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### The Effects of Benefit Cognition to Food Supplements Buying Intention of Vietnamese Consumer, Under the Influence from Government Management Activities

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**Abstract:** The aim of this paper is to research the effects of benefit cognition to buying intention under the influence of government management activities, in which the benefit cognition factors are considered under four expressions: functional benefit, convenience benefit, enjoyment benefit and economical benefit. A quantitative research was conducted to examine the relationship between these expressions and consumer's buying intention under the influences of government management activities, in order to guide and measure the effects of those influences.

In this paper, the findings from field research in Hanoi from April 1st, 2017 to April 30th, 2017 will be demonstrated in order to test the framework as well as the proposed research. Regardless of mediating variables - government management activities, the research indicates that only two factors can affect the buying intention of food supplement: enjoyment benefit cognition (0.314) and economical benefit cognition (0.277). While considering the effects of government management activities variable, this factor influence positively to the relationship between functional benefit and buying intention, whereas affect negatively to the relationship between enjoyment benefit, economical benefit and buying intention. A notable finding is that, in the case of food supplement, the cognition of enjoyment benefit creates zero impact on buying intention in both cases.

**Key word:** benefit cognition, buying intention

#### I. INTRODUCTION

Research about the influencing factors to buying intentions is an important issue in behavioral science and marketing. The factors that create impacts to buying intentions are expressed through different theories such as Theory of Reasoned Action (TRA) (Fishbein and Ajzen, 1975), or Theory of Planned Behavior

(TPB) (Ajzen, 1991). Buying intention is also an issue that attract manufacturers in FMCG industry, because this can help them understand consumer behavior and cognition toward company's product (Magistris and Gracia, 2008). As a part of the trend, food supplement is also a product category in which there are several specific characteristics in consumer's behavior. To specify this issue, this paper is going to answer few specific questions: what are the characteristics in food supplement market? How benefit cognition factors impact buying intention toward this product? What are the findings and implications of previous researches about food supplement purchase? What are the unclear remaining issues?

The definition of benefit cognition is the belief of a consumer to an extent that can help that consumer become better from buying or using a specific product (Kim *et al.*, 2008). Benefit cognition is derived from the combinations of different attributes, including opposing factors such as tangible and intangible, internal and external, functional and unfunctional, direct and indirect, and so on (Forsythe, Liu, Shannon, & Gardner, 2006; Snoj *et al.*, 2004; Lee, 2009). Benefit cognition contains different benefits and have significant role to consumer's buying intention. This was proved by many foreign scholars such as Jacoby & Kaplan (1972); Cheron & Ritchie (1982); Mitra, Reiss, & Capella (1999), etc. However, there are not many researches about this issue in Vietnam, and according to several proposed research, the actual cognition of Vietnamese consumer about food supplements is vague (Moore, 2014). In this context, what aspects about benefit and affect Vietnamese buying intentions toward food supplement? What are their trend and level of impact? These are the research gaps that are going to be addressed in this paper.

Although the food supplement market is developing rapidly in Vietnam, there are still many issues regarding government management activities, such as the medical legistration was enforced, forbidding doctors to give food supplement products in patient's prescription; food supplement products and prescribed drugs are not clearly distinguished; there are some individuals and companies suggests consumers to use food supplements directly even when they do not have any expertise in medical field (through the multilevel channel) that cause disorder and disruption about consumer's benefit cognition to food supplements. Within that context, the benefit cognition factors of Vietnamese consumers are not equally distributed, the mechanism from government management activities is not completed, and communications about regulations from government management activities are not implemented widely. Therefore, this research provide a new finding, which will analyse the effect of benefit cognition to food supplement buying intention, under the influence from government management activities.

According to the aforementioned preassumptions, in both theoretical and practical perspectives, this research is important, urgent, and can be helpful to companies, economical organisations, Vietnam government management activities in this current developing food supplement market.

## **1. Framework**

### ***Concept and characteristics of benefit cognition***

The definition of benefit cognition is the belief of consumers about how buying/consuming a particular product can make them feel better about themselves. (Kim *et al.*, 2008).

In psychology, Becker (1974) proposed a model known as "Health belief model", which explain how the health behaviors are related to benefit cognition. Champion (1999) believes benefit cognition is one of the four most important factors to forecast behavior about health.

Therefore, the concepts about consumer's benefit cognition indicate similar findings, in which benefit cognition is consumer's perception and cognition about the belief that the consumer can become better after consuming a particular product or service.

