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Factors Influence Organic Food Purchase Intention of Vietnamese Consumers

Nguyen Thi Van Anh¹, Truong Tri Tai²

¹ University of Labour and Social Affairs. Email: nguyenvananh83@ulsa.edu.vn

² Le Hong Phong High School for The Gifted. Email: tritaitruong2006@gmail.com

Abstract

The research focuses on examining factors influencing the organic food purchase intention of Vietnamese consumers. The organic food market has been developing steadily and growing in popularity, but the factors affecting organic food purchase intention are not well-studied. A conceptual model of factors was created based on evaluating other conceptual models from global research. The conceptual model includes 8 independent variables: Health consciousness (HC), Environmental concern (EC), Personal attitude (PA); Subjective norms (SN); Perceived behavior control (PBC); Food price (FP); Food availability (FA); Transparent information (TI) which affect the dependent variable “Organic food purchase intention” (OFPI). A survey was conducted and received responses from 528 Vietnamese consumers; the data collected was analyzed by SMARTPLS to examine the factors and determine the impact of each factor. The results depict that factors affecting organic food purchases include Perceived behavior control (PBC); Transparent information (TI); Subjective norms (SN); and Food availability (FA) with a decreasing level of influence. The other factors such as Food price (FP); Environmental concern (EC); Health consciousness (HC), and Personal attitude (PA) don’t possess enough statistical significance to conclude. With the results, exchanges and discussions to enhance the organic food market are drawn.

Keywords: Factors Influencing, Purchase Intention, Organic Food, Vietnamese Consumers

1. Introduction

Organic food has been growing in popularity in both developed and developing countries. Consumers are attracted to organic food since it is grown without the use of pesticides, and other detrimental ingredients. The dramatically rising demands for organic food compel producers to change from traditionally grown food to organic one.

In Vietnam, it is organic food received standardized certification from legitimate organizations in the food market: USDA (USA), NASAA (Australia), Control Union - an organization that assesses and licenses European Organic standards. Currently, the Vietnamese organic food market is developing considerably with the appearance of absolutely organic food stores or specific retail displays in supermarkets. The origin and development of the organic food market stem from the demand for a healthy diet of consumers.

In this research, the authors are examining factors influencing organic food purchase intention of Vietnamese consumers, conducting research and using 528 responses, and accreditation is implemented by SMARTPLS. 8 factors are deployed for this research model. However, the results illustrate 4 factors have a positive influence on organic food purchase intention: the highest impact is recorded for Perceived behavior control (PBC) (0.267); the second highest is Transparent information (TI) (0.21); and two factors Subjective norms (SN) and Availability (A) have an identical impact (0.138).

2. Theoretical basis, research models, and hypotheses

2.1 Theoretical basis

Organic food is defined as food produced without herbicides, pesticides, antibiotics, inorganic manure, and growth hormones (Honkanen, Verplanken, & Olsen, 2006). Diversified sources define organic food differently, but the majority of them depend on properties, including safety, nutrition, degree of importance, and nature. (Kahl et al., 2012).

TRA (Theory of Reasoned Action) - a research model from a psychosocial perspective to determine factors of conscious behavioral tendencies (Ajzen & Fishbein, 1975), including (i) *Consumers' attitude to perform an act*; (ii) *Consumers' subjective norms*.

TPB (Theory of Planned Behaviour) - is built from the original theory TRA. Model TPB of Ajzen (1991) adds a factor "*Perceived behavior control*", after two previous ones *Attitude* and *Subjective norms*, affecting the consumers' behavior.

2.2. Literature review

The research team has conducted a literature review of national and international research about organic food purchase intention in Table 1.

Table 1: Literature review

Order	Research	Authors	Year	Nation/City	Variables	Results
INTERNATIONAL RESEARCH						
1	Examining The Factors That Affect Consumers' Purchase Intention of Organic Food Products In A Developing Country	Mostafa Fawzy Zayed, Hazem Rasheed Gaber, & Nermine El Essawi	2022	Egypt	+ Personal attitude + Environmental concern + e-WOM (Marketing through the Internet/word of mouth) + Subjective norms + Perceived behavior control + Health consciousness + Purchase intention	+ Personal attitude and Environmental concern influence organic food purchase intention. + Factors that don't influence organic food purchase intention: e-WOM; Subjective norms; Perceived behavior control; and Health consciousness. + e-WOM doesn't directly affect organic food purchase intention. However, it affects other factors.
2	Factors Influencing Purchases of Organic Food	Michaela Jánská, Patrícia Kollar, & Čeněk Celer	2023	Czech Republic	+Health consciousness + Food taste + Environmental concern + Price + Purchase intention	+ Factors influencing organic food purchase intention include Health consciousness, Food taste, and Environmental concern + Price has a negative influence on organic food purchase intention

