), SPSS and AMOS version 24 (IBM Corporation, New York, NY, USA).

The goodness-of-fit (GOF) of the measurement and structural models was examined using commonly-applied fit indices including X^2/df (chi-square to degree-of-freedom ratio), GFI (goodness-of-fit index), AGFI (adjusted goodness-of-fit index), CFI (comparative fit index), TLI (Tucker and Lewis index) and RMSEA (root mean square error of approximation). According to prominent studies such as those of Hu and Bentler (1999) and Hair et al. (2010), it is reasonable to conclude that the model fit is good when $X^2/df < 3$, the values of GFI, CFI, TLI ≥ 0.90 and RMSEA ≤ 0.08.

5.1. Description of the sample

The demographic features of consumers were analysed and the summary is presented in Table 3. The results indicated that about 58.4% of the respondents were females while remaining 41.6% of the respondents were males. The majority of respondents were between 18-30 years of age; this counts around 87.9% of sample respondents. And 92.6% of respondents have experience to use and buy organic food products and 7.4% do not have experiences to use organic food. Almost 73.1% of respondents were single while remaining 26.9% of the respondents were married. The majority of the respondents (45.2%) were university undergraduates followed by high school or lesser education (22.6%) and postgraduates (15.7%). And almost 41% of respondents were students followed by employee (37.4%) and self-employed (14.4%). The sample analysis results also show the most of the respondents had an income under VND 10,000,000 (49.2%) and between VND 10,00,001 – 20,000,000 (37.4%).

Table 3: Descriptive Statistic of Respondents

		Frequency	Percent (%)
Gender	Male	127	41.6
	Female	178	58.4
	Total	305	100.0
Age	Between 18-30	268	87.9
	Between 31-40	37	12.1
	Total	305	100
Married status	Married	82	26.9
	Single	223	73.1
	Total	305	100.0
Education	High school or lesser	69	22.6
	Professional degree	15	4.9
	College degree	32	10.5
	University undergraduate	138	45.2
	Postgraduate	51	15.7
	Total	305	100.0
Occupation	Student	125	41
	Employee	114	37.4
	Professional	9	3.0
	Self-employed	44	14.4
	Unemployed	10	3.3
	Other	3	1.0
	Total	305	100.0
Income	Under VND 10,000,000	150	49.2
	Between VND 10,000,001 – 20,000,000	114	37.4
	Between VND 20,000,001 – 30,000,000	21	6.9
	Between VND 30,000,001 – 40,000,000	12	3.9
	Between VND 40,000,001 – 50,000,000	5	1.6
	Over VND 50,000,000	3	1.0
	Total	305	100.0

5.2. Composite Reliability and Exploratory Factor Analysis Results

The reliability of the constructs was tested by using Cronbach's alpha value analysis. The Cronbach's alpha value of the constructs ranged from .742 to .890 indicating adequate internal consistency of the measures. The study conducted factor analysis to test discriminant validity. The extraction method was principal component analysis. Ten factors emerged with Eigenvalues greater than 1, accounting for 70.095% of the variance. Each item loaded on its appropriate factor with no significant cross – loading. All factor loadings higher than .60 were

retained for further data analysis. One item of price barriers and one item of health benefit were deleted due to high loadings in both factors. One item of price barriers was deleted due to its low loading. One item of food safety, two items of environment friendly and one item of purchase intention were deleted to improve composite reliability and average variance extracted (AVE). The results show the acceptable discriminant validity for the constructs (Hair, Anderson, Tatham, & Black, 1998). All of the variables have the average variance extracted (AVE) value above .50, suggesting the construct's convergent validity (Table 4). In terms of discriminant validity, the AVE of each construct is higher than the squared correlations among the constructs (see Table 5), indicating that each construct has good discriminant validity (Fornell and Larcker, 1981).

Table 4: Composite Reliability and Exploratory Factor Analysis Results

Composite Reliability and Exploratory Factor Analysis Results													
	AT	FS	TR	LK	PI	AB	NA	EF	PB	HB	Cronbach's alpha	AVE	CR
AT5	.856	-.058	.011	.066	.006	-.036	-.017	-.027	.079	-.086			
AT2	.856	-.052	.014	.012	.005	.064	.077	-.030	-.025	-.016			
AT1	.845	-.021	-.040	-.030	.047	.056	.010	.022	-.030	.042	.890	.624	.892
AT3	.807	.066	.001	-.021	-.013	.027	-.067	-.111	-.017	.070			
AT4	.705	.011	.116	.062	-.027	-.125	.030	-.044	.029	.117			
FS5	-.069	.884	.017	.076	.087	-.085	.011	-.111	.037	-.005			
FS6	-.112	.821	.060	.086	.092	-.088	-.082	-.023	.024	.054			
FS3	.000	.792	.032	.003	-.086	.025	.046	.003	.020	.048	.841	.526	.845
FS4	.057	.702	-.059	-.049	-.059	.014	.212	-.022	.049	.031			
FS2	.154	.624	-.094	-.161	-.022	.153	-.086	.326	-.102	-.190			
TR3	-.125	-.005	.860	-.011	-.024	.085	.125	-.033	.056	.117			
TR2	.094	-.002	.816	-.014	.003	.013	-.084	.083	-.026	-.142	.841	.514	.843
TR4	.012	.003	.814	.018	-.026	-.070	.037	.044	-.023	-.008			
TR1	.108	.022	.756	-.015	.034	.046	-.108	.011	-.037	-.004			
LK1	.115	.028	.027	.903	.033	-.160	.120	.073	-.005	-.075			
LK4	-.004	.022	.048	.817	.010	-.015	.032	-.016	.127	-.105	.847	.621	.844
LK2	-.046	-.020	-.084	.729	-.013	.209	-.118	.059	-.083	.086			
LK3	-.015	.017	-.052	.720	-.050	.233	-.044	-.051	-.064	.050			
PI1	.051	-.045	-.015	-.085	.807	.054	.143	-.002	.118	-.118			
PI2	-.061	-.028	-.018	-.002	.801	.015	.137	.064	.148	-.067	.803	.514	.803
PI4	.031	.044	-.037	.123	.791	-.082	-.119	-.017	-.085	.044			
PI5	.004	.076	.068	-.054	.753	.077	-.148	-.047	-.199	.153			
AB2	-.012	-.027	-.013	.020	.056	.894	.018	.000	.055	.009	.868	.582	.870
AB1	.025	-.088	.038	.027	.004	.862	.033	.022	-.057	-.013			