There are two types of benefit cognition: functional benefit cognition (product/service quality) and non-functional benefit cognition (enjoyment). The aspects of benefit cognition are different according to researches in different fields. Benefit cognition include *cognition about time-saving*, *cognition about problem/product*, cognition about convenience, *cognition about security enhancement and cognition about enjoyment* (Sookeun Byun, 2007), or **functional cognition, convenience cognition** (Juwon Choi, Chihyung Ok và Aejoon Lee, 2013).

In the scope about food supplements, this paper is adapted with several appropriate aspects about cognition, including **functional, convenience, enjoyment cognition**; beside, this research also develop **economical cognition** based on qualitative research in the market and professionals' advice.

### ***Buying intention***

"Intention is the plan or ability of a person, leading to a particular action in a particular context" (Fishbein and Ajzen, 1975).

Base on this definition, the paper identifies: "buying intention is the plan or consumer's ability to buy food supplements in a particular context".

### ***Food supplements concept and the characteristics of this market in Vietnam***

There are many different perspectives about food supplements. The concept applied in this research based on Ministry of Health in Vietnam (2014), in which food supplements is an additional product to enhance the functions in human bodies, containing nutrients, making human bodies in an comfortable state, improving resistance and decrease disease threats.

In Vietnam, this market is in the rapid development stage, including product quantity and diversification. In 2016, there are 20,000 types of food supplements appear in the market. The ratio of domestic product reach 60%, when the imported products reach 30%. Consumers in Hanoi account for 63% of adult, and the statistic in Ho Chi Minh city is 43%. According to Food Supplements Association, in 2030, there will be 90% of consumers who understand and consume food supplements appropriately. The amount of frequent adult consumers reaches 70%. The production of food supplements in domestic market accounts for 75%, while the materials of which are self-provided (approximately 60%), and food supplements export reach \$5 billion (Food Supplement Association, 2016).

It can be seen that **the first characteristics** of current and future food supplements market are *large market scope, diversified product portfolio, type, develop rapidly, and considerable return-on-investment*. The enhancement of demand in the food supplements market leads to the development of supply. This is indicated from the increasing number of food supplements companies and the provided products in this market. However, this benefit results in a negative point, when there is a large amount of fake products. In the first 9 months in 2016, according to the figure from Ministry of Health, 56,978 out of 345,106 facilities violate the food safety regulation, accounts for 16.51%. In the nutshell, the fake product problem is a serious issue and also

**the second characteristic** of the food supplements market in Vietnam. **The third characteristic** involve consumer's cognition about food supplement products. Specifically, not many consumers aware correctly about food supplements, when some of them cannot distinguish between this product and prescribed drugs, or they just do not believe in the function of food supplements. These issue can be derived from the fact that some companies do not deliver what they promise from their commercials, or do not give clear description about the product.

### *Literature review*

In Darian and Tucci research - Benefit cognition about health and food buying decision (2011), they indicate that the high nutrient level of food, health benefit and functional cognition are the most important factors to buying intention.

In Mr. Shamal S và Dr. Bijuna C Mohan research - "Indian acceptance to food supplements: demographic and lifestyle", they indicate that benefit cognition are the most important factors to consumer acceptance to food supplements (Dowd & Burke, 2013).

The effect of benefit cognition to buying intention is also mentioned by several Vietnamese scholars, such as "researching factors affect buying intention of Da Nan consumers to online shopping activities" by Dr. Dang Thi Thuy Dung (2014); "factors affecting attitude and online shopping intention in Nha Trang" by Dr Nguyễn Thị Thanh Vân and Dr. Quach Thi Minh Ngoc (2013), and so on. However, all of these paper are lack of researches about benefit cognition aspects, and not about food supplements. This is the research gap that will be fulfilled in this paper.

Therefore, from the overview of previous studies and several qualitative researches, it can be seen that there are four aspects when consumers purchase food supplements, including **functional cognition** (nutrition value, nutrition information, etc.), **convenience cognition** (optimum convenience, etc.), **enjoyment cognition** (flavour, etc.) and **economical cognition**.

Functional cognition is consumers' cognition about the benefit they receive from the standout functional attributes (Sheth *et al.*, 1991). In the context of food supplements market, functional benefit cognition is known as cognition about health benefit that is gained from consuming food supplements (Urala và Lahteenmäki, 2004). In reality, communication about food supplements are abused and dishonest, causing false cognition for consumer about the real function of food supplements (in both negative and positive ways). The question here is: does benefit cognition about function affect buying decision about food supplements in Vietnam? On this ground, there are several hypotheses.

