

# Factors affecting Organic Food Purchasing Decisions of Kindergartens in Ho Chi Minh City

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#### **Abstract**

**Purpose:** This research examines the factors that influence organic food purchasing decisions of kindergartens in Ho Chi Minh City, Vietnam. **Research Design, Data, and Methodology**: A mixed-method research was utilized in this study. It included a focus group of 10 participants and a survey of 304 respondents, (quantitative research) who are employed in the selected kindergartens, using both online and paper surveys based on nonprobability and convenient sampling. The SPSS and SmartPLS 3 software were used to analyze data. **Results:** a) Eight factors affect the purchase decision of kindergartens; b) Environment Attention, Normative Beliefs, Trust belief on brand, Cost of meal set, and Reference group positively affect Intention behavior; c) Feeling safe positively affect Perceived Quality Product. Perceived quality of product and Intention behavior positively affect organic food Purchase Decision of kindergartens. **Conclusion**: Eight factors affect organic food purchasing decisions of kindergartens in Ho Chi Minh City. This study offers recommendation and solutions for a stable output of organic products in Vietnam, and ways to popularize them within the community.

Keywords: Kindergartens, Organic food, Intention behavior, Purchase decision, Ho Chi Minh City.

JEL Classifications: M16, M30, M31

#### 1. Introduction

In the final 6 months of 2018, Vietnam has inspected 351,128 firms, have discovered 68,362 of which violated the regulations, accounting for 19.47% of the total amount. First six months in 2018, there have been 53 cases of food poisoning in the country, affecting 1,301 people, 1,079 hospitalized, and 11 dead. According to the report, the number of large-scale food poisoning at schools took up about 3.7% of the total amount. During the period between 2018 and 2019, the cases of food poisoning happened

rapidly at kindergartens and primary schools, with some cases affecting hundreds of students. In particular, on October 10, 2018, 279 students at Xin Cai Primary School in Ha Giang was poisoned by the breakfast served at school.

October 10, 2018, in Ninh Binh, a case of food poisoning occurred in the kitchen of Dinh Tien Hoang Primary School, resulting in 352 students hospitalized for treatment. On 15 November 2018 at Xuan Non-Kindergarten, 200 kids had to be hospitalized for food poisoning after a celebration at the school's mess hall. Multiple cases of food poisoning happening consecutively raised an alarm about the lack of food hygiene in kindergartens all over the country. In Vietnam today, food poisoning in schools is a hot issue, being concerned by parents as well as the government.

The state of domestic and foreign organic agricultural production: According to FiBL-IFOAM (2018), in the year 2016, the total acreage of organic agriculture around the world were 57.8 million acres, the biggest was in Oceania with 27.3 million acres, followed by Europe (13.5 million acres), Latin America (7.1 million acres), Asia (nearly 4.9 million acres), North America (3.1 million acres) and Africa (1.8 million acres). Organic baby food made up to 80% of

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the baby food market in many countries. In Vietnam, there are 53,348 verified acres of organic agriculture (equivalent to 0.5% of the total area of agriculture), in addition to 58,199 acres of organic/ ecological aquiculture and 7,208 acres of primary forest to reap natural, organic products. The retail of organic agricultural products of Vietnam was around 18 million Euros, consumption of organic products per capita is 0.2 Euro. The total value of Vietnam's exports of organic products was 77 million Euros.

Nielsen (2016) showed that up to 86% of Vietnamese consumers would choose natural and organic products when possible. However, access to and usage of organic food was limited due to many problems arising from both the consumers and the suppliers. The research objective of this topic is to determine the influencing factors and the extent to which it affects the decision to buy organic food of preschools in Ho Chi Minh City, thereby suggesting appropriate management implications for Vietnamese businesses operating in the field of organic food production and trading.

## 2. Literature Review

## 2.1. Organic Food

Organic foods are foods produced by the methods and standards of organic agriculture. The standards of organic food have a difference between regions in the world. However, organic agriculture, in general, is geared towards farming promotes ecological balance, diversity, and biodiversity conservation. In organic agriculture, it is possible to limit the use of certain pesticides, herbicides, and synthetic fertilizers. Organic food is also not allowed to be treated by irradiation, industrial solvents, or synthetic food additives. According to IFOAM (2005) "The Organic agriculture is a production system that maintains the health of soil, ecosystems, and people, based on ecological processes, biodiversity, and cycles adapted to local conditions for availability to benefit the environment, share and promote fair relationships, good quality of life for all relevant people". In the study of Liu (2003), green or organic foods refer to foods that are safe to be consumed, fine quality, concerned with the humane animal treatment, nutritious foods, and produced under the principle of sustainable development.