AB3	.000	.055	.041	.026	-.022	.855	.035	-.025	.075	.011			
NA1	-.030	.060	.020	.043	-.048	-.024	.841	-.003	-.079	.056			
NA2	.075	.060	-.003	-.032	-.050	.111	.811	-.007	-.005	-.070	.825	.690	.829
NA3	-.019	-.034	-.040	.036	.112	-.001	.790	.034	-.085	.073			
EF1	-.051	-.067	.034	.079	.037	-.168	.096	.862	.003	.040			
EF2	-.059	-.012	.025	-.011	-.043	.047	-.065	.823	.012	.112	.742	.604	.757
EF5	-.072	.047	.050	.013	.010	.119	.000	.694	.014	-.047			
PB4	-.097	.008	.068	-.014	.040	.060	-.037	-.143	.852	.078			
PB3	.094	.037	-.007	.062	-.009	-.033	-.084	.128	.779	-.014	.756	.501	.758
PB5	.048	.027	-.091	-.020	-.040	.043	-.056	.047	.767	.007			
HB3	-.024	-.079	-.005	-.046	.003	.019	.047	.006	.034	.862			
HB4	.025	.163	.018	-.008	-.037	.016	.012	-.043	-.021	.778	.751	.433	.751
HB2	.188	-.046	-.077	-.049	.042	-.040	-.006	.228	.082	.626			
Eigenvalue	6.742	4.770	3.282	2.321	2.140	1.828	1.373	1.232	1.193	1.054			
Explained variance (%)	18.221	12.893	8.869	6.274	5.784	4.942	3.711	3.329	3.225	2.848			
Cumulative explained variance (%)	18.221	31.113	39.983	46.256	52.040	56.982	60.693	64.021	67.247	70.095			

Table 5: Means, standards deviations, and correlations of the constructs

Construct	Mean	SD	1	2	③	4	5	6	7	8	9	10
1. Attitude	3.47	0.744	**0.79**									
2. Food safety	3.92	0.645	0.293***	**0.725**								
3. Purchase Intention	3.99	0.566	0.185**	0.285***	**0.716**							
4. Environmental friendliness	4.16	0.582	-0.064	0.321***	0.278***	**0.717**						
5. Trust	3.69	0.65	0.494***	0.376***	0.268***	0.145*	**0.757**					
6. Lack of knowledge	3.13	0.878	-0.134*	0.05	-0.015	-0.052	-0.09	**0.763**				
7. Available barrier	3.14	0.853	-0.007	0.172*	0.063	0.128†	0.01	0.625***	**0.831**			
8. Nutritional value	3.59	0.734	0.272***	0.555***	0.188**	0.178*	0.316***	0.096	0.220**	**0.787**		
9.Price barrier	2.17	0.594	0.063	0.015	0.247**	0.136†	-0.130†	-0.125†	-0.100	-0.276***	**0.715**	
10.Health benefit	4.27	0.645	0.581***	0.352***	0.311***	0.274***	0.237**	-0.066	0.071	0.243**	0.239**	**0.708**

Notes: the square roots of AVE for discriminant validity are made bold the diagonal; significance of correlation: † $p < 0.100$, * $p < 0.050$, ** $p < 0.010$, *** $p < 0.001$.

Confirmatory factor analysis (CFA) was carried out with Amos program. A total of 37 items were used to conduct confirmatory factor analysis, the model's fit indices with χ^2 of 902.574, *df* of 583, χ^2/df of 1.548, GFI (goodness of fit index) of .865, IFI (incremental fit index) of .938, TLI (Tucker-lewis index) of .928, CFI (comparative fit index) of .937, RMSEA (root mean square error of approximation) of .042 suggest a good model fit (Table 6).

Table 6: Fit indices of CFA

Model	CMIN	DF	P	CMIN/DF	GFI	IFI	TLI	CFI	RMSEA
Default model	902.574	583	.000	1.548	.865	.938	.928	.937	.042
Saturated model	.000	0			1.000	1.000	1.000	1.000	
Independence model	5748.891	666	.000	8.632	.360	.000	.000	.000	.158

5.3. Hypothesis testing

The study used Amos to conduct structural equation modelling. The model fit indices demonstrated a good model fit. Precisely, χ^2 of 756.769, *df* of 394, χ^2/df of 1.921, satisfying Hair et al.'s (1998) suggested criterion of 3:1. GFI is .860, AGFI is .835, meeting the suggested threshold values of above .80 for an acceptable model (Doll, Xia & Torkzadeh, 1994; MacCallum & Hong, 1997). Several other indices of the model contributively suggest a good fit including CFI=.907, IFI=.908, TLI=.897, RMSEA=.055 (Table 7).

Table 7: Fit indices of SEM

Model	CMIN	DF	P	CMIN/DF	GFI	IFI	TLI	CFI	RMSEA
Default model	756.769	394	.000	1.921	.860	.908	.897	.907	.055
Saturated model	.000	0			1.000	1.000	1.000	1.000	
Independence model	4333.376	435	.000	9.962	.396	.000	.000	.000	.172

The results of the hypotheses testing are illustrated in Table 8. Specifically, food safety (β = .147, p <.05), health benefit (β = .715, p <.05), nutritional value (β = .154, p <.05) had a significantly positive impact on attitude towards purchasing intention organic food, so Hypothesis 1, Hypothesis 2 and Hypothesis 3 were supported. In contrast, lack of knowledge has a negative impact on consumer attitude towards purchase intention (β =-.135, p<.05), so Hypothesis H5 was supported. Interestingly, the relationship between environmental

friendliness and consumer attitude was negative significantly (β = -.315, p <.05), thus Hypothesis H4 was not supported. Furthermore, price barriers had a positive impact on attitude towards purchasing intention organic food, but not significant (β= .008, p>.05), so Hypothesis H6 was not supported. However, price barriers had a significantly negative impact direct to purchase intention for organic food (β = -.275, p<.05), which supported Hypothesis H7. As expected, consumer attitude had a significantly positive influence on purchase intention of organic food (β =.150, p <.05). Therefore, Hypothesis H8 was supported.

Table 8: Estimated from the structural models

Direct effects			Coefficient	S.E.	T-value	P	Outcomes
Food Safety	→	Attitude	.147	.072	2.038	.042	Supported
Health Benefits	→	Attitude	.715	.102	6.978	***	Supported
Nutritional Value	→	Attitude	.154	.073	2.105	.035	Supported
Environment Friendly	→	Attitude	-.315	.075	-4.215	***	Not Supported
Lack of Knowledge	→	Attitude	-.135	.059	-2.312	.021	Supported
Price Barriers	→	Attitude	.008	.075	.103	.918	Not supported
Price Barriers	→	Purchase Intention	-.275	.080	-3.415	***	Supported
Attitude	→	Purchase Intention	.150	.055	2.713	.007	Supported

***p<.001

5.4. Moderating effects

To obtain the interaction term for the model, items of attitude and trust, attitude and limit of availability were mean-centered and then multiplied. This helps to reduce multi-collinearity between the main effects and the interaction terms (attitude x trust and attitude x limit of availability) and also to increase the interpretability of the beta-weights for interaction term.

To assess the moderating effects, as recommended by (Cohen, Cohen, West, &Aiken, 2003), hierarchical multiple regression was conducted to examine the moderating effect of moderating variable on the relationship between independent and dependent variable. First, the main effect represented by the independent variable was entered in the first model; second, the main effect represented by the moderator variable was also entered in the second model; and third, the moderation effect (Baron & Kenny, 1986), as known as interaction variable was entered in the third model. Results show that trust positively moderates the influence of

consumer attitude and purchase intention (β =. 255; p<.05), and limit of availability negatively moderates the influence of consumer attitude and purchase intention (β =-. 147, p< .05), which supported Hypothesis 9 and Hypothesis 10.

Table 9: The moderating trust in the relationship between attitude and purchase intention.