3	Factors Influencing Organic Food Purchase of Young Chinese Consumers	Xiufeng Li & Yazhi Xin	2015	China	+ Food safety + Nutrition + Environmental concern + Transparent information + Supply + Purchase intention	+ Factors significantly influence organic food purchase intention: Food safety; Nutrition; and Environmental concern. + Factors negatively influence organic food purchase intention: Price; Dearth of trust in food information; and Limited supply.
4	Understanding The Decisional Factors Affecting Consumers' Buying Behaviour Towards Organic Food Products in Kerala	Ms Krishna. R & Dr P. Balasubramanian	2021	India	+ Knowledge + Attitude + Subjective norms + Perceived behavior control + Environmental concern + Satisfaction, Trust, and Loyalty.	+ Factors influencing organic food purchase intention: Knowledge about organic food; Attitude; Subjective norms; Perceived behavior control; Environmental concern; Satisfaction, Trust, and Loyalty. + Discussion also claims deterrent factors include Opaque information and Limited supply.
5	Factors Influencing Organic Food Purchase Intention in Developing Countries and the Moderating Role of Knowledge	Xuhui Wang, Frida Pacho, Jia Liu, & Redempta Kajungiro	2019	China	+ Subjective norms + Attitude + Health consciousness + Perceived behavior control + Knowledge + Purchase intention	+ Subjective norms; Attitude; and Health consciousness influences significantly organic food purchase intention. + Perceived behavior control weakly affects organic food purchase intention. + Knowledge is a moderate factor, influencing other variables except Perceived behavior control.
VIETNAMESE RESEARCH						
6	Factors affecting organic food purchase intention of consumers in Ho Chi Minh City	Nguyen Thao Nguyen & Le Thi Trang	2020	Ho Chi Minh	+ Food safety + Health consciousness + Quality + Environmental concern + Price + Purchase intention	+ Food safety; Health consciousness; Quality; Environmental concern; and Price affect organic food purchase intention with decreasing level of influence. + High price influences weakly organic food purchase intention.
7	Factors affecting organic food purchase intention of consumers in Long Xuyen city	Huynh Dinh Le Thu, Nguyen Thi Minh Thu & Ha Nam Khanh Giao	2020	An Giang	+ Attitude + Trust + Transparent information + Knowledge + Purchase intention	+ Attitude and Trust affect organic food purchase intention. + Trust is indirect among Transparent information, Knowledge, and organic food purchase intention.
8	Factors affecting organic food purchase intention in Long Bien district, Hanoi	Nguyen Ngoc Mai & Nguyen Thanh Phong	2020	Ha Noi	+ Consumers' awareness + Health consciousness + Subjective norms + Price + Purchase intention	+ Consumers' awareness; Health consciousness; and Subjective norms have a positive influence on organic food purchase intention. + Price negatively affects organic food purchase intention.

9	What motivation affects organic food purchase intention of Vietnamese consumers	Bui Thi Hoang Lan & Nguyen Van Anh	2021	Ho Chi Minh	+ Health consciousness + Trust + Attraction + Environmental concern + Attitude + Subjective norms + Perceived behavior control + Purchase intention	+ Factors influencing organic food purchase intention includes Health consciousness; Trust; Attraction; and Environmental concern. + Factors belonging to TPB conceptual model: Attitude; Subjective norms; and Perceived behavior control have an impact on organic food purchase intention. + Perceived behavior control is the most impactful factor.
10	Factors promoting and inhibiting organic food purchase intention of consumers in Ho Chi Minh City	Huynh Thi Kim Loan & Nguyen Ngoc Hien	2021	Ho Chi Minh	+ Health consciousness + Ecosystem welfare + Food safety + Barrier of price + Barrier of risk + Barriers to use + Purchase intention	+ Motivating factors of organic food purchase intention include Health consciousness, Ecosystem welfare; and Food safety. + Deterrent factors of organic food purchase intention include Barrier of price; Barrier of risk; and Barrier to use.