## 2.2. Environment Attention (EV)

Environment Attention (EV) is a belief, attitude, and preoccupation, the awakening of an individual or an organization with an endangered environment and exhausting resources (Said, Paim, & Masud, 2003; Kalafatis, Pollard, East, & Tsogas, 1999). Environmental concerns

play a key role in determining the intention to purchase organic food so that the purchases of organic food are considered environmentally friendly behaviors (Yadav & Pathak, 2016). Responsibility in dealing with environmental issues not only helps organizations to remain competitive and increase their market shares but also there is evidence indicating increased consumer loyalty toward such (Chegini & Saleh, 2016). Although organizations environmental awareness measurement is knowledge is recognized as the basis for environmental beliefs (Barber, Odean, & Zhu, 2008; Gil, Gracia & Sanchez, 2000). Therefore, environmental and social concerns affect intention to buy (Ibitoye, Nawi, Man, & Kamarulzaman, 2014: Junior, da Silva, Gabriel, & de Oliveira, 2015). Accordingly, the hypothesis study is:

**H1:** Environmental attention positively affects the intention of buying organic foods of the Kindergarten Schools.

## 2.3. Normative Belief (NB)

Normative Belief (NB) is composed of subjective norms and Personal norms. Studies have shown that normative beliefs affect a consumer's attitude and purchase intentions about organic products (Ajzen, 1991). In the study of Lee (2008) reported that of seven predictors of behavior for purchasing green products, social influence had the biggest impact on purchasing behavior. Personal norms refer to consumers' beliefs about the actions they should perform, which influence the actions the consumers will perform (Fishbein & Ajzen, 1975). Thøgersen (2002) found that when consumers were choosing whether to purchase organic or non-organic wine, the final choice depended on the consumer's norms once attitude and subjective norms were controlled for. Personal norms have been found to arouse positive feelings about "doing the right thing" when purchasing organic products. With organic food, the actual quality is what buyers are interested in, so when they are confident they feel good about their product quality. When they have strong beliefs, they will assume that organic products are good and safe, from which they choose to use and make buying decisions. According to Pirog and Larson (2007), Dickieson, Arkus, and Wiertz (2009), Ibitoye, Nawi, Man, and Kamarulzaman (2014), the confidence in the safety of products that affect the intention to buy, thus this research hypothesizes that:

**H2:** Normative belief positively impacts intention behavior.

#### 2.4. Trust Belief on Brand (TB)

Personal faiths in certain aspects can either motivate or suppress one's behavior (Ajzen, 2001). The product is one of the main parts of a brand (Aaker, 1996). The faith in a certain brand or a product is the psychological evaluation of

a customer of that brand. The brand provides the consumers with both the product's benefits and their psychological needs, causing the customers to switch to the brand name merchandise (Tho & Trang, 2002). Other, trust is one of the most important factors leading to a positive impacting on behavior buying (Smiciklas, 2011; Nguyen, 2018). Ida and Andrew (1989) showing the results as the faith in a brand affects a customer's attitude and reviews for that product, the more they believe in the product, the more selfconvincing they will be in their purchase decisions, believing the products they're using are at a high quality, and vice versa. Therefore, the belief in a certain brand or product that is their favorite also affects their purchase decisions. To kindergartens, there aren't any particularly popular organic brands affecting their purchases yet, the trust in a certain brand is only making the school board to prefer its quality for now. So, the bigger the faith of kindergartens towards brands and products, the products' quality that they will perceive better. This study hypothesizes

**H3:** The Trust believes in a brand positive effect on intention behavior.

# 2.5. Cost of Meal Set (CS)

Cost of meal Set is the money amount agreed between parents and the school to pay for the daily meals of the children, ensuring the menu for children with adequate nutrition. The results of Nguyen (2013); Veiga Neto and Melo (2013) and Lautiainen (2015) showed that the cost of the meal set affects buying decisions. The results of qualitative research through group discussions show that the children's ration will be balanced by the school to match the cost of each meal that parents pay. If parents are willing to increase the cost of their meals to match the price of organic food, then the school is ready to buy organic food instead of normal food. Therefore, this research makes a hypothesis:

**H4:** The cost of meal set positive impacts on intention behavior.

# 2.6. Reference Group (RG)

Reference Group (RG) is understood as a group of two people or more, sharing the same rules, beliefs, and having a connection that makes their behaviors depend on one another. The reference groups are the ones who have a direct, or indirect effect on the behaviors and opinions of someone else. Tarkiainen and Sundqvist (2005) claim that attitudes are communicated between people and thus, people with positive attitudes regarding a product will affect the attitudes of their surrounding people. The reference groups affected

because of their opinions, advice affected the overall purchase intention of the whole organization. In kindergartens' case, these groups are people or organizations that had opinions, evaluations that affected the purchase of organic foods of the facilities. The decision of buying said foodstuffs of these schools were under the general advice of parents, nutritionists, and other teaching facilities. According to Lessig and Park (1977), the reference groups affected purchases based on three key points: emotional value, compliance, and information. The results study of Le (2014) and Teng and Wang (2015), showed that these groups affected purchasing safe products, dietary supplements, and baby foods. From the aforementioned arguments, this research has come to a hypothesis:

**H5:** The reference groups had a positive effect on intention behavior.

## 2.7. The Feeling of Safety (FS)

The Feeling of Safety (FS) is a sense of doubt in certain organic products' safety. In today's life, most consumers still have their doubts about organic products, since ensuring the manufacturing processes in Vietnam are still not quite convincing enough, as opposed to ease of accessing 'dirty foods' at the moment. For products such as foodstuffs and beverages, safety has always been the number one concern. These products' safety values are what the consumers will notice the most when they're considering a purchase and eventually use them. Food safety was highlighted as a motive for purchasing organic food (Padel & Foster, 2005). The consumer feeling of safety in regards to products will affect their evaluations and reviews about the quality of these products. So, food safety issues have driven consumers to seek safer foods whose qualities and attributes are guaranteed (Lockie, Lyons, Lawrence, & Grice, 2004). Williams and Hammitt (2001) found that consumers believe organically grown produce poses a fewer risk to the consumer than conventional products. If they feel safe when using the product, it would be considered high quality or conversely. Therefore the hypothesis is set:

**H6:** The feeling of safety has a positive influence on the perceived quality product.

# 2.8. Certificate of Origin (CO)

Certificate of Origin (CO) means a specific form identifying the goods, in which the authority or body empowered to issue it certifies expressly that the goods to which the certificate relates originate in a specific country (Attakora Dwomoh, 2019). This certificate may also include

a declaration by the manufacturer, producer, supplier, exporter, or another competent person. The previous research has found that consumers use both Certificates of Origin as cues to product quality (Carneiro & Faria, 2016). Consumers are consistently found to use the Certificate of Origin as a cue in product evaluations, along with the price, brand name, and product labels (Dekhili & Achabou, 2014). In other research, this certificate not only a quality signal for the customer but also an important tool in helping customers identify organic products. Without a Certificate of Origin, the consumer might not be aware that the product is organic because the differentiation between conventional and organic food may not be that discernible (Van Loo, Caputo, Nayga, Meullenet, & Ricke, 2011).

**H7:** Certificate of origin affects perceived quality product organic food.

## 2.9. Perceived Product Quality (PQ)

The perceived product quality is the knowledge and beliefs of consumers about the quality of products with expressions such as shape, size, color... external expressions such as price, brand, origin, the location of sale (Olson & Jacoby 1972; Olson, 1977). The result is further supported by Adcroft, Teckman, Kwak, and Kang (2009), Tsiotsou (2006), Hoch and Banerji (1993), Yee, and San (2011), Woese, Lange, Boess, and Bögl (1997) which indicate that perceived product quality has a positive association with the purchase decision. Perceived product quality is a critical element for consumer decision making (Jin & Suh, 2005) that is directly related to the reputation of the firm that manufactures the product (Davis, Aquilano, Balakrishnan, & Chase, 2005). Other, perceived product quality has a direct impact on customer purchase decisions and brand loyalty, especially during the time customers have less or no information about the products that they are going to purchase (Aaker, 1991; Kotler & Armstrong, 2003). Regarding Kindergarten Schools, knowledge of product quality will promote faster the decision-making process of buying organic food. In this study, the specific hypothesis to be tested is:

**H8:** Perceived product quality affect positively purchase decisions.

## 2.10. Intention Behavior (IB)

Intention Behavior (IB) mentions the readiness of a purchase decision, positively influences the purchase decision. The Theory of Reasoned Action (TRA) and Technology Acceptance Model (TAM) model shows a high correlation between intent and actual use. The positive relationship between intention and purchase decision is described by Ajzen and Fishbein (1980), Newberry, Kleinz, and Boshoff (2003), Nguyen (2015), Nguyen (2018). Based on the previous literature, the hypothesis proposed:

**H9:** Intention-behavior affects in the same direction as the purchase decision.

## 2.11. Purchase Decision (PD)

The purchase decision is the final stage in consumer behavior. The purchase decision is understood as the act of buying or deciding to buy with no hesitation, just waiting for the goods to be received and paid.

Table 1: Construct and measurement item source and Results Testing

Constructs	Amount measurement item	Source	Focus group research	
Environment Attention	4	Gil, Gracia & Sanchez (2000)	Accepted	
Normative Belief	4	Thøgersen (2002); Ajzen (1991); Fishbein & Ajzen (1975)	Accepted	
Trust Belief in Brand	4	Tho & Trang (2002); Nguyen (2018)	Accepted	
Cost of Meal Set (CS)	4	Nguyen (2013); Veiga & Melo (2013); Lautiainen (2015)	Accepted	
Reference Group	4	Teng & Wang (2015)	Accepted	
The Feeling of Safety	4	Padel & Foster (2005); Lockie, Lyons, Lawrence, & Grice (2004)	Accepted	
Certificate of Origin	4	Botonaki, Polymeros, Tsakiridou, & Mattas (2006)	Accepted	
Perceived Product Quality	4	Woese, Lange, Boess, & Bögl (1997)	Accepted	
Intention Behavior	Holak & Lehmann (1990) Nguyen (2018, 2019)		Accepted	
Purchase Decision	A		Accepted	