Model		Unstandardized Coefficients			Collinearity Statistics		R^2	ΔR^2	ΔF
		B	t	Sig.	Tolerance	VIF			
1	(Constant)	3.483	22.864	.000			.036	.036	11.430
	Attitude	.145	3.381	.001	1.000	1.000			
2	(Constant)	3.049	15.504	.000			.072	.036	11.540
	Attitude	.077	1.640	.102	.814	1.228			
	Trust	.182	3.397	.001	.814	1.228			
3	(Constant)	2.873	14.882	.000			.140	.068	23.712
	Attitude	.073	1.629	.104	.814	1.228			
	Trust	.218	4.174	.000	.798	1.253			
	Interaction 1	.255	4.870	.000	.978	1.023			

Table 10: The moderating limit of availability in the relationship between attitude and purchase intention.

Model		Unstandardized Coefficients			Collinearity Statistics		R^2	ΔR^2	ΔF
		B	t	Sig.	Tolerance	VIF			
1	(Constant)	3.483	22.864	.000			.036	.036	11.430
	Attitude	.145	3.381	.001	1.000	1.000			
2	(Constant)	3.356	17.354	.000			.040	.004	1.119
	Attitude	.146	3.393	.001	1.000	1.000			
	Limit of availability	.040	1.058	.291	1.000	1.000			
3	(Constant)	3.355	17.694	.000			.080	.040	13.118
	Attitude	.156	3.710	.000	.995	1.005			
	Limit of availability	.028	.747	.456	.992	1.008			
	Interaction 2	-.147	-3.622	.000	.987	1.014			

Table 11: Summarise Hypothesis

Hypothesis	Outcomes
H1: Food safety has a positive impact on consumer attitudes towards purchasing intention for organic food.	Supported
H2: Health benefit awareness has a positive impact on consumer attitudes towards purchasing intention for organic food.	Supported
H3: Nutritional value of organic food has a positive impact on consumer attitude towards purchasing intention.	Supported
H4: Environmental friendliness has a positive impact on consumer attitude towards purchasing intention for organic food.	Not supported
H5: Lack of consumer's knowledge of organic food has a negative impact on attitude towards purchasing intention.	Supported
H6: Price barriers has a negative impact on consumer attitudes towards purchasing intention for organic food.	Not supported
H7: Price barrier has a negative impact on consumer purchase intention for organic food.	Supported
H8: Consumers' attitude has a positive impact towards purchasing intention for organic food .	Supported
H9: Trust positively moderate in the relationship between attitude and purchase intention for organic food.	Supported
H10: Availability negatively moderate in the relationship between attitude and purchase intention for organic food.	Supported

CHAPTER 6

CONCLUSIONS, IMPLICATIONS AND LIMITATIONS

6.1. Conclusions

This study endeavours to extend literature by incorporating various facilitators and barriers associated with organic food purchase intention in an emerging research context such as Vietnam. The importance of future research into organic food purchase in developing and emerging countries has been emphasized in the literature (Rana and Paul, 2017; Pham et al., 2018). This study therefore provides fascinating compassion with prior research, particularly those conducted in Western economies. A notable finding in this study concerns the environment does not play a significant role in the formation of their attitudes towards organic food purchase intention. This negates the importance of environmental concern in predicting organic food attitudes demonstrated in prior studies in both developed countries (e.g. Smith & Paladino, 2010) and emerging markets (e.g. Yadav & Pathak, 2016). However, several authors suggest that consumers in poorer countries, like developing and emerging markets (e.g., Vietnam), are less likely to take environmental quality into account when making a buying decision (Mostafa, 2007). This finding can be partly explained by the fact that the respondents were students or employees, the majority of whom were low income earners. These consumers do not fully understand how organic food benefits the environment as well as are less likely to care more about the environment. According to Koning et al. (2015), Vietnamese consumers generally indicate a lack of knowledge relating to sustainable consumption.

This study has also extended the finding of previous studies by comprehensively examining various determinants of attitudes towards organic food purchase intention. The findings echo the extant literature that suggest food safety (Michaelidou et al., 2008; Truong et al., 2012), health benefits (Yadav et al., 2016; Lee, 2016), nutritional value (Amodio et al., 2007) significantly strengthen attitudes towards purchasing intention of organic food. This shows that Vietnamese consumers are conscious about their health related issues and consider health as an important parameter while taking the decision to buy organic food products like developed counterparts. Therefore, health related benefits of organic food should be disseminated among the consumers as organic foods are perceived as healthier in comparison to conventionally grown foods (Lea & Worsley, 2005, William & Hammitt, 2001). While lack of knowledge about organic food had a negative impact on attitudes towards purchase intention

for organic food. This finding may be due to the low level of knowledge about organic food demonstrated by the respondents in this study (Mean = 3.13). As such, the majority of respondents were students, employees between 18-30 years of age and low income, so they did not comprehensively understand of the process, taste, types and terms organic food, which might have adversely effected their attitudes towards purchase intention the products. Similar to earlier to work (Verhoef, 2005), the findings reveal that price barriers negatively affect consumer purchase intention of organic food. Specifically, consumers perceive that organic food product is too expensive and such as high price represents an obstacle to their purchase intention. This can be explained by the widespread financial constraints of consumers in emerging markets (Nguyen et al., 2017). However, contrary to the hypothesis, the result indicates that price positively affects to consumer attitude toward organic foods purchase intention. This may be because consumers perceive that high price means high quality. They think if the price paid for organic food products is justified in terms of benefits and quality derived from the product, then it results in an increasing their attitude toward purchase intention of organic products. Further, consumer's intention to buy organic food was also determined by their attitude towards the organic food. This signifies the importance of positive attitude towards organic food among consumers while buying it.

The highlight findings of this study support that trust play the moderating roles between consumer attitude and purchase intention. Specifically, organic labelling information and certifications have a critical effect on consumer trust in organic food, which in turn will increase their attitudes towards purchasing intention of organic food. Thus, this result confirms the essential role of trust in the process of consumer organic buying intentions. If the products have certifications and are labelled fully can help consumers increase trust in organic food, then it will increase their attitudes into positive ones that can further influence organic food buying decisions.

This study demonstrated that limit of availability moderate negatively in the relationship between consumer attitude and purchase intention for organic food. The consumer demand for clean and organic food products is increasing, but paradoxically, the retail market for clean and organic food products only accounts for a very small proportion of the total consumption of agricultural products, as well as the consumer's everyday food. Furthermore, there are a few stores selling organic products, mainly concentrated in big cities such as Ha Noi, Ho Chi Minh. Therefore, it is difficult for consumers to choose to buy organic products, which in turn to negative attitude toward purchase intention.

6.2. Managerial implications

From a practical perspective, the findings from this study provide several implications about developing effective and relevant marketing strategies for organic product companies, retailers and market regulatory agencies, marketers to foster organic food consumption among Vietnamese consumers. First, the demand for organic products might be encouraged by making such products less costly in terms of value for money. In this regard, organic food producers should make every effort to increase their efficiencies, which would result in lower prices, while distributors should consider discounting the price of organic products whenever possible. Because consumer still considers organic foods as expensive compared to the price of conventional foods, if the price is high, they can switch to conventional foods.