*H1: Functional benefit cognition affect positively to food supplements buying intention.*

Convenience cognition is the benefit consumers get from time and efforts to earn the product from sellers. This statement motivates buying motives and creates consumer satisfaction (Dabholkar, 1996; Meuter *et al.*, 2000). In the food supplements market context in Vietnam at the moment, the products are not widely distributed in the market. On the other hand, consumers have different buying behavior in different areas, such as buying in drug stores or supermarkets. The question is: does convenience in shopping affect food supplements buying intention? This paper suggest the second hypothesis:

*H2: Convenience benefit cognition affect food supplements buying intention.*

Urala's research in 2005 focus on **health confidence** with food supplement consumption; Verbeke (2008) researches about flavor of food supplements; Landström *et al* (2007) and Petrovici & Ritson (2006) focus on **cognitive efficiency** and **nutrient knowledge**; Van Kleef *et al* (2005) and Wansink *et al.*, (2005) depict that consumers' **knowledge about nutrition level** can contribute significantly to food supplement buying intention. Therefore, it can be seen that enjoyment cognition can affect food supplement buying intention.

In addition, consumers in Vietnam are entering an era when there's a variety of FMCG. Consumer needs are adapted rapidly. Therefore, the enjoyment through goods consumption has become an irreplaceable needs in this current society. With the awarded benefit from food supplements such as flavor, confidence, health,..., can this product category serve consumer's enjoyment needs? And if it is, how can food supplements enjoyment cognition can affect consumer's buying intention toward this product. The third hypothesis is proposed below:

*H3: Enjoyment benefit cognition affect food supplements buying intention.*

Vietnamese consumers cognition about economical benefit in food supplements market is a new finding in this paper. Specifically, when being healthy is considered to be a kind of investment in the future - as known as "better safe than sorry", can consumers aware that they will not have to spend any hospitalisation fees when they buy food supplements? In this paper, economical benefit cognition is consumer's awareness about received benefit from product consumption, in which consumers can reduce the fees they may have to pay when they do not pay for the food supplements. All of these issues will be examined with quantitative analysis. The fourth hypothesis is suggested below:

*H4: Economical benefit cognition affect food supplements buying intention*

As mentioned in the beginning of this paper, in this food supplements context in Vietnam, there are plenty of issues regarding government management activities such as communication, distribution, etc., that affect negatively to food supplements providers. Therefore, the effects of government management to the relationship between benefit cognition and food supplements buying intentions will be analysed under the following hypotheses:

*H5: Government management activities affect the relationship between functional benefit cognition and food supplements buying intention.*

*H6: Government management activities affect the relationship between convenience benefit cognition and food supplements buying intention.*

*H7: Government management activities affect the relationship between enjoyment benefit cognition and food supplements buying intention.*

*H8: Government management activities affect the relationship between economical benefit cognition and food supplements buying intention.*

## **Models**

From theory analysis and suggested hypotheses, the following models are proposed below (Figure 1)