Source: Summary of research team

2.3. Research factors, scales, and hypotheses

Table 2: Research factors and scales

Order	Factor	Encode	Scale	Reference
1	Health consciousness (HC)	HC1	I buy organic food due to its health benefits.	Hansen et al. (2018)
		HC2	I buy organic food to ensure health and safety for me and my family.	
		HC3	I pay attention to the long-term impact of consuming food.	
		HC4	I can sacrifice some eating interests to possess the best health.	
2	Environmental concern (EC)	EC1	I buy organic food since it contributes to environmental protection.	Teng & Lu (2016)
		EC2	I think organic food is environmentally friendly.	
		EC3	Present pollution influences my organic food purchase intention.	
		EC4	Production of organic food utilizes fewer chemical substances which are detrimental to the environment.	
3	Personal attitude (PA)	PA1	I believe organic food has less chemical substance than traditionally grown one.	Gil et al. (2000); Lockie et al. (2004); Wang et al. (2019)
		PA2	I believe organic food has a better taste than traditionally grown one.	
		PA3	I believe organic food has a better quality than traditionally grown one.	
		PA4	I believe organic food is safer than traditionally grown one.	
		PA5	I believe organic food is more visually attractive than traditionally grown one.	
4	Subjective norms (SN)	SN1	My family believes I ought to buy organic food.	Chen et al. (1998); Asif et al. (2018)
		SN2	My friends, or colleagues believe I ought to buy organic food.	
		SN3	Scientific newspapers and journals influence my organic food purchase intention.	
		SN4	Government policies influence my organic food purchase intention.	
5	Perceived behavior control (PBC)	PBC1	I can afford organic food.	Asif et al. (2018)
		PBC2	I have some knowledge about organic food.	
		PBC3	I am ready to spend money on organic food.	

		PBC4	I can purchase organic food without difficulties.	
6	Food price (FP)	FP1	I believe organic food has a higher price than traditionally grown ones.	Tandon et al. (2020); Kushwah et al. (2019)
		FP2	I believe organic food's price is suitable due to its quality.	
		FP3	I believe organic food's price is suitable due to its production.	
		FP4	I believe organic food's price is acceptable.	
7	Food availability (FA)	FA1	I can find organic food in my local area.	Xie et al. (2015); Sondhi (2014)
		FA2	I can find organic food at supermarkets.	
		FA3	I can find organic food at green stores.	
		FA4	I can find organic food on social networking sites.	
8	Transparent information (TI)	TI1	I pay attention to organic food's labels or packaging.	Krystallis & Chryssohoidis (2005); Siegrist (2000); Tandon et al. (2020); Nuttavuthisit & Thøgersen (2017)
		TI2	I pay attention to organic food possessing qualified certification.	
		TI3	I pay attention to accurate information on organic food's labels or packaging.	
		TI4	I have faith in organizations which license food quality currently.	
9	Organic food purchase intention (OFPI)	OFPI1	I choose organic food over traditionally grown ones.	Shamsi et al. (2020)
		OFPI2	I have a possibility to purchase organic food in the future.	
		OFPI3	I am ready to purchase organic food in the future.	
		OFPI4	I actively find organic food.	
		OFPI5	I will introduce organic food to my family and friends.	

Source: Summary of research team

Research hypotheses:

- H1. Health consciousness (HC) has a positive influence on organic food purchase intention (OFPI)
- H2. Environmental concern (EC) has a positive influence on organic food purchase intention (OFPI)
- H3. Personal attitude (PA) has a positive influence on organic food purchase intention (OFPI)
- H4. Subjective norms (SN) have a positive influence on organic food purchase intention (OFPI)
- H5. Perceived behavior control (PBC) has a positive influence on organic food purchase intention (OFPI)
- H6. Food price (FP) has a positive influence on organic food purchase intention (OFPI)
- H7. Food availability (FA) has a positive influence on organic food purchase intention (OFPI)
- H8. Transparent information (TI) has a positive influence on organic food purchase intention (OFPI)

3. Research Methodology

3.1. Data Collection Method

Based on the Theoretical Basis and Literature Review of factors influencing organic food purchase intention, factors in the research model include 8 independent variables (i) *Health consciousness (HC)*, (ii) *Environmental concern (EC)*, (iii) *Personal attitudes (PA)*; (iv) *Subjective norms (SN)*; (v) *Perceived behavior control (PBC)*; (vi) *Food price (FP)*; (vii) *Food availability (FA)*; (viii) *Transparent information (TI)*; and a dependent variable "*Organic food purchase intention*".

The questionnaire is constructed with Likert 5 scale: 1. *Strongly disagree*; 2. *Disagree*; 3. *Neutral*; 4. *Agree*; 5. *Strongly agree*.

After erecting the questionnaire, the research team interviewed 7 consumers knowledgeable about organic food. The preliminary results of the survey depict that opinions agree with factors in the model. Based on the initial results, the research team perfected the questionnaire and administered the large-scale survey through a link (<https://shorturl.at/krTV8>) where the intended subjects are Vietnamese consumers.

The data collection method was executed by the research team according to Convenience sampling and Snowball sampling (the method of finding the following subjects via recent interviewees' suggestions or recommendations) to ensure a sufficient amount of required sample size. There are 528 responses that are received and analyzed.