Second, policymakers should facilitate the development and implementation of the national organic labelling program, developing relevant policies to support the production and distribution of organic food products, as well as educate consumers to engage more in organic food consumption and to become smarter and more responsible ones. For example, communication programs and activities should be developed to promote the concept of organic food to consumers and highlight the positive features associated with organic food such as health and environmental benefits. Besides, a national policy of regulating the use of "organic" terms and labels is needed. Currently, Vietnam has implemented the TCVN11041 as the national certification for organic food production. However, it has no brand identity and only supervises whether manufacturers can call their products organic. Other certification bodies such as American's USDA or European's BIO can be recognized easily with standardized logos printed on the products' packaging. It would be useful to improve TCVN11041 to the same level as other international organic certificates to reduce confusion and gain consumer trust in organic food. Furthermore, it is necessary to promote the link between the government, the farmer (the manufacturer), and the distributor to have a stable source of quality organic food to offer consumers. In particular, retailers and distributors should create the motivation for producers in investing to bring organic products that have real value and more popular in the market. Also, the government needs to tightly control food safety issues from the production to distribution. Manufacturers and entrepreneurs need to coordinate closely with state agencies to make the inspection and control transparent and open to consumers.

Third, since organic food is still a new concept in Vietnam, effective education programs and communication campaigns should be jointly developed by the stakeholders. Food topics and issues (e.g. sustainable food consumption, environmental friendliness food consumption)

should be promoted via mass media (e.g. TV, advertisement, radio) and social media (e.g. Facebook, Instagram, Zalo, Tiktok) to increase consumers' knowledge about organic products as well as their awareness about the safety, environmental and health benefits of organic food. Such programs should provide clear and honest information about the organic farming method, nutrition facts, and environmental benefits associated with organic food. Firms can collaborate with relevant organizations and associations to hold organic food exhibitions, contests, fairs, and other activities to promote organic food attributes and help consumers recognize trusted organic labels and certifications.

Fourth, this study provides guidelines and suggestions for retailers who are selling organic foods. Retailers should create a more convenient and pleasant shopping atmosphere for consumers. Providing more attractive displays and organic sections within stores can assist with this cause. Besides the study can provide insights for the health and wellness companies to reorient their production and marketing strategies to cater to increasing consumer demand for healthier food choices and to devise their growth and development plans effectively. Serious efforts should be made to improve the distribution channel of organic food so that consumers can easily buy organic food from nearby markets and stores.

Fifth, the current study provides useful information about the characteristics of the organic consumer. These insights help organic food marketers to better understand the variables as bases for segmenting their market and target relevant segments cautiously. Also, this knowledge helps to frame their marketing strategy to convince and raise the recognition of these potential consumers about its benefits, such as healthy contents, pesticide-free, freshness, and environment-friendly. For example, firms' products should convey health benefits and useful information attached to the label and certification to gain customer trust. The product packaging should use appropriate design and material to emphasize its healthy attributes. Sufficient and relevant information should be provided on the package to facilitate the purchase decision process of the "traditional consumers" who are often cautious in purchasing new products such as organic ones. Additionally, consumers need to be informed about the availability of organic produce as consumers believe the limited availability of organic foods in the market.

6.3. Limitation and Future research

This study provides some useful findings to identify factors and assess the degree of influence on different factors about customers' buying intention. However, the research still contains some limitations, which must be critically considered. First, the study is limited to measuring the purchase intention of organic food, there is no measure of actual buying behaviour. Although prior findings have supported that intention to act is positively impact actual behaviour, there is a need to incorporate actual buying behaviour along with the intention in future studies. Second, since the research data were collected in the Vietnam market, so the variables and models are only meaningful in this market. Future studies should focus on samples from other countries, and it could be valuable in conducting a cross-cultural comparison. Third, the majority of the sample consisted of students and employees who had low income. Therefore, to address the limitation of this study's sample, future research should obtain data from respondents who have a high income, which enables a comparative analysis between high and low incomes. Fourth, as price barriers proved a non-significant effect on consumer attitude in this study, future studies can be done to explore these in detail for a clear understanding of purchase intention. Finally, the study has measured the overall organic foods whereas earlier studies have shown that consumption of organic food differed among various food products such as organic meat, organic vegetable, organic rice, organic milk which may limit the generalization of findings. Future studies may test and compare consumer intention and behaviour towards various ranges of organic food products.

REFERENCES

Aertsens, J., Mondelaers, K., Verbeke, W., Buysse, J., Huylenbroeck, G.V, (2011) "The influence of subjective and objective knowledge on attitude, motivations and consumption of organic food," *British Food Journal*, 113, 1353–1378.

Aertsens, J., Verbeke, W., Mondelaers, K. and Van Huylenbroeck, G (2009), "Personal determinants of organic food consumption: a review," *British Food Journal*, 111 (10), 1140-1167.

Ajzen, I (1985), "From intentions to actions: a theory of planned behavior," In Kuhl, J. and Beckmann, J. (Eds), Action Control: From Cognition to Behavior, Springer, Heidelberg, 11-39.

Ajzen, I (1989), "Attitudes structure and behavior," In Breckler, S.J. and Greenwald, A.G. (Eds), Attitudes Structure and Function, Springer, New York, NY, 241-274.

Ajzen, I (1991), "The theory of planned behavior," Organizational Behavior and Human Decision Processes, 50(2), 179-211.

Ajzen, I (2002), "Constructing a TPB questionnaire: conceptual and methodological considerations"

Ajzen, I. & Fishbein, M (1975), "Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research," Addison-Wesley Publishing Co., Reading MA.

Ajzen, I. &Fishbein, M (1980), "Understanding Attitudes and Predicting Social Behavior," Prentice-Hall, Englewood Cliffs, HJ.

Ajzen, I., & Fishbein, M (2000), "Attitudes and the Attitude-Behavior Relation: Reasoned and Automatic Processes", *European Review of Social Psychology,* 11(1), 1-33.

Alagoz, S.H., Hekimoglu, H (2012), "A study on TAM: Analysis of customer attitudes in online food ordering system," *Procedia Social and Behavior Science,* 62, 1138–1143.

Amodio, M.L., Colelli, G., Hasey, J.K. and Kader, A. A (2007), "A comparative study of composition and postharvest performance of organically and conventionally grown kiwifruits," *Journal of the Science of Food and Agriculture*, 87 (7), 1228-36.

Angulo, A.M., Gil, J.M. and Tamburo, L (2005), "Food safety and consumers' willingness to pay for labelled beef in Spain," *Journal of Food Products Marketing,* 11 (3), 89-105.

Arvola, A., Vassallo, M., Dean, M., Lampila, P., Saba, A., Lahteenmaki, L., & Shepherd, R (2008), "Predicting intentions to purchase organic food: The role of affective and moral attitudes in the theory of planned behavior," *Appetite,* 50, 443–454.

Baron, R.M., Kenny, D. A (1986), "The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations," *Journal of Personality and Social Psychology,* 51 (6), 1173-1182.

Barrett, H. R., Browne, A. W., Harris, P. J. C., & Cadoret, K (2002), "Organic certification and the UK market: organic imports from developing countries," *Food Policy,* 27(4), 301–318.

Basha, M. B., Mason, C., Shamsudin, M. F., Hussain, H. I., & Salem, M. A (2015), "Consumers Attitude Towards Organic Food", *Procedia Economics and Finance,* 31, 444–452.

