

# SOME KEY FACTORS IMPACTING CUSTOMER'S PURCHASE INTENTION VEGETARIAN FOOD IN VIETNAM

## MỘT SỐ YẾU TỐ QUAN TRỌNG TÁC ĐỘNG ĐẾN DỰ ĐỊNH HÀNH VI SỬ DỤNG THỰC PHẨM CHAY TẠI VIỆT NAM

Do Phuong Linh, Nguyen Quyet, Vu Tuan Duong\*

### ABSTRACT

This study aims to examine the impact of some factors on attitude towards use and purchase intention vegetarian food in Vietnam. Through the primary data set collected from 315 customers, the results of analysis SEM model showed that health consciousness and social norm play an essential role in the attitude towards use of customers consuming vegetarian food. Meanwhile the impact of environmental concern on attitude towards use is not clear. Finally, both the social norm and the attitude towards use show predictability towards a customer's purchase intention. The research results support vegetarian food businesses to come up with solutions to promote business activities.

**Keywords:** *Vegetarian food; customer behaviour; purchase intention; attitude towards use.*

### TÓM TẮT

Nghiên cứu này có mục đích đánh giá tác động của một số yếu tố đến thái độ và dự định hành vi tiêu dùng thực phẩm chay ở Việt Nam. Thông qua bộ dữ liệu sơ cấp được thu thập từ 315 khách hàng, kết quả phân tích mô hình cấu trúc tuyến tính SEM đã chỉ ra ý thức về sức khỏe và chuẩn mực xã hội đóng vai trò quan trọng đối với thái độ sử dụng thực phẩm chay của khách hàng. Trong khi đó, tác động của nhận thức về môi trường đối với thái độ sử dụng là không rõ ràng. Cuối cùng, cả chuẩn mực xã hội và thái độ sử dụng có khả năng dự báo dự định hành vi mua của khách hàng đối với thực phẩm chay. Những khám phá của nghiên cứu góp phần hỗ trợ các cơ sở kinh doanh thực phẩm chay trong việc thúc đẩy hoạt động kinh doanh mặt hàng này.

**Từ khóa:** *Thực phẩm chay; hành vi khách hàng; dự định mua; thái độ sử dụng.*

Thuongmai University

\*Email: vutuanuong@tmu.edu.vn

Received: 02/6/2021

Revised: 30/6/2021

Accepted: 25/8/2021

### 1. INTRODUCTION

Reports from the Vegan Food Association (PBFA) and advocacy group The Good Food Institute (GFI) show that by the end of 2019, the plant-based food industry was worth about \$5 billion. Retail sales of vegetarian foods grew 11.4% in 2019, while retail sales of food in the US grew only 2.2% during the same period. "Plant-based foods are the driving force behind the industry's growth, growing 29% in

just the past two years. 18% is the revenue from vegetarian meat products in 2019, accounting for 2% of total packaged meat sales and currently, the vegetarian meat market is worth more than 939 million USD. The global vegan food market was worth about \$15.6 billion in 2019, expected to grow at an average rate of 10.5% per year and reach about \$31.4 billion by 2026. According to recent studies, 30% of Americans give up eating meat and switch to using vegetarian foods made from plants.

Meanwhile, sales of meat of animal origin increased only 3% during the same period. The same trend applies to other emerging vegetarian products. Vegan yoghurt sales jumped 31%, while regular yoghurt sales fell 1%. Sales of vegetarian cheese also increased by 18%, while sales of milk cheese increased only 1%. Market analysis firm Meticulous Market Research predicts that the plant-based food industry can achieve a compound annual growth rate of 11.9% in 2020-2027, bringing the entire industry's value to \$74.2 billion by 2027.

In Vietnam, in the last two years alone, the vegetarian food product segment has made a strong impression on the Vietnamese food market, in which domestic vegetarian food is quite competitive in price compared to imported goods. Most of the products appearing on the shelves of modern and traditional distribution channels are a plus point for domestic vegetarian food products. In particular, grasping consumers' tastes, who tend to prioritize convenience products and green foods, domestic enterprises are constantly improving, innovating and improving product quality. In particular, the line of instant products not only stops at instant noodles, instant vermicelli, but now on the market, there are also crab noodles, rice cakes, flour soup cakes, brown rice vermicelli. The fast growth of the vegetarian food market in terms of scale has attracted the attention of businesses and customers. Restaurants serving vegetarian food appear in large cities such as Hanoi, Ho Chi Minh City, Hai Phong. Although the development of the market has not reached an explosive level, the market's potential is still there. The majority of businesses has also recognized vegetarian food. The level of competition of the industry shortly will reach a high level. Therefore, understanding and analyzing

customers' buying behaviour for this product will be necessary for businesses in finding and developing business activities. From the above analysis, the research team conducted a study on the topic **"Some key factor impacting customer's purchase intention vegetarian food in Vietnam"**.