3.2. Data Analysis Method

It is a quantitative method that is implemented to analyze data from the survey of Vietnamese consumers about organic food. SMARTPLS software is utilized to authenticate the hypotheses and evaluate the factors' level of influence.

Table 3: Steps to analyze data via software SMARTPLS

Step 1: Evaluating Measurement Model		
<i>Evaluating measurement model on the basis of auditing values of reliability, quality of observed variables, convergence, and discriminant.</i>		
Inspecting the quality of observed variables (Outer Loadings)	Outer Loadings of observed variables are indicators illustrating the associating degree between observed variables and latent variables (proxy variables). It is the square root of absolute value R^2 linear regression from the latent variables to sub-observed ones.	Hair et al. (2016) suggests the outer loadings ought to be greater than or equal to 0.708 observed variables that are quality. To enhance memorization, the researchers rounded 0.708 to 0.7
Evaluating Reliability	Evaluating reliability via SMARTPLS by two main indicators, Cronbach's Alpha and Composite Reliability (CR). Researchers have a preference for Composite Reliability (CR) over Cronbach's Alpha since the latter underestimates the reliability compared to the former.	Chin (1988) claims that in exploratory research, CR must be over 0.6. Studies confirm 0.7 threshold is the suitable level for CR (Henseler & Sarstedt, 2013). Others also agree that the aforementioned threshold can be utilized for the majority of cases such as Hair et al. (2010), and Bagozzi & Yi (1988).
Inspecting Convergence	Evaluating Convergence on SMARTPLS derives from average variance extracted AVE.	Hock & Ringle (2010) assert a scale reaches a convergence value providing that AVE is above or equal to 0.5. 0.5 (50%) represents that the average latent variable explains at least 50% of each sub-observed variable's variation. Thus, convergence is evaluated by Average Variance Extracted $AVE \geq 0.5$.
Inspecting Discriminant Validity	Discriminant value can demonstrate whether a research variable is actually different from others in the model.	To evaluate the discriminant validity, Sarstedt et al. (2017) consider two criteria including cross-loadings and measurement of Fornell and Larcker (1981).
	Cross-loading coefficient is usually the first approach to evaluate the discriminant validity of indicators (observed variables).	According to Hair, Hult, et al., 2017, the loading figure of the observed variable (indicator), linked with a factor (latent variable), should be greater than any of its cross-loading coefficients (correlation) in other factors.
	Henseler et al. (2015) utilized simulation studies to demonstrate that discriminant validity is better evaluated by the HTMT index that they developed.	Fornell and Larcker (1981) recommend discrimination is ensured when the square root of AVE of each latent variable is higher than all correlations among latent variables.
Inspecting Multicollinearity	A scale of multicollinearity is a variance magnification factor (VIF).	Henseler et al. (2015) propose on the condition that this value is below 0.9, the discriminant validity will be guaranteed. Meanwhile, Clark & Watson (1995) and Kline (2015) possessed a stricter standard threshold of 0.85. SMARTPLS prioritized a threshold of 0.85 in their evaluation.
		VIF value ≥ 5 indicates an extremely high level of multicollinearity; the model lacks

		multicollinearity when VIF indicators < 5 (Hair et al., 2016).
Step 2: Evaluating Structural Model		
<i>Evaluating the structural model through the impact relationship, path coefficient, R squared, and f squared after the measurement model reaches a standard</i>		
Evaluating the impact relationship	<p>Bootstrap analysis's results are deployed. In accordance with two main columns (1) Original Sample (standardized impact coefficient) and (2) P Values (sig value compared to 0.05 significance level).</p> <ul style="list-style-type: none"> • <i>Original Sample</i>: standardized impact coefficient of original data. SMARTPLS doesn't have non-standardized impact coefficients. • <i>Sample Mean</i>: average standardized impact coefficient of all samples from Bootstrap. • <i>Standard Deviation</i>: deviation of standardized impact coefficient (original sample). • <i>T Statistics</i>: inspecting value t (testing student meaning of the impact) • <i>P Values</i>: significance level of inspecting value t. It is usually considered with relative thresholds like 0.05; 0.1 or 0.01 (usually 0.05) 	Evaluating the level of interpretation of independent variables for the dependent one by R ² coefficient (R square). To evaluate the R ² coefficient, results of the PLS Algorithm analysis are utilized. The R ² value verifies the accuracy of model hypotheses and demonstrates the level of interpretation of independent variables for the dependent one. R square ranges from 0 to 1; the closer to 1, the more independent variables account for the dependent one. (Hair, Hult, et al, 2017).