Beardworth, A., Brynan, A. leil, T., Goode, J., Haslam, C., & Haslam, E (2002), "Women, men and food: the significant of gender for nutritional attitudes and choices," *British Food Journal,* 104(7), 470-91.

Bhaskaran, Polonsky, M., Cary, J., Fernandez, S (2006), "Environmentally sustainable food production and marketing," *British Food Journal,* 108(8), 677-690.

Bourn, D., Prescott, J (2002), "A comparison of the nutritional value, sensory qualities and food safety of organically and conventionally produced foods," *Critical Reviews in Food Science and Nutrition,* 42 (1), 1-34.

Bryła, P (2016), "Organic food consumption in Poland: Motives and barriers," *Appetite,* 2016, 105, 737–746.

Buzby, J.C. and Skees, J (1994), "Consumers want reduced exposure to pesticides in food," *Food Review,* 17(2), 19–22.

Caswell, J.A (2000), "Valuing the benefits and costs of improved food safety and nutrition," *Australian Journal of Agricultural and Resource Economics,* 42(4), 409–424.

Chakrabarti, S (2010), "Factors Influencing Organic Food Purchase in India - Expert survey insight," *British Food Journal,* 112(8), 902-915.

Chang, H. and Kinnucan, H.W (1991), "Advertising, information and product quality: the case of butter," *American Journal of Agricultural Economics,* 73, 1195–1203.

Chen, J. and Lobo, A. (2012), "Organic food products in China: determinants of consumers' purchase intention," *The International Review of Retail, Distribution and Consumer Research,* 22(3), 293-314.

Chen, M.F (2007), "Consumer attitudes and purchase intention in relation to organic foods in Taiwan: moderating effects of food-related personality traits," *Food Quality and Preference,* 18 (7), 1008-1021.

Chen, M.F (2009), "Attitude toward organic foods among Taiwanese as related to health consciousness, environmental attitudes, and the mediating effects of a healthy lifestyle," *British Food Journal*, 111, 165–178.

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S (2003), "Applied multiple regression/correlation analysis for the behavioral sciences (3rd ed.)," Lawrence Erlbaum Associates Publishers.

Coleman, L. J., Bahnan, N., Kelkar, M., & Curry, N (2011), "Walking The walk: How the theory of reasoned action explains adult and student intentions to go green," *Journal of Applied Business Research,* 27(3), 107-116.

Davies, A., Titterington, A.J. and Cochrane, C (1995), "Who buys organic food? A profile of the purchasers of organic food in Northern Ireland," *British Food Journal*, 97(10), 17-23.

de Koning, J.I.J.C.; Crul, M.R.M.; Wever, R.; Brezet, J.C (2015), "Sustainable consumption in Vietnam: An explorative study among the urban middle class," *International Journal of Consumer Studies*, 39, 608–618.

de Magistris, T.; Gracia, A. (2008), "The decision to buy organic food products in Southern Italy," *British Food Journal*, 110, 929–947.

Dean, M., Raats, M.M., Shepherd, R (2012), "The role of self-identity, past behavior, and their interaction in predicting intention to purchase fresh and processed organic food," *Journal of Applied Social Psychology*, 42, 669–688.

Demeritt, L (2002), "All Things Organic 2002: A Look at the Organic Consumer," The Hartman Group, Bellevue, WA.

Doll, W., Xia, W., & Torkzadeh, G (1994), "A confirmation factor analysis of the end-user computing satisfaction instrument," *MIS Quarterly,* 18(4), 453-461.

D'Souza, C., Taghian, M., Lamb, P (2006), "An empirical study on the influence of environmental labels on consumers," *Corporate Communications an International Journal*, 11 (2), 162-173.

Dubé, L.; Labban, A.; Moubarac, J.-C.; Heslop, G.; Ma, Y.; Paquet, C (2014), "A nutrition/health mindset on commercial big data and drivers of food demand in modern and traditional systems," *Annals of New York Academy of Science*, 1331, 278–295.

Effendi, I., Ginting, P., Lubis, A.N., Fachruddin, K.A (2015), "Analysis of consumer behaviour of organic food in north Sumatra Province, Indonesia," *Journal of Business Management*, 4 (1), 44-58.

Elbeck, M., & Mandernach, B. J (2008), "Expanding the value of scholarly, open access e-journals," *Library and Information Science Research,* 30(4), 237-241.

FAO (1999), "Guidelines for the Production, Processing, Labeling and Marketing of Organically Produced Foods", vol. 32. Joint/WHO Food Standards Program Codex Alimentarius Commision, Rome, CAC/GL, p. 49.

Fornell, C., & Larcker, D. F (1981), "Evaluating structural equation models with unobservable variables and measurement error," *Journal of Marketing Research,* 18(1), 39-50.

Gan, C., Wee, H.Y., Ozanne, L., Kao, T.H (2008), "Consumers' purchasing behaviour towards green products in New Zealand," *Innovation Marketing,* 4(1), 93-102.

Gefen, D. (2004), "What makes an ERP implementation relationship worthwhile: linking trust mechanisms and ERP usefulness", *Journal of Management Information Systems,* 21(1), 263-288.

Gil, J. M., Gracia, A., Sanchez, M (2000), "Market segmentation and willingness to pay for organic products in Spain," *International Food Agribusiness Management Review*, 3(2), 207-226.

Grossman, M (1972), "On the concept of health capital and the demand for health," *Journal of Political Economy,* 80(2), 223-55.

GSO. Viet Nam Household Living Standards Survey (2012), General Satistics Office of Vietnam: Hanoi, Vietnam.

Hack, M.D (1993), "Organically grown products: Perception, preferences and motives of Dutch consumers", *Acta Horti-culturae,* 340, 247–253.

Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C (1998), "Multivariate data analysis," Englewood Cliffs, NJ: Prentice Hall.

Hale, J. L., Householder, B.J. & Greene, K. L (2003), "The theory of reasoned action, The persuasion handbook: Developments in theory and practice," Thousand Oaks, CA: Sage, 259-289.

Hammitt, K., Williams P (2006), "Perceived Risks of Conventional and Organic Produce: Pesticides, Pathogens and Natural Toxins," *Risk Analysis Journal,* 21 (2), 319-330.

Han, H., Hsu, L.T., & Lee, J.S (2009), "Empirical Investigation of the Roles of Attitudes towards Green Behaviours, Overall Image, Gender, and Age in Hotel Customers' Eco Friendly Decision Making Process," *International Journal of Hospitality Management,* 28, 519-528.

Harper, G.C., Makatouni, A (2002), "Consumer perception of organic food productions and farm animal welfare," *British Food Journal,* 104 (3/4/5), 287-299.

Hart, P. and Saunders, C. (1997), "Power and trust: critical factors in the adoption and use of electronic data interchange", *Organization Science,* 8(1), 23-42.

Hay, J (1989), "The consumer's perspective on organic food," *Canadian Institute of Food Science Technology Journal,* 22(2), 95–99.

Hill, H., & Lynchehaun, F (2002), "Organic milk: Attitudes and consumption patterns", *British Food Journal,* 104(7), 526–542.

Hoefkens, C., Camp, J.V., Verbeke,W., Aertsens, J., &Mondelaers, K (2009), "The nutritional and toxicological value of organic vegetables: Consumer perception versus scientific evidence", *British Food Journal,* 111(10), 1062–1077.