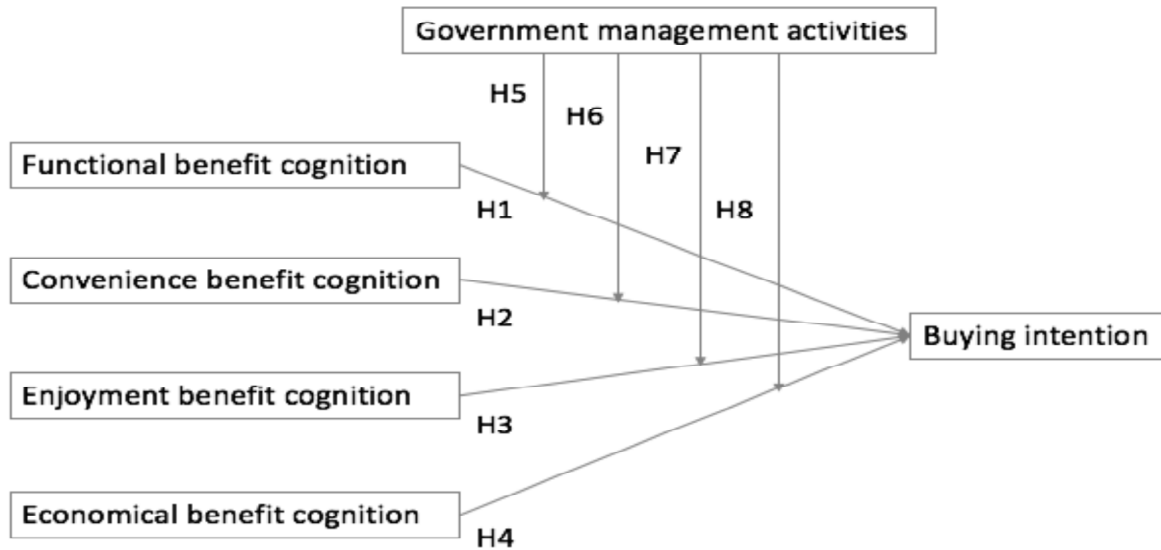


Figure 1: Model of benefit cognition effects to food supplements buying intention.

Source: Paper's research, 2017

## 2. METHODOLOGY

The research is conducted through two steps: preliminary and official research. The first step is preliminary qualitative and quantitative research, and the second step is official quantitative research. Specifically, in preliminary qualitative research stage, depth interview and focus group methods were applied with professionals in order to discover new factors which are **economical benefit cognition** and **government management activities**. The unofficial first and second scales are created in this stage.

Afterwards, the complete quantitative research questionnaire was officially introduced in Hanoi from April 1st, 2017 to April 30th, 2017. The audiences of this research are customers over 18, who have buying intention to food supplements (can be first time buyers or rebuyers). The interview process was conducted in residential area, with appropriate ratio in each district. To increase credence quality in this research, the proposed scale of this research is N=500, and the result from this research is N=500. After screening and eliminate disqualified answer sheets, 470 valid answer sheets were analysed.

There are 470 official random and convenient samples. The gender ratio is **equal**, with 41.7% male, 57.9% female and 0.4% belongs to other gender type. Besides, the participants are mostly young adult and middle aged men/women, when 47.2% and 40.9% of them are from 18-30 and 30-45 years old respectively. On the other hand, their levels of education are relatively equal, when most of them had awarded with bachelor degree (40.4%), master degree (37%) and high school degree (17.9%).

Most of the respondents are married people with children (56.6%), single (34.5%). Their income is **average**, with 43% and 38.7% of respondents with monthly income from below VND 4.5 million and VND 4.5 to 7.5 million respectively. Another notable feature is that most of the respondents buy food supplement products more than **once a year** (50.2%), when 25.1% of them buy once every 6 months to a full year, and the remains buy more frequently (24.7%).

**Table 1**  
**Samples**

<i>Criteria</i>	<i>Description</i>	<i>Frequency</i>	<i>Percentage</i>
Gendre	Male	196	41.7
	Female	272	57.9
	Other	2	0.04
Age	<18	12	2.6
	18-30	222	47.2
	31-45	192	40.9
	46-60	42	8.9
	>60	2	0.4
Level of education	High school	84	17.9
	Bachelor	190	40.4
	Postgraduate	174	37.0
	Other	22	4.7
Marriage status	Single	162	34.5
	Married, no children	32	6.8
	Married, with children	266	56.6
	Divorced	6	1.3
	Other	4	0.9
Income	Under VND 4.5 million	202	43.0
	From VND 4.5– under VND 7,5 million	182	38.7
	From VND 7,5 – under VND 11 million	58	12.3
	From VND 11 – under VND 15 million	16	3.4
	Above VND 15 million	12	2.6
Buying frequency	More than once a year	236	50.2
	Once every 6 months - a year	118	25.1
	Once every 3-6 months	88	18.7
	Once every 1-3 months	22	4.7
	Monthly	6	1.3

*Source:* Paper's research, 2017

To examine scales and frameworks, the analysis is conducted in the following process:

1. Preliminary research on scale and its reliability, measured by Cronchbach Alpha and Exploratory Factor Analysis in SPSS;
2. Examine framework with CFA in AMOS;
3. Linear regression in SPSS.

## 4. FINDINGS

### 4.1. Evaluating preliminary scale

By using SPSS 20, the result about the reliability of scale (Cronbach Alpha) is illustrated in Table 2.

**Table 2**  
**Scale's Cronbach Alpha**

<i>STT</i>	<i>Scale</i>	<i>Observable variable</i>	<i>Cronbach Alpha</i>
1	Functional Benefit (LICD)	5	0.878
2	Convenience Benefit (LITL)	4	0.827
3	Enjoyment Benefit (LIHT)	5	0.843
4	Economical Benefit (LIKT)	5	0.881
5	Government Management Activities (QLNN)	6	0.936
6	Buying Intention (YDM)	6	0.846

*Source:* Paper's research, 2017

Based on the aforementioned result, the framework's scales are above 0.6. All the observed variables are not eliminated and can be used to analyse the next factor.