Source: Summary of research team

4. Research results

4.1. Characteristics of respondent's description

According to a survey, the research team received responses from 528 participants

Table 4: Demographic characteristics of respondents

Demographic Criteria		Frequency	Percentage (%)
Gender	Male	263	49.8
	Female	188	35.6
	Others	77	14.6
Age	Below 22	144	27.3
	22 - 31	165	31.3
	32 - 42	132	25
	Above 42	87	16.5
Academic level	High school	132	25
	Bachelor's degree	249	47.2
	Higher than bachelor's degree	147	27.8
Monthly income in VND	Under 1 million	54	10.2
	1 - under 5 million	64	12.1

	5 - under 10 million	95	18
	10 - under 20 million	178	33.7
	20 million or above	137	25.9

Source: Summary of research team

4.2. Inspecting results

4.2.1. Results of quality evaluation of observed variables in Measurement Model

4.2.1.1. Inspecting the quality of observed variables

The quality of observed variables is evaluated by outer loadings coefficients. The quality of observed variables affecting organic food purchase intention of Vietnamese consumers is presented in Table 5.

Table 5: Outer loadings of variables influencing organic food purchase intention of Vietnamese consumers

	SN	FP	EC	FA	PBC	HC	PA	TI	OFPI
SN1	0.739								
SN2	0.792								
SN4	0.755								
FP1		0.730							
FP2		0.762							
FP3		0.758							
FP4		0.712							
EC1			0.826						
EC2			0.734						
EC3			0.785						
FA1				0.835					
FA2				0.865					
PBC1					0.765				
PBC2					0.794				
PBC3					0.740				
PBC4					0.702				
HC1						0.703			
HC2						0.792			
HC3						0.700			
HC4						0.731			
PA1							0.831		
PA2							0.728		
PA3							0.767		
TI1								0.862	
TI2								0.861	
OFPI1									0.819
OFPI2									0.782
OFPI3									0.765

Source: Inspecting results of research team

After initial evaluation, 10 scales SN3, EC4, FA3&4, PA4&5, TI3&4, và OFPI 4&5 having outlet loadings < 0.7 are eliminated from the model. Results from Table 1 demonstrate outer loadings of all total variable correlation coefficients of factors influencing organic food purchase intention of Vietnamese consumers are > 0.7 (Hair & et al, 2016) which means observed variables are significant.

4.2.1.2. Inspecting scale's reliability

Inspecting scale's reliability of factors influencing organic food purchase intention of Vietnamese consumers via SMARTPLS by two main indicators Cronbach's Alpha and Composite Reliability (CR).

Table 6: Cronbach's Alpha and Composite Reliability of factors influencing organic food purchase intention of Vietnamese consumers

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
SN	0.640	0.640	0.806	0.581
FP	0.727	0.729	0.829	0.549
EC	0.684	0.685	0.825	0.612
FA	0.616	0.619	0.839	0.722
PBC	0.742	0.745	0.838	0.564
HC	0.719	0.732	0.822	0.536
PA	0.669	0.673	0.820	0.603
TI	0.653	0.653	0.852	0.742
OFPI	0.697	0.698	0.832	0.623

Source: Inspecting results of research team

According to Table 6, after the inspection of reliability through Cronbach's Alpha of factors, the results illustrate: Subjective norms (SN) reaches 0.640; Food price (FP) reaches 0.727; Environmental concern (EC) reaches 0.684; Food availability (FA) reaches 0.616; Perceived behavior control (PBC) reaches 0.742; Health consciousness (HC) reaches 0.719; Personal attitude (PA) reaches 0.669; Transparent information (TI) reaches 0.653. All of the scales have Cronbach's Alpha > 0.6.

In this research, CR values: Subjective norms (SN) reaches 0.806; Food price (FP) reaches 0.829; Environmental concern (EC) reaches 0.825; Food availability (FA) reaches 0.839; Perceived behavior control (PBC) reaches 0.838; Health consciousness (HC) reaches 0.822; Personal attitude (PA) reaches 0.820; Transparent information (TI) reaches 0.852. Therefore, all of the scales have > 0.7, reaching standards, in accordance with Chin (1998), Henseler & Sarstedt (2013), Hair et al. (2010), Bagozzi & Yi (1988).

Hence, the scale has reliability and analytical significance, and is utilized in the following factors analysis.

4.2.1.3. Convergence

As reported by the results in Table 2, AVE (Average Variance Extracted) of factors: Subjective norms (SN) reaches 0.581; Food price (FP) reaches 0.549; Environmental concern (EC) reaches 0.612; Food availability (FA) reaches 0.722; Perceived behavior control (PBC) reaches 0.564; Health consciousness (HC) reaches 0.536; Personal attitude (PA) reaches 0.603; Transparent information (TI) reaches 0.742.