## 3. Methodology

The mixed-method include qualitative research and quantitative research was applied in this study. Qualitative research used a group discussion method with 10 participants, of which 7 experts and 3 representatives of preschool. The purpose of qualitative is to explore and check the validity of constructs and measurement items. Group discussions used unstructured questionnaires, in which section 1 is an outline to explore, and section 2 tested content validity by CRV index:

$$CRV = \frac{Ne - \frac{N}{2}}{N/2}$$

It involves a panel of participants rating items into one of three categories: "essential," "useful, but not essential," or "not necessary." In which Ne is the number of respondents said it is necessary; N is the total number of participants. CV R values range between -1 (perfect disagreement) and +1 (perfect agreement) with CVR values above zero indicating that over half of panel members agree an item essential. When CRV > 0, the construct and measurement items achieve content reliability (Laewshe, 1975). However, when interpreting a CVR for any given item, it may be important to consider whether the level of agreement is also above that which may have occurred by chance. Therefore, CVR<sub>Critical</sub> is used instead of CRV.

In this study that is some participant 10 members, if  $CVR_{Critical} \ge 0.8$ , the constructs and measurement items will be accepted (Ayre & Scally, 2014). The quantitative research was conducted by a cross-sectional survey with 304 respondents representing preschools. Convenient, nonprobability sampling techniques are applied. Approach to take samples by direct interview at the school administrative office and by a self-filled survey on google doc with respondents agreeing to participate. The questionnaire has a clarification to ensure that the respondent representing the preschool has bought organic food or has decided to buy, when the supply is available, buy it immediately. The form of the questionnaire in this research applied a 5-point Likert scale (1= strongly disagree; 5= strongly agree). Ouestionnaires were distributed both electronically and by paper. The data for this study was obtained by an electronic survey distributed on Facebook, via email, and through a face-to-face survey. The administration process took 30 days. The SPSS and SmartPLS 3 software were used to analyze collected data.

#### 4. Results

## 4.1. Qualitative research

The original conceptual model with 10 constructs and 40 measurement items was developed from the theoretical background and previous research. The result focus group showed that all 10 constructs and 40 measurement items have  $CVR \geq 0.8$ . It gained content validity to be further quantitative research.

## 4.2. Quantitative research

## 4.2.1 Descriptive Analysis Result

This research was conducted in Ho Chi Minh City in May 2019 with the total number of votes issued was 459, the number of votes collected was three hundred and ninety, of which three hundred and four valid votes (accounting for sixty-six point two three percent). A total of three hundred and four schools responded to the survey, of which Two hundred and fifty eight of the surveyed schools were knowledgeable about organic food (Eighty-four to eight seven percent), purchased or decided to buy, the remaining fifteen and thirteen percent which was provided information by the research team decided to buy also. Specifically, the rate of private kindergartens was about forty-four point four-one percent; Public preschools accounted for thirtyeight point eighty-two percent; International preschools accounted for eleven point five one hundred percent, and private preschools accounted for five point twenty six percent. On average, the school fees are four million and five hundred thousand VND/month.

#### 4.2.2 Exploratory Factor Analysis (EFA)

The measurement items were refined using exploratory factor analysis (EFA) and poorly fitted items were excluded from the study. In this study, an extraction method principal axis factoring with Promax rotation was used. The Kaiser-Meyer-Olkin measure of sampling adequacy (KMO) = 0.837; Chi-Square = 4714.152; df = 630, Sig. = 0.000; Sig. = 0.000; Extraction Sums of Squared Loadings Cumulative = 64.929%. Pattern Matrix had 10 factors with 36 measurement items (TB4, SF4, CS4, and CO4 was deleted from the model). Factor loadings of the indicators for each construct were statistically significant and sufficiently high to demonstrate that the indicators and their underlying constructs were accepted. The conceptual model with ten constructs with thirty six measurement items was qualified for Structural Equation Modeling analysis.

## 4.2.3. Structural Equation Modeling (SEM)

#### 4.2.3.1. Assessment of the Model

Partial least square structural equation modeling (PLS-

SEM) is a suitable technique to test the complex models which include the mediated-moderation relationships. SmartPLS 3 is the emerging SEM tool that assists the estimation process based on PLS-SEM. The result showed that 1 construct (CO) and three measurement items have to delete from the conceptual model due to outer loading and reliability is not satisfactory. The model has remained nine constructs with thirty three measurement items satisfactory continuous to further assessment. Model fit: this model presents excellent approximate goodness of fit, since the value of the SRMR (Standardised Root Mean Squareresidual) estimated model has a value of 0.077, complying with the minimum standards described 0.08 level (Sarstedt, Ringle, & Hair, 2017). Thus, the overall model had a good fit.