Moreover, Exploratory Factor Analysis (EFA) is applied by combining two methods: Principak Component and Pattern Matrix. The result indicates that the factor loading figure from observed variables are almost above 0.5; and two variable types are eliminated, which are LITL4 and YDM1 because their factor loading figure are below 0.5.

**Table 3**  
**Rotated component matrix**

<i>Factor</i>	<i>Item</i>	<i>Factor</i>					
		<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
QLNN	QLNN3	0.880					
	QLNN4	0.878					
	QLNN2	0.867					
	QLNN5	0.864					
	QLNN1	0.808					
	QLNN6	0.798					
LICD	LICD2		0.875				
	LICD4		0.854				
	LICD3		0.846				
	LICD1		0.646				
	LICD5		0.557				

*contd. table 3*



Factor	Item	Factor					
		1	2	3	4	5	6
LIK T	LIK T5			0.827			
	LIK T3			0.730			
	LIK T4			0.728			
	LIK T2			0.722			
	LIK T1			0.542			
YDM	YDM4				0.849		
	YDM5				0.747		
	YDM6				0.741		
	YDM3				0.724		
	YDM2				0.546		
LIHT	LIHT4					0.763	
	LIHT2					0.724	
	LIHT3					0.674	
	LIHT1					0.600	
	LIHT5					0.579	
LITL	LITL2						0.829
	LITL1						0.775
	LITL3						0.567

Source: Paper's research, 2017

The EFA result is:  $KMO = 0.874 > 0.5$ ,  $sig = 0.00 < 0.05$  and variance = 62.656, meaning that the data is suitable to analyse factors. Moreover, the result indicate six factor groups, which is suitable with the proposed hypotheses.

#### 4.2. Model examination

The CFA method in analysing SEM has superior advantages in comparison to other traditional methods such as Correlation coefficients method, Multitrait - Multimethod,... (Bagozzi & Foxali, 1996). Therefore, in this study, CFA method is applied to examine the appropriation of this model with the acquired data from customers, after preliminary analysis with Cronbach Alpha and EFA in the previous sections.

The CFA result examines the appropriation of model with market data: Chi-square=875.033; df=195; P= 0.000<0.05; Chi-square/df = 4.487<5; GFI= 0.859  $\approx$  0.9; TLI =0.866  $\approx$  0.9; CFI = 0.887  $\approx$  0.9; RMSEA= 0.086  $\approx$  0.9. Therefore, according to Kettinger & Lee (1995) and Bentler & Bonett (1980), although the exact figures are not completely ideal, the analysis satisfy the standardised condition when the fractions are rounded. This ensures the appropriation between model and market data (CMIN/df <5; GFI, TLI, CFI  $\geq$  0.9; RMSEA  $\leq$  0.08).

#### 4.3. Hypotheses examination

As proposed from introduction phase, the overall model include eight hypotheses. H1 to H4 are hypotheses about the relationship between LICD, LITL, LIHT, LIKT factors to YDM regardless of the effects from