## 2. LITERATURE REVIEW

### 2.1. Customer Purchase Behaviour

Consumer behaviour is a topic that has attracted much attention from researchers over the past decades. Theories of customer behaviour gain a diversity of perspectives and approaches. Customer behaviour is understood as all actions that consumers reveal in investigating, purchasing, using, evaluating goods and services to satisfy needs [30]. According to Kuester and Sabine [26], customer behaviour is the process they use to select, attach, use, and dispose of products, services, experiences, or ideas to satisfy needs. And the impacts of these processes on consumers and society. Customer behaviour is often placed in many relationships related to satisfaction, quality, value [12] and has become an essential concept in the development of academic theory and has many practical implications for business operations.

### 2.2. Purchase Intention

Ajzen [3] defined *intention* as a psychological state that is closely related to motivation factors. Determination and the degree of effort of an individual to perform the behaviour and intention are influenced by subjective norms, attitudes, and cognitive behavioural control. According to Fishbein & Ajzen [16], intention is the immediate identification of behaviour, and when individuals have the right solutions, it will make the most accurate prediction of behaviour. The bridge of intention to the relationship between attitude towards use and customer behaviour has been mentioned in many studies, such as an important theory in marketing [6]. The role of intention in the decision-making process of food products is examined in studies by Rana & Paul [32]

### 2.3. Attitude Towards Use

Attitudes, demographics, and beliefs are among the three main factors that examine human behaviour, attitudes are relatively consistent judgments, feelings, and action tendencies about a certain thing, phenomenon or idea [5]. Attitudes are often assessed according to approaches that reflect the "right or wrong" or "appropriate or inappropriate" issue. Most of the research in marketing on consumer behaviour appreciates the role of attitude in the process from intention to customer decision. Fishbein & Ajzen [16], Davis [13] have shown that attitude has a strong relationship with behavioural intention and customer behaviour.

### 2.4. Environmental Concern

*Environmental concern* is defined as an assessment or attitude towards events, one's behaviour or the behaviour

of others with consequences for the environment [37]. Environmental concerns can refer to a specific attitude that directly determines intention, or more broadly, to a general attitude or value orientation [34]. Dunlap & Jones [14] indicated that environmental awareness can assist in solving social problems such as environmental problems. Meanwhile, environmental knowledge is perceived to be related to ecological value and can change customer attitudes and behaviour [38].

### 2.5. Health Consciousness

*Health consciousness* is a psychological variable that reflects the perception and assessment of health problems and affects health attitudes and behaviours [17,23,27]. An individual's level of health consciousness is closely related to how they seek and respond to health information [8]. Thus, attention to individual health consciousness is crucial in designing health interventions and targeting the public, as it determines their response to health information and health information sources [21].

### 2.6. Social Norm

Social norm theory predicts that interventions that correct these misperceptions by revealing a more realistic, healthy norm will benefit most individuals. That is, social norms promote attitudes and behaviours that benefit the community [9]. *Social norms* are rules that dictate how individuals are expected to behave in particular situations. Several theories of social behaviour emphasize the normative influence of peer behaviour. Psychosocial researchers have found that pressure on peer-group conformity and achievement of reference group standards often creates a strong desire in individuals to apply and maintain peer group expectations and behaviours and then act on these perceptions [19].

## 3. RESEARCH MODEL AND HYPOTHESIS DEVELOPMENT

### 3.1. Some theoretical research models

#### 3.1.1. Theory of Reasoned Action (TRA)

The reasoned action theory (TRA) model was proposed by Fishbein & Ajzen [16] and applied in many studies [7, 11]. In this model, attitude toward the behaviour and subjective norm impact intention, affecting behaviour. Accordingly:

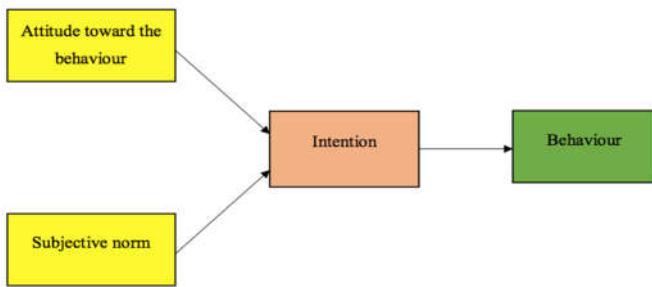
1. *Behaviour* is defined as the real, observable actions of customers.

2. *Intention* is defined as the subject's personal ability to perform a behaviour and can be viewed as a particular case of belief.