In the next step, we check the formative measurement models for the collinearity of indicators by looking at the formative indicators' VIF values. According to the results, VIF of the PQ1 has the lowest (one point two four nine) to the highest value of EV3 (two point four zero two). Hence, VIF values are uniformly below the threshold value of three. Therefore, collinearity among the predictor constructs is not a critical issue in the structural model, and we can continue examining the results report.

#### 4.2.3.2. Valuation of the Measurement Model

The reliability and validity analysis will be carried out through the analysis of individual reliability (factorial loads and commonality) and internal consistency (composite reliability, convergent validity through of the AVE, and finally, discriminant validity via Heterotrait–Monotrait ratio).

Internal Consistency Reliability: According to Sarstedt, Ringle, and Hair (2017), a factor displayed its reliability if its Composite. Reliability and Cronbach's alpha and Rho-A is greater than zero point seven. The result showed that the Cronbach's alpha coefficient retested was from zero point seven two to zero point eighty and seventy, rho-A was from zero point seven four two to zero point eight seven two, and Composite Reliability of all constructs in this study was from zero point eight three four to zero point nine eleven (see Table 2). The results confirm the existence of good internal reliability of the measurement model.

Convergent Validity: This study checked Construct Validity both by Loadings, indicator Reliability, and Average Variance Extracted (AVE). The results showed that outer Loading of thirty three measurement items was from, and Indicator reliability of thirty three measurement items was from zero point nine three to zero point eighty and seventy larger than zero point five and AVE of nine constructs from zero point five years eight to ero seven one nine larger than zero point five, therefore, nine constructs were considered to have achieved validity (see Table 2).

Discriminant Validity: This study checked to construct

discriminant validity by Heterotrait Monotrait (HTMT). The result showed that all constructs have excellent values, well below zero point eight five already supports discriminant validity.

The value R<sup>2</sup>: the result shows that R<sup>2</sup> values of all three endogenous constructs are respectively IB (0.463), followed by DS (zero point three seven), and PQ (zero point zero two). These results provide clear correlation coefficients squares support for the model. The effect sizes f<sup>2</sup> for all structural model relationships for all combinations of endogenous constructs and corresponding exogenous. IB has a weak effect size of zero point zero four five) on PD and PQ of zero point one zero three on PD.

The Q<sup>2</sup> values of three endogenous constructs are considerably above zero. More precisely, Q<sup>2</sup> construct cross-validated redundancy of IB has the highest values (zero point three one), followed by DS (zero point zero nine one), and PQ (zero point zero one one). These results provide clear support for the model's predictive relevance regarding the endogenous latent variables.

#### 4.2.3.3. Hypothesis Testing

The conceptual model and nine hypothesis were tested using bootstrapping. Considering the results obtained in the previous (see Table 3), it indicated the value of the fit model and that the overall variables were supported. Eight hypothesis were significant and less than the p-value below than zero point zero five level, except for H7 (see Table 3). Overall, all the path coefficient-related hypothesis were supported from zero point one zero five to zero point tow none three (see Figure 1). It was also shown that environment attention, normative beliefs, trust belief on brand, cost of meal set, reference group, feeling of safety, perceived product quality, and intention behavior were positively influenced the entrepreneurial decision

#### **4.2.3.4.** Findings

The result shows that six factors indirectly affect purchasing decisions through the perceived product quality and intention behavior. The perceived quality product impact the strongest on purchase decision with  $\beta = 0.299$ . This is similar to the results research of Adcroft, Teckman, Kwak, and Kang (2009), Tsiotsou (2006), Hoch and Banerji (1993), and Yee and San (2011). The feeling safe directly affects the perceived quality product with a coefficient  $\beta$  = zero point one four two. It is the same results research of Lockie, Lyons, Lawrence, and Grice (2004). Environment attention; normative beliefs; trust belief on brand; the cost of meal set and reference group have been shown to influence purchasing behavior by result research of Junior. da Silva, Gabriel, and de Oliveira (2015), Fishbein and Ajzen, (1975), Smiciklas (2011), Nguyen, (2018), Nguyen (2013), Veiga Neto and Melo (2013), and Lautiainen (2015), Le (2014). This result research shows that Environment attention; normative beliefs; trust belief on brand; the cost of meal set and reference group have a direct impact on intention behavior with a coefficient of following  $\beta$  = zero point one eight six, respectively;  $\beta$  = zero point one one three;  $\beta$  = zero point two eight eight; and  $\beta$  = zero point one one eight. The purchasing intention influences to decide to buy with coefficient  $\beta$  = zero point one nine eight. The positive relationship between intention buying to purchase decisions has also been confirmed through studies of Newberry, Kleinz, and Boshoff (2003), Nguyen (2015), Nguyen (2018).