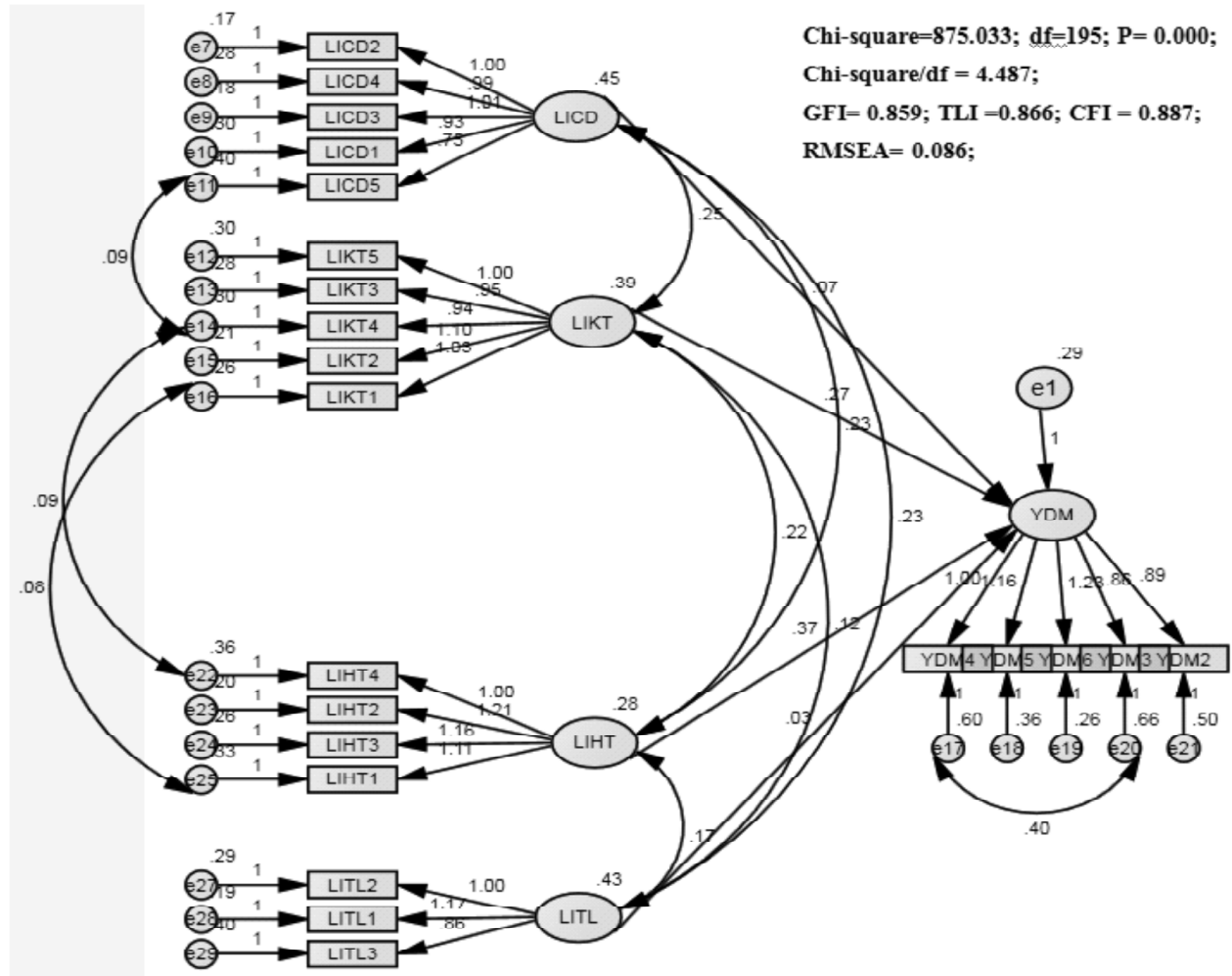


Figure 2: Model examination

Source: Paper’s research, 2017

moderating variable - QLNN. Besides, H5 to H8 hypotheses evaluate the relationship between the aforementioned factors under the influence of moderating variable. The tables below are the result from regression analysis under two circumstances: (i) Model 1 - without moderating variable effects and (ii) Model 2 - with the effects from moderating variable.

**Table 4**  
**Result of linear regression analysis: the relationship between benefit cognition, government management activities and buying intention**

Model	R	R <sup>2</sup>	R <sup>2</sup> adjusted	S.E
1	.508a	.258	.252	.65988
2	.555a	.308	.294	.64113

Source: Paper’s research, 2017

**Table 5**  
**Coefficients of samples' regression model**

Model		Unstandardized coefficients		Standardized coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.760	.190		4.006	.000
	LICD	.028	.060	.025	.470	.638
	<b>LIHT</b>	<b>.314</b>	<b>.065</b>	<b>.263</b>	<b>4.795</b>	<b>.000</b>
	LIKT	.277	.061	.244	4.551	.000
	LITL	.085	.048	.082	1.787	.075
2	(Constant)	1.243	.214		5.818	.000
	<b>LICD</b>	<b>.694</b>	<b>.274</b>	<b>.607</b>	<b>2.533</b>	<b>.012</b>
	LIHT	-.347	.280	-.290	-1.239	.216
	LIKT	-.187	.262	-.164	-.714	.475
	LITL	.156	.204	.150	.766	.444
	QLNN*LICD	-.044	.054	-.287	-.812	.417
	QLNN* LIHT	-.182	.069	-1.036	-2.629	.009
	QLNN* LIKT	.176	.073	.935	2.431	.015
	QLNN*LITL	.116	.065	.617	1.802	.072

Source: Paper's research, 2017

- The benefit between benefit cognitions, including: (i)LICD, (ii)LIHT, (iii)LIKT, (iv) LITL to YDM TPCN (hypotheses examination H1-H4):