Thus, AVE (Average Variance Extracted) of all variables is > 0.5 (Hock & Ringle, 2010), demonstrating that the model satisfies the standards of convergence.

4.2.1.4. Discriminant Validity

Results in Table 7 about Fornell-Larcker criteria of research model of factors influencing organic food purchase intention of Vietnamese consumers depict that factors Subjective norms (SN); Food price (FP); Environmental concern (EC); Food availability (FA); Perceived behavior control (PBC); Health consciousness (HC); Personal

attitude (PA); Transparent information (TI) all ensure the discriminant validity since AVE square root diagonal values are higher than non-diagonal ones. Therefore, discriminant validity through two indicators, including cross-load factor and Fornell-Larcker criteria, meets the requirement.

Table 7: Fornell-Larcker criteria of research model of factors influencing organic food purchase intention of Vietnamese consumers

	SN	FP	EC	FA	PBC	HC	PA	TI	OFPI
SN	0.762								
FP	0.499	0.741							
EC	0.483	0.571	0.783						
FA	0.459	0.598	0.443	0.850					
PBC	0.594	0.625	0.553	0.548	0.751				
HC	0.428	0.585	0.615	0.489	0.486	0.732			
PA	0.527	0.588	0.571	0.486	0.502	0.535	0.777		
TI	0.413	0.568	0.453	0.437	0.467	0.436	0.451	0.862	
OFPI	0.547	0.565	0.512	0.538	0.630	0.479	0.521	0.546	0.789

Source: Inspecting results of research team

Inspecting values in table 8 demonstrate HTMT index on discriminant among factors influencing organic food purchase intention of Vietnamese consumers. Garson (2016) claims that the discriminant is ensured (since all are <1). According to Henseler et al. (2016), providing that this value is below 0.9, the discriminant is ensured. HTMT index in Table 4 demonstrates the discriminant among factors in the model.

Table 8: HTMT index of research model of factors influencing organic food purchase intention of Vietnamese consumers

	SN	FP	EC	FA	PBC	HC	PA	TI	OFPI
SN									
FP	0.727								
EC	0.727	0.809							
FA	0.727	0.886	0.673						
PBC	0.859	0.846	0.771	0.810					
HC	0.615	0.803	0.857	0.711	0.656				
PA	0.802	0.839	0.840	0.759	0.715	0.758			
TI	0.640	0.822	0.676	0.684	0.671	0.624	0.682		
OFPI	0.810	0.777	0.730	0.819	0.870	0.647	0.763	0.800	

Source: Inspecting results of research team

4.2.1.5. Function value f^2

Function value f^2 represents the level of influence of structure (factor) when eliminated from the model. f^2 values reach 0.02; 0.15; 0.35, corresponding to small, average, and high impact (Cohen, 1988) of exogenous variables. On the condition that effect size < 0.02, no impact is recorded.

Table 9. Summary values of f^2

	SN	FP	EC	FA	PBC	HC	PA	TI	OFPI
SN									0.023
FP									0.000
EC									0.003

FA									0.023
PBC									0.071
HC									0.002
PA									0.008
TI									0.060
OFPI									

Source: Inspecting results of research team

In this research, Table 9 represents relationships among SN (0.023); FA (0.023); PBC (0.071); and TI (0.060) have an impact on organic food purchase intention of Vietnamese consumers, with $f^2 > 0.02$ - small impact. Factors FP (0.000), EC (0.003), HC (0.002), PA (0.008) have $f^2 < 0.02$, considered as having no impact on organic food purchase intention of Vietnamese consumers.

4.2.2. Inspecting level of influence via structural model

4.2.2.1. Evaluating impactful relationships

Relationships and the level of influence of factors influencing organic food purchase intention of Vietnamese consumers via SMARTPLS are presented in Figure 1.