**Table 2:** Validity and Reliability of the Measurement Model

Constructs	Cronbach's alpha	rho-A	CR	AVE
CS	0.769	0.773	0.866	0.684
EV	0.870	0.872	0.911	0.715
FS	0.722	0.760	0.834	0.628
NB	0.848	0.852	0.898	0.687
IB	0.797	0.841	0.863	0.614
PQ	0.737	0.742	0.835	0.558
PD	0.849	0.854	0.898	0.689
RG	0.745	0.802	0.835	0.563
TB	ΓB 0.780		0.872	0.695

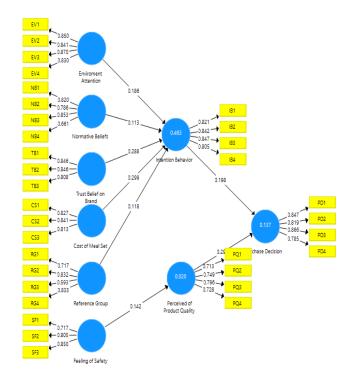


Figure 1: Structural Equation Modeling

Table 3: Construct and Hypothesis Test

Constructs	Original Sample (O)	Sample Mean (M)	STDEV	O/STDEV	P Values	Hypothesis test	
							Results
CS→IB	0.299	0.300	0.053	5.606	0.000	H4	Supported
EV→IB	0.186	0.186	0.054	3.451	0.001	H1	Supported
FS→PQ	0.142	0.160	0.055	2.564	0.010	H6	Supported
IB→PD	0.198	0.197	0.061	3.269	0.001	H9	Supported
NB→IB	0.113	0.118	0.046	2.449	0.014	H2	Supported
PQ→PD	0.299	0.307	0.062	4.853	0.000	H8	Supported
RG→IB	0.118	0.121	0.049	2.385	0.017	H5	Supported
TB→IB	0.288	0.286	0.047	6.115	0.000	H3	Supported

# 5. Conclusions

Organic food is a matter of high interest to consumers. This study sought to investigate factors affecting organic food purchasing decisions of kindergarten schools in Ho Chi Minh City. The results of this study show that 8 factors influence the decision to buy organic foods, including feeling safe, perceived quality product, normative beliefs, environment attention, trust in belief, cost of meal set, reference group, intention behavior. A perceived quality product has the strongest influence on purchasing decisions

of school, so businesses need to promote marketing to increase the level of awareness and understanding of the school about values, roles, and benefits of using organic food in the daily meals of preschool children. The school's perception of the quality of organic food is influenced by factors: consumer safety perception for the product. Therefore, promoting brand building activities creating trust with quality products and safety for the school is extremely necessary before they decide to choose suppliers. Therefore through activities: Introducing the organic food production process through the media and farm visits so that the businesses demonstrate the process through organic production certificates. The titles that businesses achieve

will be the solution to help businesses build trust with the school.

## 6. Limitations and Future Research

In the research, the survey subjects did not use organic food, so it was completely subjective conjecture, and difficult to assess the factors of price, quality, and product benefits. Another limitation of this research is that it did not yet assess the impact of demographic factors of individuals within the organization on the decision to buy organic food. The direction of research development: Research this model on a larger scale in many provinces and cities across the country to get more accurate and representative results. Research and develop organic agricultural value chains, bringing genuine products of farmers to consumers. Nevertheless, it would be interesting topics for future research.

## References

- Aaker, D. A. (1991). Managing brand equity: Capitalizing on the value of a brand name. New York, NY: The Free Press.
- Aaker, D. A. (1996). Building Strong Brands. New York, NY: The Free Press.
- Adcroft, A., Teckman, J., Kwak, D. H., & Kang, J. H. (2009). Symbolic purchase in sport: the roles of self-image congruence and perceived quality. *Management Decision*.
- Ajzen, I., & Fishbein, M. (1975). Belief, Attitude, Intention and Behavior: An Introduction to theory and research. Boston, MA: Addision - Wesley.
- Ajzen, I. (1991). The Theory of Planned Behavior. Organizational Behavior and human decision processes, 50, 179 - 211.
- Ajzen, I. (2001). Nature and operation of attitudes. *Annual review of psychology*, 52(1), 27-58.
- Akhter, S. H. (2010). Service attribute satisfaction and actual repurchase behavior: the mediating influence of overall satisfaction and purchase intention. *Journal of Consumer Satisfaction, Dissatisfaction & Complaining Behavior*, 23, 52-64.
- Attakora Dwomoh, K. (2019). Trade facilitation: a necessary tool for attaining the intended objectives of the African continental free trade agreement (Doctoral dissertation). University of Pretoria, Pretoria, South Africa.
- Ayre, C., & Scally, A. J. (2014). Critical values for Lawshe's content validity ratio: revisiting the original methods of calculation. Measurement and Evaluation in Counseling and Development, 47(1), 79-86.
- Barber, B. M., Odean, T., & Zhu, N. (2008). Do retail trades move markets? The Review of Financial Studies, 22(1), 151-186.
- Barber, N., Taylor, C., & Strick, S. (2009). Wine consumers' environmental knowledge and attitudes: Influence on