As can be seen from the regressino analysis of model 1 from table and 5, the benefit cognition factors can only explain 25.8% the variability of YDM, while LIHT and **LIKT - the newly discovered factor** - can affect significantly to buying intention with Sig factor below 0.05. Meanwhile, LICD and LITL factors affect negatively to YDM at 95% with Sig factor above 0.05. Therefore, H3 and H4 hypotheses are confirmed and H1 and H2 are eliminated. To be more specific:

- LICD affect negatively to YDM (Eliminate H1);
- LIHT affect positively to YDM (Confirm H3);
- LIKT affect positively to YDM (Confirm H4);
- LITL affect negatively to YDM (Eliminate H2);

The linear regression equation about buying intention according to benefit cognition factors is:

$$\text{YDM} = 0.314 \text{ LIHT} + 0.277 \text{ LIKT}$$

- The relationship between benefit cognition factors, including: (i)LICD, (ii)LIHT, (iii) LIKT, (iv) LITL and YDM of food supplements under the influence of moderating factor - QLNN (hypotheses H5-H8):

The model analyse the effects of QLNN to the relationship between benefit cognition variables and YDM by creating new variable that is the integral of QLNN with all the benefit cognition variables: QLNN\* LICD; QLNN\* LIHT; QLNN\* LIKT; QLNN\* LITL.

By looking at the result from regression analysis in table 4 and 5, the benefit cognition factors - under the influence of QLNN - has explained 30.8% the variability of YDM. Specifically, under the influence of QLNN, LICD has positive impact to YDM (with sig = 0.000<0.05); while **LIKT and LIHT no longer affect positively** to YDM with negative beta index and sig>0.05. This finding is completely different to the result from regression analysis regardless of the influence from QLNN. In the case of LITL, the result cannot show its positive impact on YDM. On the other hand, two out of four variables that represent the influence of moderating variable to the relationship between benefit cognition - QLNN\* LIHT; QLNN\* LIKT - have expressed their influence with sig<0.05. From the aforementioned result, it can be concluded about hypotheses as below:

- QLNN has positive impact to the relationship between LICD and YDM (accept H5);
- QLNN has negative impact to the relationship between LIKT and LIHT to TPCN (eliminate H7, H8);
- QLNN has no impact to the relationship between LITL and YDM TPCN (eliminate H6);

The linear regression equation according to NTLI factor under QLNN effects is:

$$\text{YDM} = 0.694 \text{ LICD} - 0.182 \text{ QLNN} * \text{LIHT} + 0.176 \text{ QLNN} * \text{LIKT}$$

## 5. RESEARCH DISCUSSION AND LIMITATION, AND FUTURE RESEARCH ORIENTATION

### • *Discussions and implications for businesses and government*

This research has built the frameworks with two important additional variables, which are LIKT (independent variable) and QLNN (moderating variable); test hypotheses and adjust scales to match with food supplement market in Vietnam. The notable points are:

- (i) When QLNN is not considered, only two factors affect positively to YDM which are LIHT and **LIKT - the newly discovered factor.**
- (ii) When QLNN is considered, LICD factor affect positively to YDM.

### **Recommendations for government bodies**

Government management is an important moderating factor that can affect the relationship between benefit cognition and food supplements buying intention. The government should focus on regulation on food supplements (distinguished between drug and food), the consumption of food supplements must be prescribed, promotional activities of food supplements must be under strict supervision, the legal frame should be clear, qualified; and the effects of food supplements should be recognised by authorised institutions. Besides, these legal factors should be communicated clearly to consumers and companies in this industry.

### **Recommendations for companies**

There are numerous problems in government management activities, especially the inefficient communications about legal terms to companies and consumers. Therefore, in short term, LICD factor is not fully recognised by consumers and has not affect positively to YDM yet; meanwhile, LIHT and LIKT affect significantly on YDM and companies should allocate their resources to focus on these two factors.

Specifically, they can promote communication activities about economical benefits (reduce prospective hospitalisation fees by consuming food supplements, etc) and enjoyment benefits (food supplements have delicious flavour, etc.).

In the long term, with improved context in government management activities according to the aforementioned recommendations, companies should switch to focus on LICD solutions. Specifically: (i) improve functions and utilities of product to better satisfy consumers' needs; (ii) invest in more efficient communication activities, imply in factors such as: minimize risk of hospitalisation, improve health in general, etc.