Honkanen, P., Verplanken, B. and Olsen, S.O (2006), "Ethical values and motives driving organic food choice," *Journal of Consumer Behaviour,* 5(5), 420-430.

Howard, J.A. and Sheth, J.N (1967), "A Theory of Buyer Behavior, in Moyer, R. (ed.). Changing Marketing System," Proceedings of the 1967 Winter Conference of the American Marketing Association AMA, 253-262.

Hughner, R., McDonagh, P., Prothero, A., Shultz, J., Stanton, J (2007), "Who are organic food consumers? A compilation and review of why people purchase organic food," *Journal of Consumer Behavior,* 6 (2/3), 94-110.

Hutchins, R.K., Greenhalgh, L.A (1997), "Organic confusion: sustaining competitive advantage," *British Food Journal,* 99 (9), 336-338.

Ihsan, E; Paham, G; Arlina Nurbaity, L; Khaira Amalia, F (2015), "Analysis of Consumer Behavior of Organic Food in North Sumatra Province, Indonesia," *Journal of Business and Management,* 4(1), 44-58.

Janssen, M., & Hamm, U (2012), "Product labelling in the market for organic food: consumer preferences and willingness-to-pay for different organic certification logos," *Food Quality and Preference,* 25(1), 9–22.

Jolly, D.A., Schutz, G.H., Diaz-Knauf, K.V., and Johal, J (1989), "Organic foods: Consumer attitudes and use," *Food Technology,* 43(11), 60–65.

Kim, D.J., Ferrin, D.L. and Rao, H.R (2008), "A trust-based consumer decision-making model in electronic commerce: the role of trust, perceived risk, and their antecedents", *Decision Support Systems,* 44(2), 544-564.

Klonsky, K., Tourte, L (1998), "Organic agricultural production in the United States: debates and direction," *American Journal of Agricultural Economics*, 80(5), 1119-1124.

Kotler P. & Armstrong G (2010), "Principles of Marketing", New Jersey: Pearson Prentice Hall.

Kramer, R.M. (1999), "Trust and distrust in organizations: emerging perspectives, enduring questions", *Annual Review of Psychology*, 50(1), 569-598.

Krystallis, A., Chryssohoidis, G (2006), "Consumers' willingness to pay for organic food products: Factor that affect it and variation per organic product type," *British Food Journal*, 107(6), 320-343.

Lea, E., & Worsley, T (2005), "Australians' organic food beliefs, demographics and values", *British Food Journal*, 107(11), 855–869.

Lee, H.-J (2016), "Individual and situational determinants of U.S. Consumers' buying behavior of organic foods," *Journal of International Food Agribusiness Marketing*, 2016, 28, 117–131.

MacCallum, R. C., & Hong, S (1997), "Power analysis in covariance structure modeling using GFI and AGFI," *Multivariate Behavioral Research*, 32, 193-210.

Magnusson, M (2004), "Consumer Perception of Organic and Genetically Modified Foods: Health and Environmental Considerations," Uppsala: Acta Universitatis Upsaliensis.

Magnusson, M. K., Arvola, A., Hursti, U. K. K., Aberg, L., & Sjödén, P. O (2001), "Attitudes towards organic foods among Swedish consumers," *British Food Journal*, 103(3), 209-227.

Magnusson, M.K., Arvola, A., Hursti, U.K., Å berg, L. & Sjödén, P (2003), "Choice of organic foods is related to perceived consequences for human health and to environmentally friendly behavior", *Appetite*, 40(2), 109-117.

Makatouni, A. (2002) 'What motivates consumers to buy organic food in the UK? Results from a qualitative study," *British Food Journal*, 104(3–5), 345-352.

Mathieson, K (1991), "Predicting user intentions: comparing the technology acceptance model with the theory of planned behaviour", *Information Systems Research*, 2(3),173-191.

McDonald, P (2001), "The organic food market in Europe: An overview of Europe's fastest growing niche food market," Queensland: Queensland Government Trade & Investment Office Europe.

McCarthy, B. L., Liu, H. B., and Chen, T (2015), "Trends in organic and green food consumption in China: Opportunities and challenges for regional Australian exporters". *Journal of Economic and Social Policy*,17(1), 2.

Michaelidou, N., Hassan, L. M (2008), "The role of health consciousness, food safety concern and ethical identity on attitudes and intentions towards organic food," *International Journal of Consumer Studies*, 32(2), 163–170.

Monika, K; Simona, U (2014), "Ethical behavior: factor influencing intention to buy organic products in Lithuania", *Economic and management*, 2014, 19(1).

Mostafa, M.M (2007), "A hierarchical analysis of the green consciousness of the Egyptian consumer," *Psychological Marketing*, 2007, 24, 445–473.

Mottaleb, K.A., Rahut, D.B., Kruseman, G., Erenstein, O (2018), "Evolving food consumption patterns of rural and urban households in developing countries: A Bangladesh case," *British Food Journal*, 2018, 120, 392–408.

Nasir, V.A., and Karakaya, F. (2014), "Underlying Motivations of Organic Food Purchase Intentions", *Agribusiness*, 30 (3), 290–308.

Nguyen Viet, H.; Ninh Nguyen; Bach Khoa, N; Antonio Lobo; Phuong Anh, V (2019), "Organic Food Purchases in an Emerging Market: The Influence of Consumers' Personal Factors and Green Marketing Practices of Food Stores". *International Journal of Environmental Research and Public Health*, 2019, 16, 1037.

Nguyen, T. H (2007), "Attitude, motivation and consumption of seafood in Bacninh Province, Vietnam," Thesis in International Fisheries, Management Department of Social and Marketing Studies Norwegian College of Fisheries Science, University of Tromso.

Nguyen-Viet, H.; Tuyet-Hanh, T.T.; Unger, F.; Dang-Xuan, S.; Grace, D (2017), "Food safety in Vietnam: Where we are at and what we can learn from international experiences," *Infectious Diseases of Poverty*, 2017, 6, 39.

O'Fallon, M.J., Gursoy, D. and Swanger, N (2007), "To buy or not to buy: impact of labelling on purchasing intentions of genetically modified foods", *International Journal of Hospitality Management*, 26(1), 117-130.

Øystein, S., Persillet, V., and Sylvander, B (2001), "The consumers' faithfulness and competence in regard to organic products: Comparison between France and Norway," Paper Presented at the 2002 IFOAM Conference, Vancouver, Canada.

Padel, S., & Foster, C (2005), "Exploring the gap between attitudes and behaviour: Understanding why consumers buy or do not buy organic food," *British Food Journal*, 107(8), 606–625.

Paul, J., Rana, J (2012), "Consumer behaviour and purchase intention for organic food," *Journal of Consumer Marketing*, 29(6), 412-422.

Petterson, B.D (1977), "A comparison between conventional and bio-dynamic farming systems as indicated by yield and quality," *BioDynamics,* 124,19–27.

Pham, T.H.; Nguyen, T.N.; Phan, T.T.H.; Nguyen, N.T (2018), "Evaluating the purchase behaviour of organic food by young consumers in an emerging market economy," *Journal of Strategic Marketing*, 2018, 1–17.

Radman, M (2005), "Consumer consumption and perception of organic products in Croatia," *British Food Journal*, 107 (4), 263-273.