3. *Attitude* is defined as an attitude towards an action or behaviour. It represents an individual's positive or negative perceptions of performing a behaviour, measured by the sum of the energy to strengthen the belief and evaluate this belief.

4. *Subjective norm* is defined as an individual's perception that the behaviour should or should not be performed with that individual's key references.

Details of the TRA model are shown in Figure 1.

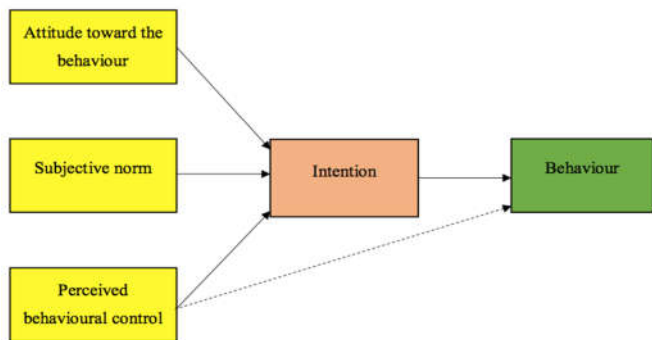


Source: Fishbein & Ajzen [16]

Figure 1. TRA Model

**3.1.2. Theory of Planned Behavior (TPB)**

Ajzen [3] argued that the TRA model might not be perfect in some research contexts. It would be ideal for implementing additional cognitive-behavioural control (perceived behaviour control). To strengthen this point of view, Ajzen [3] has shown that some customer behaviours do not seem to be influenced by non-motivational factors such as resources, ability. Therefore, perceived behavioural control should be considered as an essential role in consumer intentions and behaviour. Details of the TPB model are shown in Figure 2.



Source: Ajzen [3]

Figure 2. TPB Model

**3.2. Hypothesis Development**

The relationship between attitude and intention behaviour is widely recognized in marketing research. Most studies evaluate this relationship as causal, in which attitude will lead to customer behaviour [13, 16]. In studies on customer buying behaviour for food products, Nguyen et al. 2020 evaluated the impact of customer behaviour on functional foods. Meanwhile, Ajzen [4] has developed the theory of the TPB model to indicate the impact of attitude on customer behaviour towards food. Kim et al. [24] examined the positive effects of attitudes on vegetarian food consumption behaviour. From the above arguments, research hypothesis H<sub>1</sub> is proposed:

**H<sub>1</sub>:** *Attitude towards use has a positive effect on purchase intention for vegetarian food.*

Social norms have positive effects on customer attitudes [15]. Researches by Ajitha & Sivakumar [2]; Kim et

al. [25] pointed out the issues related to the image of customers in society, the views that increase social recognition have a positive influence on the customer's attitude when consuming. Besides, vegetarian food has links to social activities such as religion, lifestyle. The positive effect of social norm on purchase intention has been verified in many studies in different contexts [31, 18, 1]. From the above analysis, research hypothesis H<sub>2</sub> and H<sub>3</sub> are proposed:

**H<sub>2</sub>:** *Social norm has a positive effect on customer's purchase intention using vegetarian food*

**H<sub>3</sub>:** *Social norm has a positive impact on customer attitudes towards use vegetarian food.*

The influence of health consciousness on attitude has been tested in many studies. Hoque et al. [22] evaluated the impact of health consciousness on consumers' attitudes when consuming dairy products in Bangladesh. With the same opinion, Xu et al. [40] indicated a positive relationship between consumers' awareness and attitude towards environmentally friendly furniture products. Michaelidou et al. [27] examined this relationship for organic food products. The results also indicate the positive effects of health consciousness on customer attitudes. From the above analysis, research hypothesis H<sub>4</sub> is proposed:

**H<sub>4</sub>:** *Health consciousness has a positive impact on customer attitudes towards use vegetarian food.*

The studies of Schifferstein & Oude Ophuis [33], Williams & Hammit [39], Chen [10] has shown associations between environmental concern towards consumption of foods with environmentally friendly production processes. The relationship between environmental perception towards customers' attitudes towards vegetarian food is tested in Kim et al. [24]. Vegetarian food is produced from plant-based materials that are considered environmentally friendly. The process of cultivating plants as raw materials for vegetarian food processing also limits the amount of waste released into the environment compared to meat products. From the above analysis, H<sub>5</sub> research is proposed:

**H<sub>5</sub>:** *Environmental concern has a positive effect on consumer attitudes towards use vegetarian food.*

**3.3. Research model**

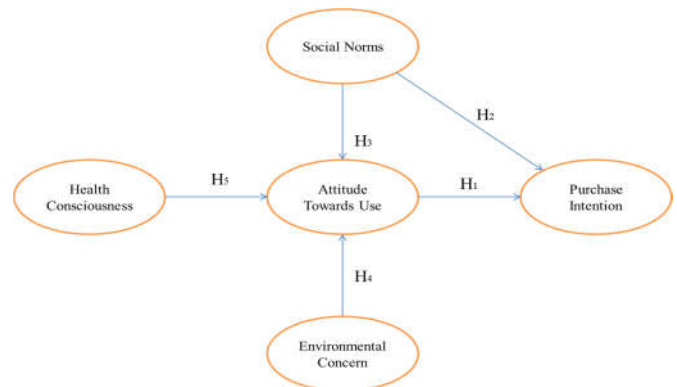


Figure 3. Research Model

From the proposed research hypotheses and theories from the TRA and TPB models, the authors suggested a research model evaluate the factors affecting customer behaviour of consuming vegetarian food. The research model is depicted in Figure 3.

**4. RESEARCH METHODOLOGY, SAMPLE AND DATA COLLECTION**

**4.1. Research Methodology**

The study applies both qualitative and quantitative research methods. In which qualitative research is used in collecting and synthesizing secondary data and interviewing experts to calibrate the official research scale. Quantitative research is applied to primary data processing through descriptive statistics, scale testing, confirmatory factor analysis, and SEM analysis. The software used for quantitative research is IBM SPSS 20 and IBM AMOS 23.

**4.2. Sample and Data Collection**

In this study, the research sample was selected by the convenience sampling method. The minimum sample size was followed by the principle of Hair et al. [20]. Accordingly, the minimum sample size needs to be five times the number of observed variables, the number of observed variables in the research scale is 16, so the minimum sample size is  $16 \times 5 = 80$ .

Table 1. Demographic profile of the respondents

Demographic Characteristic	Frequency	%
<i>Gender</i>		
Male	145	46.03
Female	170	53.97
<i>Age</i>		
22-30	102	32.38
30-45	99	31.43
> 45	114	36.19
<i>Frequency of using vegetarian food</i>		
Daily	76	24.13
Weekly	155	49.21
Monthly	84	26.66
<i>Amount of payment for vegetarian food in 1 month</i>		
500.000-1.000.000 VNĐ	37	41.27
1.000.000-2.000.000 VNĐ	119	37.78
Trên 2.000.000 VNĐ	66	20.95

The survey is collected by two methods: direct interview method and online survey method (supported by google form software). For face-to-face interviews, the researchers went to vegetarian food stores and public places to interact with customers who used vegetarian food. Respondents need to confirm that they are not under any pressure when answering the interview. The questions about content from respondents during the interview process will be answered by the research team member. For the online survey, forms were sent to groups and forums of vegetarians. To confirm that the information obtained is reliable, the researchers will call back through the phone number entered in the

questionnaire and get confirmation from the respondents. The details of the study sample are described in Table 1.

**4.3. Measures**

The scale is referenced from many past studies on customer buying behaviour, ecological value, perceived value. Although the referenced studies have high reliability, it is necessary to ensure the appropriateness with the research context in Vietnam. The group of authors conducts several solutions to solve this problem.

Firstly, because the observed variables are referenced from foreign studies, two language experts will be invited to assist. Expert 1 conducts an independent translation from English to Vietnamese and expert two from that result translates from Vietnamese to English to check for deviations. In addition, the experts also have comments on the expression and style in the statements of the observed variables.

Secondly, the contents of the observed variables after being translated are analyzed by a team of experts, including 3 PhDs in Marketing and 2 PhDs in Business Administration, to comment and make comments to adjust to suit the research environment in Vietnam.

After implementing the above solutions, the original scale consisting of 19 observed variables was reduced to 16 observed variables. Details of the items and the referenced studies are described in Table 2.

**5. DATA ANALYSIS RESULTS**

**5.1. Measurement Model, Construct Reliability and Convergent Validity**

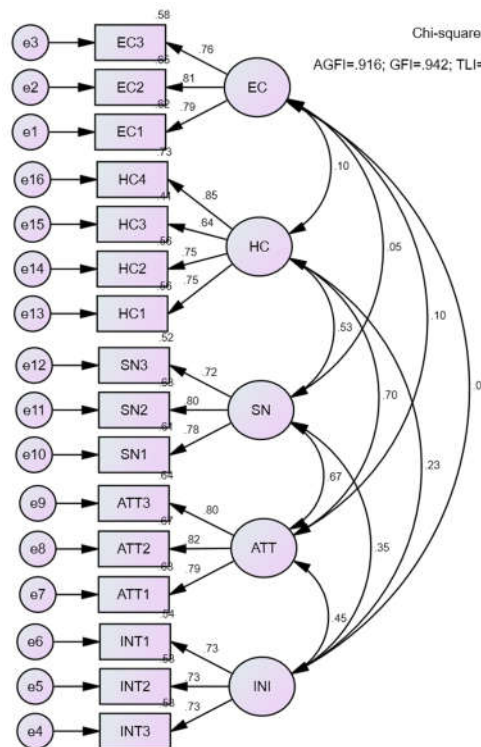


Figure 4. Confirmatory Factor Analysis



The results of CFA analysis show that, the measurement model includes 94 degrees of freedom, the value Chi-square/df = 1.650 (less than 3); P-value = 0.000 (less than 0.05). AGFI Indicators; GFI; TLI; CFI; NFI are all greater than 0.9; RMSEA = 0.045 (less than 0.08). The results fully meet the thresholds suggested by Hair et al. [20]. So the measurement model fits suitable for the collected data.