- willingness to purchase. *International Journal of Wine Research*, 1(1), 59-72.
- Botonaki, A., Polymeros, K., Tsakiridou, E., & Mattas, K. (2006). The role of food quality certification on consumers' food choices. *British Food Journal*, 108(2/3), 77.
- Carneiro, J., & Faria, F. (2016). Quest for purposefully designed conceptualization of the country-of-origin image construct. *Journal of Business Research*, 69(10), 4411-4420.
- Chegini, A. R., & Saleh, A. A. (2016). Measurement of the effect of green marketing tools on consumer purchasing behavior. *Journal of Management and Accounting Studies*, 2(2), 13-19.
- Davis, M. M., Aquilano, N. J., Balakrishnan, J., & Chase, R. B. (2005). Fundamentals of operations management. New York, NY: McGraw-Hill Ryerson.
- Davies, J., Foxall, G. R., & Pallister, J. (2002). Beyond the intention-behaviour mythology: an integrated model of recycling. *Marketing theory*, 2(1), 29-113.
- Dekhili, S., & Achabou, M. A. (2014). Towards greater understanding of ecolabel effects: The role of country of origin. *Journal of Applied Business Research (JABR)*, 30(2), 433-438.
- Dickieson, J., Arkus, V., & Wiertz, C. (2009). Factors that influence the purchase of organic food: A study of consumer behaviour in the UK.
- FiBL-IFOAM. (2018). *The World of Organic Agriculture Statistics and Emerging Trends 2018*. Retrieved from https://shop.fibl.org/CHfr/mwdownloads/download/link/id/10 93/?ref=1
- Fishbein, M., & Ajzen, I. (1975). Belief, attitude, intention, and behavior: An introduction to theory and research. Reading, MA: Addison-Wesley.
- Fishbein, M., & Ajzen, I. (1980). Understanding attitudes and predicting social behavior.
- Gil, J. M., Gracia, A., & Sanchez, M. (2000). Market segmentation and willingness to pay for organic products in Spain. The International Food and Agribusiness Management Review, 3(2), 207-226.
- Hoch, S. J., & Banerji, S. (1993). When do private labels succeed? MIT Sloan Management Review, 34(4), 57.
- Holak, S. L., & Lehmann, D. R. (1990). Purchase intentions and the dimensions of innovation: An exploratory model. *Journal of Product Innovation Management: an international publication of the product development & management association*, 7(1), 59-73.
- Ibitoye, O. O., Nawi, N. M., Man, N., & Kamarulzaman, N. H. (2014). Factors Influencing Consumers' Purchasing Behaviour towards Organic Rice in Malaysia. World Applied Sciences Journal, 32(4), 611-617.
- Ida, E. B., Andrew, A. M. (1989). The Effect of Advertising on Attitude Accessibility, Attitude Confidence, and the Attitude-Behavior Relationship. *Journal of Consumer Research*, 16(3), 269–279.
- IFOAM. (2005). Principles of Organic Agriculture. Retrieved June 15, 2019, from
  - https://www.ifoam.bio/sites/default/files/poa english web.pdf
- Jin, B., & Suh, Y. G. (2005). Integrating effect of consumer perception factors in predicting private brand purchase in a Korean discount store context. *Journal of consumer* marketing.