Ramayah, T., Lee, J. W. C., Mohamad, O (2010), "Green product purchase intention: Some insights from a developing country," *Resources Conservation and Recycling*, 54(12), 1419-1427.

Rana, J.; Paul, J (2017), "Consumer behavior and purchase intention for organic food: A review and research agenda," *Journal of Retailing Consumer Servives,* 2017, 38, 157–165.

Rashid, N. R. N. A (2009), "Awareness of Eco-label in Malaysia's Green Marketing Initiative," *International Journal of Business and Management*, 4(8).

Rimal, A. P., Moon, W., Balasubramanian, S (2005), "Agro-biotechnology and organic food purchase in the United Kingdom," *British Food Journal*, 107(2), 84-97.

Schifferstein, H.N.J. and Oude-Ophuis, P.A.M (1998), "Health related determinants of organic food consumption in the Netherlands," *Food Quality and Preference,* 9(3), 119–133.

Schuphan, W (1974), "Nutritional value of crops as influenced by organic and inorganic fertilizer treatments," *Plant Foods for Human Nutrition,* 23, 333–358.

Shih-Jui, T., Ching-Chun, S., Wei, S., & Yu-Hua, C. (2012), "Attitudinal inconsistency toward organic food in relation to purchasing intention and behaviour," *British Food Journal*, 114(7), 997–1015.

Siegrist, M (2000), "The influence of trust and perceptions of risks and benefits on the acceptance of gene technology", *Risk Analysis*, 20(2), 195-204.

Singh, A., & Verma, P (2017), "Factors influencing Indian consumers' actual buying behaviour towards organic food products," *Journal of Cleaner Production*, 167, 473–483.

Siti Nor Bayaah, A; Nutia, J (2010), "Organic Food: A Study on Demographic Characteristics and Factors Influencing Purchase Intentions among Consumers in Klang Valley, Malaysia", *International Journal of Business and Management,* 5(2), 105-118.

Smith, S., Paladino, A (2010), "Eating clean and green? Investigating consumer motivations towards the purchase of organic food," *Australia Marketing Journal*, 2010, 18, 93–104.

Squires, L., Bettina Cornwell, T., Juric, B (2001), "Level of market development and intensity of organic food consumption: Cross-cultural study of Danish and New Zealand consumers," *Journal of Consumer Marketing*, 2001, 18, 392–409.

Tanner, C., Kast, S.W, (2003), "Promoting sustainable consumption: Determinants of green purchases by Swiss consumers," *Psychological Marketing*, 2003, 20, 883–902.

Tarkiainen, A., Sundqvist, S (2005), "Subjective norms, attitudes and intentions of finish consumers in buying organic food," *British Food Journal*, 2005, 107, 808–822.

Teng, C. C. & Wang, Y. M (2015), "Decisional factors driving organic food consumption," *British Food Journal*, 117(3), 1066 – 1081.

Teng, C.C., & Lu, C.H (2016), "Organic food consumption in Taiwan: Motives, involvement, and purchase intention under the moderating role of uncertainty," *Appetite*, 105, 95–105.

Torjusen, H., Nyberg, A., and Wandel, M (1999), "Organic food: consumers' perceptions and dietary choices online," *Food and Agriculture Organization of the United Nation*, 1999, 5.

Tregear, A., Dent, J., McGregor, M. (1994), "The demand for organically grown produce," *British Food Journal*, 96(4), 21-25.

Truong, T.T.; Yap, M.H.T.; Ineson, E.M (2012), "Potential Vietnamese consumers' perceptions of organic foods," *British Food Journal*, 2012, 114, 529–543.

Tsakiridou, E., Boutsouki, C., Zotos, Y., & Mattas, K (2008) "Attitudes and behaviour towards organic products: An exploratory study," *International Journal of Retail & Distribution Management*, 36(2), 158–175.

Ueasangkomsate, P., & Santiteerakul, S (2016), "A Study of Consumers' Attitudes and Intention to Buy Organic Foods for Sustainability," *Procedia Environmental Sciences*, 34, 423–430.

Van Doorn, J.; Verhoef, P.C (2015), "Drivers of and barriers to organic purchase behavior," *Journal of Retailing*, 2015, 91, 436–450.

Verhoef, P.C (2005), "Explaining purchases of organic meat by Dutch consumers," *European Review of Agricultural Economics*, 2005, 32, 245–267.

Vermeir, I. and Verbeke, W (2006), "Sustainable food consumption: exploring the consumer 'attitude-behavioural intention' gap", *Journal of Agricultural and Environmental Ethics*, 19(2), 169-194.

Vermeir, I., Verbeke, W (2004), "Sustainable Food Consumption: Exploring the Consumer Attitude-behaviour Gap," Working Paper, Ghen University, Belgium, 121, 65-78.

Vietnam News. The Organic Food Market Is Getting More and More Vibrant (2018).

Vietnam news. Trends consumption in the food and beverage industry (2018).

Von Alvesleben, R (1997), "Consumer behavior", in Padberg, D.I., Ritson, C. and Albisu, L.M. (Eds), *A*gro-Food Marketing, CAB International, New York, 209-244.

von Meyer-Höfer, M., Olea-Jaik, E., Padilla-Bravo, C.A., Spiller, A (2015), "Mature and emerging organic markets: Modelling consumer attitude and behaviour with partial least square approach," *Journal of Food Products Marketing*, 21, 626–653.

Wandel, M. and Bugge, A (1997), "Environmental concerns in consumer evaluation of food quality," *Food Quality and Preferences*, 8(1),19–26.

Wang, X., Pacho, F., Liu, J., & Kajungiro, R (2019), "Factors Influencing Organic Food Purchase Intention in Tanzania and Kenya and the Moderating Role of Knowledge," *Sustainability*, 11(1), 209.

Wee, C. S., Ariff, M. S. B. M., Zakuan, N., Tajudin, M. N. M (2014), "Consumers Perception, Purchase Intention and Actual Purchase Behavior of Organic Food Products," *Review of Integrative Business and Economics*, Research, 3(2), 378-397.

Wier, M. and Calverly, C (2002), "Market Potential for Organic Foods in Europe," *British Food Journal* 104(1), 45-62.

Wilcock, A.; Pun, M.; Khanona, J.; Aung, M (2004), "Consumer attitudes, knowledge and behaviour: A review of food safety issues," *Trends in Food Science Technology*, 2004, 15, 56–66.

Williams, P.R. and Hammitt, J.K (2001), "Perceived risks of conventional and organic produce: pesticides, pathogens, and natural toxins", *Risk Analysis*, 21(2), 319-330.

Winter, C. K., & Davis, S. F. (2006), "Organic Foods," *Journal of Food Science*, 71(9), 117-124.

Wolfson, J.L. and Shearer, G (1981), "Amino acid composition of grain protein of maize grown with and without pesticides and standard commercial fertilizers," *Agronomy Journal*, 73, 611–613.

Xie, B., Wang, L., Yang, H., Wang, Y.; Zhang, M (2015), "Consumer perceptions and attitudes of organic food products in eastern china," *British Food Journal*, 2015, 117, 1105–1121.

Yadav, R., Pathak, G.S (2016), "Intention to purchase organic food among young consumers: Evidences from a developing nation," *Appetite*, 2016, 96, 122–128.