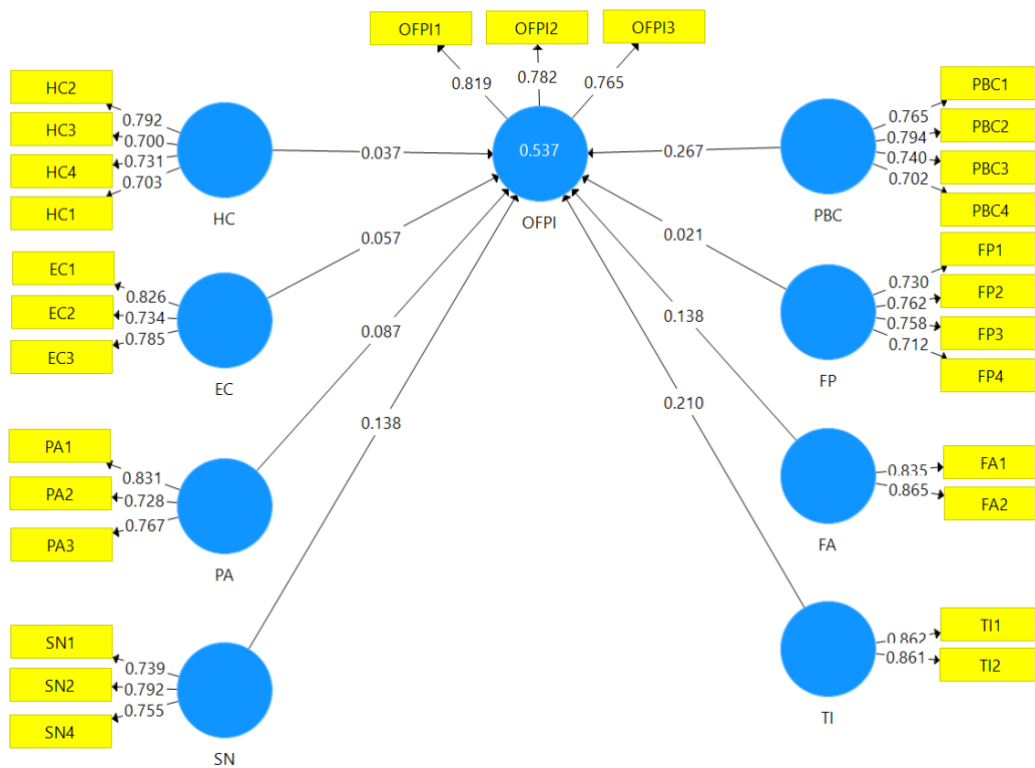


Figure 1: Factors influencing organic food purchase intention of Vietnamese consumers

Source: Inspecting results via SMARTPLS of research team

Results of analyzing Bootstrap to evaluate the impactful relationships are demonstrated in Table 10. Factors “Subjective norms”, “Food availability”, “Perceived behavior control”, and “Transparent information” have P values < 0.05, which represents those factors have a sufficient amount of statistical significance to show a positive influence on organic food purchase intention of Vietnamese consumers (Hypotheses H4, H5, H7, H8 are supported). Factors “Food price”, “Environmental concern”, “Health consciousness”, and “Personal attitude” have P Values > 0.05, which represents those factors don’t have a sufficient amount of statistical significance to show a positive influence on organic food purchase intention of Vietnamese consumers (Hypotheses H1, H2, H3, H6 are rejected).

Table 10: Path Coefficient of structural model

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
SN => OFPI	0.138	0.138	0.058	2,381	0.018
FP => OFPI	0.021	0.027	0.063	0.337	0.736
EC => OFPI	0.057	0.056	0.061	0.940	0.348
FA => OFPI	0.138	0.136	0.050	2,770	0.006
PBC => OFPI	0.267	0.272	0.059	4,559	0.000
HC => OFPI	0.037	0.039	0.049	0.762	0.447
PA => OFPI	0.087	0.083	0.053	1,627	0.104
TI => OFPI	0.210	0.208	0.053	3,967	0.000

Source: Inspecting results via SMARTPLS of research team

Results in table 6 illustrate that with reliability 95%, “Perceived behavior control” (PBC) influences the most significantly, with an impact of 0.267; following is “Transparent information” (TI), with an impact of 0.210. “Subjective norms” (SN) and “Food availability” (FA) have an identical impact of 0.138.

4.2.2.2. Evaluating coefficient of determination R^2 (R square)

Results of PLS Algorithm analysis for R^2 value depicts the level of interpretation of independent variables for the dependent one. R^2 measures the overall coefficient of determination (R-square value), an indicator of suitability for the data model (interpretability of model). Hair et al (2010) cite that the R-square value ought to be 0.75, 0.50, or 0.25.

Table 11: Coefficient depicting the level of interpretation of independent variables for the dependent one (R Square)

	R Square	R Square Adjusted
OFPI	0.537	0.530

Source: Inspecting results of research team

Results in Table 11 illustrate that R^2 is 0.537 and R^2 adjusted equals 0.530, which is suitable in this circumstance, and independent variables in the model can explain 53.7% “Organic food purchase intention of Vietnamese consumers”.

4.2.2.3. Evaluating reliability index (SRMR)

Standardized Root Mean Square Residual (SRMR) index: this index illustrates the suitability rate of the research model. According to Hu & Bentler (1999), a suitable research model usually has an SRMR index below 0.08

Table 12: Standardized Root Mean Square Residual (SRMR) index

	Saturated Model	Estimated Model
SRMR	0.067	0.067

Source: Inspecting results of research team

SRMR index in Table 12 of the research model is 0.067, below 0.08. Hence, this model is suitable to analyze data.