To evaluate the convergent validity and discriminant validity, the recommendations based on the results of the study by Hair et al. (2014) are used including:

- (1) AVE > 0.5
- (2) Factor Loadings > 0.5
- (3) CR > 0.7
- (4) MSV < AVE
- (5) SQRAVE > Bivariate correlation coefficients

Table 2. Reliability, Convergent Validity and Descriptive Analysis

Source	Items	Mean	SD	FIs
Dunlap & Jones [14]	<b>Environment Concern (AVE=0.629; CR=0.819; α=0.829)</b>			
	Nature's balance is easily destroyed	3.146	0.789	0.790
	Humans are seriously destroying the environment	3.229	0.781	0.808
	Humans need to maintain the balance of nature to survive	3.117	0.807	0.761
Chen [10]	<b>Health Consciousness (AVE=0.565; CR=0.837; α=0.829)</b>			
	I think I've tried hard to be in good health	3.997	0.689	0.750
	I think I've tried hard to be in good health	3.800	0.741	0.748
	Health is very valuable to me	3.686	0.722	0.643
Jansson & Dorrepaal [41]	<b>Social Norm (AVE=0.588; CR=0.810; α=0.805)</b>			
	People who are important to me think that I should use vegetarian food	3.416	0.787	0.782
	Many people around me are very active in using vegetarian food	3.552	0.778	0.795
	I think many people around me expect me to use vegetarian food	3.438	0.809	0.721
Chen [10]; Nguyen et al. [29]	<b>Attitude Towards Use (AVE=0.648; CR=0.846; α=0.846)</b>			
	Vegetarian food is healthy	3.641	0.688	0.795
	Vegetarian food is a good choice	3.565	0.717	0.820
Sukboon yasatit [35]	<b>Purchase Intention (AVE=0.530; CR=0.772; α=0.772)</b>			
	I intend to purchase vegetarian food in the next few weeks	3.556	0.867	0.726
	I aim to purchase vegetarian food for my healthy lifestyle	3.759	0.840	0.726
	I plan to purchase vegetarian food	3.759	0.797	0.733

Note: SD - Standard Deviation; FIs - Factor Loadings; CR - Composite Reliability; AVE - Average Variance Extracted

Table 3. Discriminant Validity

	MSV	Max R(H)	EC	HC	SN	ATT	INI
EC	0.011	0.831	<b>0.787</b>				
HC	0.497	0.855	0.104	<b>0.752</b>			
SN	0.452	0.814	0.047	0.531	<b>0.767</b>		
ATT	0.497	0.847	0.104	0.705	0.672	<b>0.805</b>	
INI	0.199	0.772	0.065	0.232	0.355	0.446	<b>0.728</b>

Based on the analysis results, it can be seen that the AVE index ranges from 0.530 - 0.648; MSV values < AVE; CR is more significant than 0.7, SQRAVE is greater than Bivariate correlation coefficients, Cronbach Alpha value is greater than 0.7, and factor loadings are all greater than 0.5. Therefore, the results satisfy the thresholds set by Hair et al. [20] recommends that reliability, convergent validity and discriminant validity be guaranteed.

### 5.2. Hypothesis Testing

The SEM analysis results show that the model includes 96 degrees of freedom, Chi-square/df = 1.647 (less than 3), P-value = 0.000 (less than 0.05). AGFI value = 0.916; GFI = 0.940; TLI = 0.964; CFI = 0.971; NFI = 0.930 (greater than 0.9) and RMSEA = 0.045 (less than 0.08). The above results guarantee the thresholds of Hair et al. [20] suggested that the collected data is suitable for the research model.