Yiridoe, E. K., Bonti-Ankomah, S., and Martin, R. C (2005), "Comparison of Consumer Perceptions and Preference towards Organic versus Conventionally Produced Foods: A Review and Update of the Literature," *Renewable Agriculture and Food Systems*, 20(4), 193-205.

Young, W., Hwang, K., McDonald, S., Oates, C.J (2010), "Sustainable consumption: green consumer behaviour when purchasing products," *Sustainable Development*, 18 (1), 20-31.

Yu, X., Gao, Z., and Zeng, Y (2014), "Willingness to pay for the "Green Food" in China", *Food Policy*, 45, 80-87.

Yu, X (2012), "Productivity, efficiency and structural problems in Chinese dairy farmers", *China Agricultural Economic Review*, 4(2), 168-175.

Zundel, C., Kilcher, L (2007), "Organic agriculture and food availability," Paper Presented in International Conference on Organic Agriculture and Food Security during May 3-5, 2007. FAO, Rome, Italy, pp. 1-25.

Questionnaire (English)

Dear respondent,

This questionnaire is designed to gather information on the topic titled: "Factors influencing consumer purchase intentions toward organic food products: An empirical study in Vietnam market". The contents of the questionnaire are only processes statistically and we promise that the data obtained from the survey results will not be used for any purpose other than this study. In addition, there is no correct answer every question, so please be frank about what you think. Thank you for your valuable time for this study.

Respondent Information:

1. **Do you know Organic food products? And did you buy Organic food products?**

① No, I don't know. (End of question. Thank you).

② Yes, I know, I bought it and I am also intended to buy them (Go to the next questions. Thank you).

2. **Below are questions for the information about organic foods, to what extent do you agree or disagree with the following statement?**
   1) Below are questions about food safety impacts on your attitude towards purchasing intention for organic foods.

Item	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1. Organic food does not contain genetically modified ingredients.	①	②	③	④	⑤
2. Organic food products contain no preservatives or artificial color.	①	②	③	④	⑤
3. Organic food can reduce the food poisoning risk.	①	②	③	④	⑤
4. Organic foods are safer to eat than conventional foods;	①	②	③	④	⑤

5. The quality and safety of foods nowadays concerns me.	①	②	③	④	⑤
6. I am very concerned about the number of antibiotics, veterinary residues and preservatives in organic food.	①	②	③	④	⑤

2) Below are questions about <u>health benefits</u> impacts on your attitude towards purchasing intention for organic foods.

Item	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
7. I know that organic food is not contaminated with chemicals that are harmful to health.	①	②	③	④	⑤
8. I know eating organic products reduce health risks.	①	②	③	④	⑤
9. Organic food are high quality and have high nutritional value	①	②	③	④	⑤
10. Organic food is good for health	①	②	③	④	⑤

3) Below are questions about <u>nutritional value</u> impacts on your attitude towards purchasing intention for organic foods.

Item	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
11. I know that organic food is more nutritious.	①	②	③	④	⑤
12. Organic food contains more antioxidants and vitamins than conventional foods.	①	②	③	④	⑤
13. Organic food have lower nitrate content, and higher dry matter and mineral content compared to conventional foods.	①	②	③	④	⑤

4) Below are questions about <u>environment friendly</u> impacts on your attitude towards purchasing intention for organic foods.

Item	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
14. I know that organic food is friendliness to the environment.	①	②	③	④	⑤
15. Organic foods are produced based on natural farming, do not use chemicals that are harmful to environment.	①	②	③	④	⑤
16. Organic farming uses less energy and produced, packaged, and transported environmental friendly.	①	②	③	④	⑤
17. Organic farming can prevent the contamination and pollution of soil, air, water and food supply.	①	②	③	④	⑤
18. Organic farming can protect the environment because it does not carry any harmful synthetic chemical pesticides and fertilizers.	①	②	③	④	⑤

5) Below are questions about <u>lack of knowledge</u> about organic foods impacts on your attitude towards purchasing intention for organic foods.

Item	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
19. I don’t know the process of organic food.	①	②	③	④	⑤
20. I don’t know the taste of organic food.	①	②	③	④	⑤
21. I don’t know type of organic food.	①	②	③	④	⑤
22. I am not familiar with the terms organic food.	①	②	③	④	⑤

6) Below are questions about price barriers impacts on your attitude towards purchasing intention for organic foods.

Item	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
23. Organic food is still expensive.	①	②	③	④	⑤
24. The price of organic food is a barrier to purchase it.	①	②	③	④	⑤
25. The price of organic food is in accordance with benefits.	①	②	③	④	⑤
26. The price paid in accordance with the quality of organic food.	①	②	③	④	⑤
27. People should buy organic food, even though they are more expensive than conventional food.	①	②	③	④	⑤

7) Below are questions about your attitude towards purchasing intention for organic foods.

Item	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
28. Buying organic food instead of conventional food is beneficial.	①	②	③	④	⑤
29. Buying organic food instead of conventional food is a wise choice.	①	②	③	④	⑤
30. Buying organic food instead of conventional food make me feel pleased.	①	②	③	④	⑤
31. I believe organic food is very useful to meet the nutritional needs.	①	②	③	④	⑤
32. Buying organic foods are tastes better than conventional food.	①	②	③	④	⑤

8) Below are questions about your intention to purchase organic foods.

Item	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
33. I intend to consume organic products in the future.	①	②	③	④	⑤
34. I plan to consume organic food products for the nutritional needs for the family.	①	②	③	④	⑤
35. I am willing to buy organic foods despite their higher prices.	①	②	③	④	⑤
36. If organic foods were available in the shops, I would buy them.	①	②	③	④	⑤
37. I always intend to look for organic foods, although outside the city.	①	②	③	④	⑤

9) Below are questions about trust on certifications impact on your attitude towards purchasing intention for organic foods.

Item	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
38. I think that corporations in the field of organic foods are aware of their responsibilities.	①	②	③	④	⑤
39. I trust those who sell certified organic foods indeed sell quality organic foods.	①	②	③	④	⑤
40. I trust a quality organic food label or logo.	①	②	③	④	⑤
41. I trust the institutions certifying organic food products.	①	②	③	④	⑤

10) Below are questions about limit of availability impacts on your attitude towards purchasing intention for organic foods.

Item	Strongly disagree	Disagree	Neutral	Agree	Strongly agree

42. Organic products are difficult obtained in the market.	①	②	③	④	⑤
43. I had difficulties when looking to buy organic products.	①	②	③	④	⑤
44. I find to buy organic food but there are no organic food stores around my place.	①	②	③	④	⑤

3. Gender

① Male ② Female

4. Age

① Between 18 – 30 ② Over 30

5. Marital status

① Married ② Single

6. Educational level

① High school or lesser

② Professional degree

③ College degree

④ University undergraduate

⑤ Postgraduate

7. What is your occupation?

① Student

② Employee

③ Professional

④ Self-employed

⑤ Unemployed

⑥ Other

8. What is your monthly income?

① Under VND 10,000,000

② Between VND 10,000,001 – 20,000,000

③ Between VND 20,000,001 – 30,000,000

④ Between VND 30,000,001 – 40,000,000

⑤ Between VND 40,000,001 – 50,000,000

⑥ Over VND 50,000,000