5. Discussions

With a significant level of 5%, among 8 factors included, there are only 4 factors influencing the “organic food purchase intention of Vietnamese consumers”. “Perceived behavior control” (PBC) has the strongest influence on organic food purchase intention of Vietnamese consumers, with an impact of 0.267, showing that when Perceived behavior control increases by 1 unit, it enhances organic food purchase intention of Vietnamese consumers to increase by 0.267 unit. Following this, the factor “Transparent information” (TI) has an impact of

0.210, representing that when Transparent information increases by 1 unit, it fosters organic food purchase intention of Vietnamese consumers to increase by 0.210 unit. Factors “*Subjective norms*” (*SN*) and “*Food availability*” (*FA*) have an identical impact of 0.138, demonstrating that when those factors increase by 1 unit, it bolsters organic food purchase intention of Vietnamese consumers to increase by 0.210 unit

From responses and inspecting the influence of variables in the model on organic food purchase intention of Vietnamese consumers, the research team proposed some recommendations:

Factors “*Perceived behavior control*” has the strongest influence. To promote this factor, the agricultural industry, local authorities, and organizations ought to coordinate training sessions, seminars, exchanges, and discussions, boosting public awareness about organic food. Concentrating on providing information, including the steady surge of producing organic food in different countries, environmental problems enhancing the demands, and benefits for the health of families ... constructs accurate awareness and encourages Vietnamese consumers to utilize organic food.

Organic food should have standardized labels, building trust in consumers, and promoting “*Transparent information*”. With transparency and accuracy about origins, provenances, and ingredients, consumers are more inclined to purchase products. Stores, supermarkets, and groceries, which are experts at contributing organic food, must have certification from political organizations, reassuring products’ quality and legit. Apart from certification, each product of the “*green store*” should have a stamp/logo, enhancing consumers to recognize and distinguish.

At certain periods, instead of devoting their effort to developing their health, Vietnamese consumers choose cheap fast food. This has culminated in detrimental problems for health. Nevertheless, through propaganda, advertising, word-of-mouth introduction, communication, and program organization, consumers presently concentrate on good eating habits and using organic food. It is a tendency to buy organic food when a person is surrounded by like-minded family members or colleagues encouraging each other. The government also assists green organizations through obvious planning; improvement in infrastructures, including drainage systems or freshwater reserves; appropriate fertilizer supply. Promotions and offers allow Vietnamese consumers to access organic food, an expensive product in markets. Propagandas and promotions bolster factor “*Subjective norms*” to promote, influencing organic food purchase intention.

Demands for organic food in markets are skyrocketing. Enterprises, cooperatives, and producers are paying attention to this phenomenon, rendering “*Food availability*” subsequently developed. Due to the ever-rising technological developments, consumers passionate about organic food can create groups to exchange, share personal experiences, answer questions, and contribute ideas. Firms, cooperatives, and producers ought to be pioneers in this field, investing money to enhance production, advertising, customer service, and orientation in which consumers acknowledge the products’ merits. Additionally, organizing viable activities to orientate young entrepreneurs, potentially advancing this field in Vietnam.

Besides, factors “*Food price*”, “*Environmental concern*”, “*Health consciousness*”, and “*Personal Attitude*” are not statistically significant enough to confirm a positive relationship with organic food purchase intention. In terms of the “*Food price*”, Vietnamese consumers have a preference for food’s quality over the price. They are willing to pay higher amounts in exchange for the health and quality of organic food, creating a competitive advantage. This will advance the intention to purchase organic food of Vietnamese consumers. Even though factors “*Environmental concern*” and “*Health consciousness*” do not have a positive influence on organic food purchase intention of Vietnamese consumers, raising awareness about health and the environment is an inevitable trend today, and, consequently, will change consumers’ intention to buy organic food. Manufacturers and businesses need to pay attention to health safety and environmental friendliness in the production and processing stages, promoting organic food’s quality, and, therefore, enhancing organic food purchase intention of Vietnamese consumers.

6. Conclusion

Results initially identify the relationships among factors influencing organic food purchase intention of Vietnamese consumers. A small-scale survey with 528 responses collected and analyzed, along with the convenience and randomness are the limitations of sample size and its quality. Furthermore, 8 factors included only explain 53% of “Organic food purchase intention of Vietnamese consumers”, with 4 factors being statistically significant, whereas the other four are not. This represents that there are other factors influencing organic food purchase intention of Vietnamese consumers. With the results collected considered as an orientation for following research about organic food purchase intention of consumers, consequently, the research team might feasibly expand the survey, amend additional information, and select purposeful participants so as to leap the sample size, its quality, and the level of interpretation of the model.

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