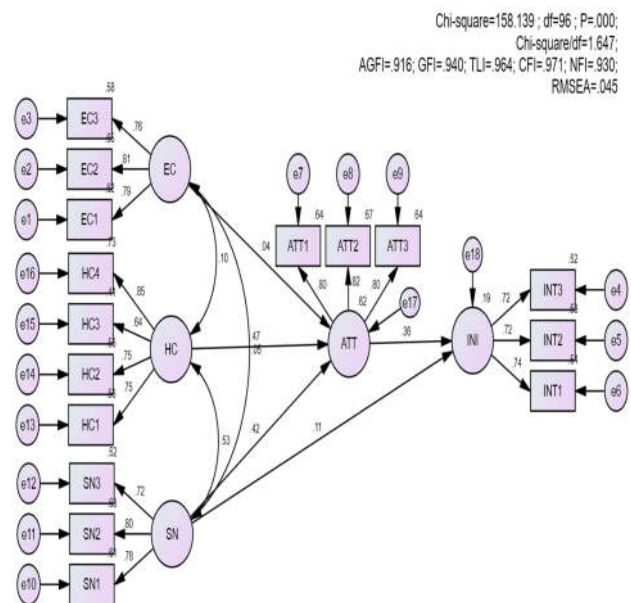


Figure 5. SEM Analysis Result

The regression weights analysis and hypothesis testing results showed that the research hypothesis about the relationship between environmental concern and attitude was rejected because the p-value was more significant than 0.05. Meanwhile, the remaining four hypotheses are accepted at the p-value of statistical significance less than 0.05. Among the factors affecting attitude, the regression weight of health consciousness was at the highest level

(0.474), the social norm showed an influence on attitude with regression weight at 0.419. The relationship between attitude towards use to purchase intention is reflected by the regression weight at 0.356. Finally, the social norm affects purchase intention with a regression weight of 0.112. The SEM model explains 62% of the dependent variable's attitude towards use. Meanwhile, purchase intention was explained at the 19% significance.

Table 4. Regression Weights and Hypothesis Testing Result

Hypothesis	Estimate	S.E.	C.R.	P-value	Findings
Attitude ← Environmental Concern	0.036	0.044	0.725	0.469	Not supported
Attitude ← Health Consciousness	0.474	0.073	6.887	***	Supported
Attitude ← Social Norm	0.419	0.061	6.144	***	Supported
Intention ← Attitude	0.356	0.107	3.483	***	Supported
Intention ← Social Norm	0.112	0.095	1.109	***	Supported

## 6. DISCUSSION, IMPLICATION AND LIMITATION

### 6.1. Discussion

The study successfully built a model including environmental awareness, health consciousness and explaining customers' purchase intention of vegetarian food. Some of the prominent research findings include:

Firstly, in this study, attitude is also shown to affect the purchase intention of customers. This result is also consistent with the large theoretical foundations of customer buying behaviour [3, 16]. Despite this, the attitude towards use and social norms only explains 19% of the variation in customer purchase intention, indicating that many other factors influence customer purchase intention that needs to be explored.

Secondly, environmental perceptions have no impact on customers' attitudes towards purchase intention vegetarian food. Some studies in developing countries have shown that environmental awareness issues when consuming food are relatively lacklustre [28]. This situation is explained not simply as a problem related to the lack of environmental knowledge but also from product knowledge.

Thirdly, health consciousness and social norms have substantial impacts on customer attitudes. Several studies on eco-friendly foods have shown that these foods attract health-conscious consumers [10], but the importance of social norms is unique. This situation may be related to cultural, religious or traditional factors of the market.

### 6.2. Implications

Although in the study, environmental perceptions have a less pronounced impact on customer attitudes. However, environmental issues are always considered factors that influence guests' behaviour in the context that the natural environment is gradually becoming unbalanced.

Environmental awareness has not shown to be related to customer's attitude, which can be traced back to several reasons, such as (1) Customer's knowledge of the environment is still limited; (2) The business unit has not highlighted the values that vegetarian food brings to the environment. For cause (1), the effective resolution requires the efforts of media and education agencies. While with cause number (2), businesses can communicate through the vegetarian food experience space, building a culture of enjoying vegetarian food towards the benefits of the environment can be an effective solution. In addition, the application of green marketing activities such as using environmentally friendly materials to make packaging and serving utensils is also an excellent solution to help customers connect between environmental values and environmental protection that vegetarian food brings, thereby helping to raise environmental awareness of customers.

In the 21<sup>st</sup> century, when customers become more and more intelligent in consumption, products with good health benefits always receive customers' attention. Vegetarian food is considered as a food that helps customers avoid the harmful effects of meat-based foods such as cardiovascular diseases, blood pressure, obesity. Vegetarian food is also a solution to help purify the body. so it can be seen that the value that vegetarian food belongs to users is great. Therefore, if customers' health consciousness excels, the vegetarian food business opportunity will be more likely to grow. In order to implement this solution, trade promotion activities need to focus on the health benefits of vegetarian food and the value of good health for life. Health knowledge can be communicated through different platforms to direct customers to the needs of vegetarian products.