- Junior, S. B., da Silva, D., Gabriel, M. L. D., & de Oliveira Braga, W. R. (2015). The effects of environmental concern on purchase of green products in retail. *Procedia-Social and Behavioral Sciences*, 170, 99-108.
- Kalafatis, S. P., Pollard, M., East, R., & Tsogas, M. H. (1999). Green marketing and Ajzen's theory of planned behaviour: a cross-market examination. *Journal of consumer marketing*, 16(5), 441-460.
- Kotler, P., & Armstrong, G. (2003). Fundamentos de marketing. London, United Kingdom: Pearson Educación.
- Lautiainen, T. (2015). Factors affecting consumers' buying decision in the selection of a coffee brand. Finland: Saimaa University of applied science (Doctoral dissertation).
- Lawshe, C. H. (1975). A quantitative approach to content validity 1. *Personnel psychology*, 28(4), 563-575.
- Le, T. H. (2014). Study the factors affecting the intention of buying safe food by urban residents for example in Hanoi City (Doctoral dissertation). National Economics University, Hanoi, Vietnam.
- Lee, K. (2008). Opportunities for green marketing: Young consumers. *Marketing Intelligence & Planning*, 26, 573–586.
- Lessig, V. P., & Park, C. W. (1978). Promotional perspectives of reference group influence: Advertising implications. *Journal* of advertising, 7(2), 41-47.
- Liu, P. (2003). Environmental and social standards, certification and labelling for cash crops (Vol. 2). Food & Agriculture Org.
- Lockie, S., Lyons, K., Lawrence, G., & Grice, J. (2004). Choosing organics: a path analysis of factors underlying the selection of organic food among Australian consumers. *Appetite*, 43(2), 135-146.
- Newberry, C. R., Klemz, B. R., & Boshoff, C. (2003). Managerial implications of predicting purchase behavior from purchase intentions: a retail patronage case study. *Journal of Services Marketing*.
- Nguyen, T. H. Y. (2013). Factors affecting consumers' decision to buy safe chicken in Ho Chi Minh City (Master's thesis). University of Economics Ho Chi Minh City, Vietnam.
- Nguyen, X. T. (2015). The impact of social media usage on hitech products purchase decision of generation Y in Vietnam. *GE-International Journal of Management Research*, 3(10), 123-147
- Nguyen, X. T. (2018). The Impact of Hallyu 4.0 and Social Media on Korean Products Purchase Decision of Generation C in Vietnam. *Journal of Asian Finance, Economics, and Business*, 5(3) 95-107. http://doi.org/10.13106/jafeb.2018.vol5.no3.81.
- Nguyen, X. T. (2019). Factors impacting on Korean Consumer Goods Purchase Decision of Vietnam's Generation Z. *Journal of Distribution Science*, 17(10), 61-71.
- Nielsen. (2016). Food good to health Trends selected by consumers. *Annual organic food consumption study report*. Retrieved May 30, 2019
  - https://www.nielsen.com/vn/vi/insights/2016/ingredient-trends-2016.html
- Olson, J. C., & Jacoby, J. (1972). Cue utilization in the quality perception process. *ACR Special Volumes*.
- Olson, J. C. (1977). Price as an Informational Cue: Effects on

- Product Evaluations. Consumer and Industrial Buying Behavior.
- 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.
- Pirog, R. S., & Larson, A. (2007). Consumer perceptions of the safety, health and environmental impact of various scales and geographic origin of food supply chains.
- Smiciklas, M. (2011). Word of Mouth Marketing. *Social Media Explorer*:
- Said, A. M., Paim, L. H., & Masud, J. (2003). Environmental concerns, knowledge and practices gap among Malaysian teachers. *International Journal of Sustainability in Higher Education*.
- Sarstedt, M., Ringle, C. M., & Hair, J. F. (2017). Partial least squares structural equation modeling. *Handbook of market* research, 26, 1-40.
- Shaharudin, M. R., Pani, J. J., Mansor, S. W., Elias, S. J., & Sadek, D. M. (2010). Purchase intention of organic food in Kedah, Malaysia; A religious overview. *International Journal of Marketing Studies*, 2(1), 96.
- Tarkiainen, A., & Sundqvist, S. (2005). Subjective norms, attitudes and intentions of Finnish consumers in buying organic food. *British food journal*.
- Teng, C. C., & Wang, Y. M. (2015). Decisional factors driving organic food consumption. *British Food Journal*, 117(3), 1066-1081.
- Tho, N. D., & Trang, N. T. M. (2002). Study the components of brand equity and measure them in the consumer goods market in Vietnam (Ministry-MSB level research project).
- Thøgersen, J. (2002). Direct experience and the strength of the personal norm-behavior relationship. *Psychology & Marketing*, 19(10), 881-893.
- Tsiotsou, R. (2006). The role of perceived product quality and overall satisfaction on purchase intentions. *International journal of consumer studies*, 30(2), 207-217.
- Van Loo, E. J., Caputo, V., Nayga, R. M. Jr., Meullenet, J. F., & Ricke, S. C. (2011). Consumers' willingness to pay for organic chicken breast: Evidence from choice experiment. Food quality and preference, 22(7), 603-613.
- Veiga Neto, A. R., & Melo, L. G. N. S. D. (2013). Factors influencing children's food purchasing behavior. Saúde e Sociedade, 22(2), 441-455.
- Williams, P. R., & Hammitt, J. K. (2001). Perceived risks of conventional and organic produce: pesticides, pathogens, and natural toxins. *Risk analysis*, 21(2), 319-330.
- Woese, K., Lange, D., Boess, C., & Bögl, K. W. (1997). A comparison of organically and conventionally grown foods—results of a review of the relevant literature. *Journal of the Science of Food and Agriculture*, 74(3), 281-293.
- Yadav, R., & Pathak, G. S. (2016). Intention to purchase organic food among young consumers: Evidences from a developing nation. *Appetite*, 96, 122-128.
- Yee, C. J., & San, N. C. (2011). Consumers' perceived quality, perceived value and perceived risk towards purchase decision on automobile. *American Journal of Economics and Business Administration*, 3(1), 47-57.