### **Limitations and future research orientations**

Firstly, the samples are located only in Hanoi with food supplement as the research product. The different samples in different areas and product types can have different impact regarding benefit cognition and government management activities.

Secondly, only four level of benefit cognitions are included in this research. If the level and expression are expanded, the benefit cognition factors can result in better findings. This is also a prospective research orientation for this paper.

## **REFERENCES**

### ***Foreign source***

- Ajzen I. & Fishbein M. "Belief, attitude, intention and behavior. An introduction to theory and research" (1975).
- Arai, "Global view on functional foods: Asian perspectives," *British Journal of Nutrition*, 88, Suppl. 2, S139–S143 (2002).
- Bagozzi, R.P. (1996), "Measurement in marketing research: Basic principles of questionnaire design".
- Bentler, P.M. & Bonett, D.G. (1980), Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88, 588–606.
- Childs, N.M. & Poryzees, G.H., "Food that help disease: consumer attitude and public policy implications", *British Food Journal* (1998).
- Dabholkar, P.A. Consumer Evaluations of New Technology-Based Self-Service Options: An Investigation of Alternative Models of Service Quality. *International Journal of Research in Marketing* 13 (1), 29-51 (1996).
- Dowd & Burke, "The influence of ethical values and food choice motivations on intentions to purchase sustainably sourced foods," *Appetite*, 69: 137–44 (2013).
- Dodds, W. B., & Monroe, K. B."The effect of brand and price information on subjective product evaluation. *Advances in Consumer Research*", 12, 85-90 (1985).
- Joowon Choi, Aejoon Lee và Chihyung Ok "The effects of consumers' perceived risk and benefit on attitude and behavioral intention: a study of street food" (2013).
- Kettinger, W. J., Lee, C. C. and Lee, S. (1995), "Global Measures of Information Services Quality: A Cross-National Study," *Decision Sciences* (26:5), pp. 569-588.
- Menrad, Weststrate *et al.*, "Market and marketing of functional food in Europe," *Journal of Food Engineering*, 56, 181–188 (2003) & (2002).
- Meuter, M.L., Ostrom, A.L., Roundtree, R.I., Bitner, M.J., 2000. Self-Service Technologies: Understanding Customer Satisfaction with Technology-Based Service Encounters. *Journal of Marketing* 64 (3), 50-64.

- Moon & Kim, "Extending the TAM for a World-Wide-Web context" (2001).
- Nina Urala and Lisa Lahteenmaki, "Reasons behind consumers functional food choices," *Nutrition & Food Science*, Volume 33, Issue 4, pp. 148-158 (2003).
- Mr. Shamal S, Dr. Bijuna C Mohan, "Functional Food Acceptance in India: Socio-Demographic and Lifestyle Determinants" (2015).
- Niva, M. All foods affect health: "Understandings of functional foods and healthy eating among health-oriented Finns" (2007).
- Petrovici D, Ritson C. "Factors influencing consumer dietary health preventative behaviours". *BMC Public Health* (2006).
- Samin Rezvani, Goodarz Javadian Dehkordi, Muhammad Sabbir Rahman, Firoozeh Fouladivanda, Mahsa Habibi1 & Sanaz Eghtebasi "A Conceptual Study on the Country of Origin Effect on Consumer Purchase Intention" (2012).
- Sookeun Byun "Exploring consumer perceptions of biometric access at automatic teller machines" (2007).
- Topics of professional interest *Journal of the the American dietetic association* (2011).
- Urala, N., & Lahteenmaki, L. Attitudes behind consumer's willingness to use functional foods. *Food Quality and Preference* (2004).
- Verbeke, W. Functional foods: Consumer willingness to compromise on taste for health? *Food Quality and Preference* (2006).
- Winarno, F. G., & Allain, A. "Street foods in developing countries: Lessons from Asia. *Food, Nutrition and Agriculture*", 1(1), 11-18 (1991).

***Domestic sources***

- Đặng Thị Thùy Dung, "Nghiên cứu các yếu tố ảnh hưởng đến ý định sử dụng dịch vụ mua hàng điện tử qua mạng của người tiêu dùng tại thành phố Đà Nẵng" (2014)
- Moore, Thực phẩm chức năng, người tiêu dùng và hoạt động quảng cáo (2014)
- Nguyễn Thị Kim Vân và Quách Thị Khánh Ngọc, "Các nhân tố ảnh hưởng đến thái độ và ý định mua hàng trực tuyến tại thành phố Nha Trang" (2013)