Social norms are associated with views of the dong and are highly communal. For social standards to positively impact the vegetarian food business, it is necessary to build a large community and group about vegetarianism, which will be essential kernels to spread the vegetarian culture to the community. When wanting to become consumer-oriented social norms, vegetarian food needs to show the values that this product brings to the development of the community. This perspective leads to the ethical and social marketing activities of the vegetarian food business to the community. Activities that can become the solution include: Organizing charity demonstrations; Develop funds to support social activities from profits from vegetarian food business.

### 6.3. Limitation

Although the study has completed, the research objectives set out, but due to limitations of resources, time and space, the research still has limitations including:

Firstly, the sample size is still narrow (N=315), and the convenient sampling method can reduce the objectivity of the research results. Although there are solutions to ensure

the accuracy of survey information, there are still limitations for online surveys, as researchers cannot directly interview and answer customers.

Secondly, multigroup tests have not been performed in the study for reasons related to the sampling method. Therefore, the research has not been able to in-depth assess the differences between different customer segments to bring many solutions to vegetarian food businesses.

Thirdly, the adjusted R2 coefficient of customer buying behaviour is 0.19, which means that the research model can only explain 19% of purchase intention vegetarian food variation. Therefore, the research model needs to add more factors to support the clarification of customer purchase intention. Could be: Quality of customer service; Trademark; Cultural; Religion.

From the limitations of the study stated together with the development trends of vegetarian food consumption. Some research directions the author can expand in the future include:

Firstly, to expand the sample size, conduct sample selection by stratified sampling method to serve multigroup tests and increase the sample size to increase the research significance.

Secondly, adding new factors to the research model such as green marketing activities, cultural factors, religious factors.

## REFERENCE

- [1]. Abrahamse W., Steg L., 2009. *How do socio-demographic and psychological factors relate to households' direct and indirect energy use and savings?* J. Econ. Psychol. 30, 711–720.
- [2]. Ajitha S., Sivakumar V. J., 2017. *Understanding the effect of personal and social value on attitude and usage behavior of luxury cosmetic brands.* Journal of Retailing and Consumer Services, 39, 103-113.
- [3]. Ajzen I., 1991. *The theory of planned behavior.* Organizational behavior and human decision processes 50(2), 179-211.
- [4]. Ajzen, I., 2015. *Consumer attitudes and behavior: the theory of planned behavior applied to food consumption decisions.* Italian Review of Agricultural Economics, 70(2), 121-138.
- [5]. Assael H., 1981. *Consumer behavior and executive action.* Boston: Kent.
- [6]. Bagozzi R. P., 1981. *Attitudes, intentions, and behavior: A test of some key hypotheses.* Journal of personality and social psychology, 41(4), 607.
- [7]. Bagozzi R. P., 1992. *The self-regulation of attitudes, intentions, and behavior.* Social psychology quarterly, 178-204.
- [8]. Basu A., Dutta M. J., 2008. *The relationship between health information seeking and community participation: The roles of health information orientation and efficacy.* Health Communication, 23(1), 70-79.
- [9]. Berkowitz A. D., 2003. *Applications of social norms theory to other health and social justice issues. The social norms approach to preventing school and college age substance abuse: A handbook for educators, counselors, and clinicians,* 1.
- [10]. Chen M., 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(2)
- [11]. Cordano M., Welcomer S., Scherer R. F., Pradenas L., Parada V., 2011. *A cross-cultural assessment of three theories of pro-environmental behavior: A comparison between business students of Chile and the United States.* Environment and Behavior, 43(5), 634-657.
- [12]. Cronin Jr J. J., Brady M. K., Hult G. T. M., 2000. *Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments.* Journal of retailing, 76(2), 193-218.
- [13]. Davis F.D., 1989. *Perceived usefulness, perceived ease of use and user acceptance of information technology.* MIS Quarterly, 13(3), 319-339. Davis F.D., Bagozzi R.P., Warshaw P.R., 1989. *User acceptance of computer technology: a comparison of two theoretical models.* Management Science, 35(8), 982-1003
- [14]. Dunlap R., Jones, 2012. *R. Environmental concern: Conceptual and measurement issues.* In Handbook of Environmental Sociology. Dunlap, R.E., Michelson, W., Eds.; Greenwood Press: London, pp. 482–542.
- [15]. Fang W. T., Ng E., Chang M. C., 2017. *Physical outdoor activity versus indoor activity: Their influence on environmental behaviors.* International journal of environmental research and public health, 14(7), 797.
- [16]. Fishbein M., Ajzen I., 1975. *Belief, attitude, intention and behavior: An introduction to theory and research.* Reading, MA: Addison Wesley
- [17]. Furnham A., Forey J., 1994. *The attitudes behaviors and beliefs of patients of conventional vs. complementary (alternative) medicine.* Journal of Clinical Psychology, 50(3), 458- 469.
- [18]. Guagnano G.A. Stern P.C. Dietz T., 1995. *Influences on attitude-behavior relationships a natural experiment with curbside recycling.* Environ. Behav., 27, 699–718.
- [19]. Hagman B. T., Noel N. E., Clifford P. R., 2007. *Social norms theory-based interventions: Testing the feasibility of a purported mechanism of action.* Journal of American College Health, 56(3), 293-298.
- [20]. Hair J.F., Anderson R.E., Babin B.J., Black W.C., 2014. *Multivariate Data Analysis: A global Perspective.* Upper Saddle River, Pearson, N.J., USA.
- [21]. Hong H., 2009. *Scale development for measuring health consciousness: Re-conceptualization.* That Matters to the Practice, 212.
- [22]. Hoque M. Z., Alam M., Nahid K. A., 2018. *Health consciousness and its effect on perceived knowledge, and belief in the purchase intent of liquid milk: Consumer insights from an emerging market.* Foods, 7(9), 150.
- [23]. Iversen, A. C., & Kraft, P., 2006. *Does socio-economic status and health consciousness influence how women respond to health related messages in media?.* Health Education Research, 21(5), 601-610.
- [24]. Kim M. J., Hall C. M., Kim D. K., 2020. *Predicting environmentally friendly eating out behavior by value-attitude-behavior theory: does being vegetarian reduce food waste?.* Journal of Sustainable Tourism, 28(6), 797-815.
- [25]. Kim S. B., Sun K. A., Kim D. Y., 2013. *The influence of consumer value-based factors on attitude-behavioral intention in social commerce: The differences between high-and low-technology experience groups.* Journal of Travel & Tourism Marketing, 30(1-2), 108-125.
- [26]. Kuester Sabine, 2012. *Strategic Marketing & Marketing in Specific Industry Contexts.* University of Mannheim, p. 110.

- [27]. 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.
- [28]. Nguyen H. V., Nguyen N., Nguyen B. K., Lobo A., Vu P. A., 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(6), 1037.
- [29]. Nguyen N., Nguyen H. V., Nguyen, P. T., Tran V. T., Nguyen H. N., Nguyen T., Cao T. K., Nguyen T. H., 2019. *Some Key Factors Affecting Consumers' Intentions to Purchase Functional Foods. A Case Study of Functional Yogurts in Vietnam*. Foods (Basel, Switzerland), 9(1), 24. <https://doi.org/10.3390/foods9010024>
- [30]. Philip Kotler, 2007. *Marketing can ban*. Transport Publishing House.
- [31]. Pristl A. C., Kilian S., Mann A., 2020. *When does a social norm catch the worm? Disentangling social normative influences on sustainable consumption behaviour*. Journal of Consumer Behaviour.
- [32]. Rana J., Paul J., 2017. *Consumer behavior and purchase intention for organic food: A review and research agenda*. Journal of Retailing and Consumer Services, 38, 157-165.
- [33]. Schifferstein H.N.J., Oude Ophuis P.A.M., 1998. *Health-related determinants of organic foods consumption in The Netherlands*. Food Quality and Preference, Vol. 9 No. 3, pp. 119-33
- [34]. Stern P. C., 1992. *Psychological dimensions of global environmental change*. Annual Review of Psychology, 43, 269-302
- [35]. Sukboonyasatit D., 2009. *Prediction of Peoples' Intentions and Actual Consumption of Functional Foods in Palmerston North*. PhD. Thesis, Massey University, Auckland, New Zealand.
- [36]. 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.
- [37]. Weigel R. H., 1983. *Environmental attitudes and the prediction of behavior*. In N. R. Feimer & E. S. Geller, (Eds), Environmental psychology: Directions and perspectives. New York: Preager, pp. 257-287
- [38]. Weigel R., Weigel J., 1978. *Environmental concern: The development of a measure*. Environment and behavior, 10(1), 3-15.
- [39]. Williams P.R.D., Hammit J.K., 2001. *Perceived risks of conventional and organic produce: pesticides, pathogens, and natural toxins*. Risk Analysis, Vol. 21 No. 2, pp. 319-30.
- [40]. Xu X., Wang S., Yu Y., 2020. *Consumer's intention to purchase green furniture: do health consciousness and environmental awareness matter?*. Science of the Total Environment, 704, 135275.
- [41]. Jansson J., Dorrepaal E., 2015. *Personal norms for dealing with climate change: results from a survey using moral foundations theory*. Sustainable Development, 23(6), 381-395.

---

#### THÔNG TIN TÁC GIẢ

**Đỗ Phương Linh, Nguyễn Quyết, Vũ Tuấn Dương**

Trường Đại học Thương mại