The Impacts of Consumers' Familiarity on Their Behavioral Intentions towards Frozen Pangasius Products: A Study in Ho Chi Minh City, Vietnam

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Abstract

The paper aims to examine the impacts of product familiarity on the intention of customers in purchasing frozen pangasius products in Ho Chi Minh City, Vietnam. Quantitative surveys were conducted, in which 300 valid responses were used for data analysis. Based on previous studies in consumer behaviors, five hypotheses to test the effects of familiarity on behavioral intentions of purchasing pangasius products were proposed, which were implemented by structural equation modeling (SEM) technique. The data analysis showed that three independent factors (i.e. product knowledge, product involvement, and social-environmental impacts), except information approach, are positively correlated with product familiarity, which also plays an essential role in identifying the behavioral intention toward pangasius products. Furthermore, the empirical results also demonstrated that gender and age have no impact on consumers' behavior intentions. The results from this research could benefit for the aquaculture industry, especially business enterprises. Furthermore, this study provides a wide view to recognize the influences on behavior intentions towards frozen pangasius products in Ho Chi Minh City, Vietnam.

Keywords: pangasius products, behavioral intentions, product familiarity, knowledge, involvement

1. Introduction

1.1 Introduce the Problem

With the trend of urbanization, people have become busier earning for their living, especially those living in big cities. Therefore, their time for cooking is usually shortened than before and using frozen or canned products has become one of their most favorite choices since it can bring time utilization to consumers. When it comes to frozen aquaculture products, it can be seen that they have become more and more familiar to many households in dynamic cities and contribute to the diversity of the food products for Vietnamese consumers. The frozen-food market has developed from 20-40% each year, in which products from pangasius are among the most popular frozen ones favored by consumers. According to the Sales Department of Big C Supermarket, within the first two months of 2012, the consumption of pangasius products increased 20% compared to the same period last year. Furthermore, in recent years, the number of supermarkets and convenient stores in Ho Chi Minh City has been growing rapidly with the jump of both domestic and foreign investments. Up to December 31, 2011, there were about 140 supermarkets and more than 500 convenient stores in Ho Chi Minh City. They have become one of the fastest and most convenient channels operated to bring products closer to consumers; therefore, they can be the appropriate places for food-processing firms to introduce their products to domestic consumers. In addition, with the population of more than 86 million people, the Vietnamese domestic market becomes a very promising segment for food-processing firms in general and aquaculture products processing firms in particular.

1.2 Explore Importance of the Problem

As mentioned above, Ho Chi Minh City is one of the largest and most dynamic cities in Vietnam. The bustle at work every day makes people now prefer something fast and convenient but still healthy and nutritious for an affordable price; thus, frozen food has become popular in many supermarkets in the city recently. Although researchers have determined the predominant driving factors of customer behavior intention in many commodities such as mobile services (Guo & Barnes, 2011; Shin & Shin, 2011), or vegetable products (Kamphuis et al., 2006; Kamphuis et al., 2007; Sabbe, Verbeke, & Van Damme, 2008), there are a few studies

about a specific kind of food products like pangasius. Therefore, this study aims to analyze what factors influence on the familiar feelings among consumers in Ho Chi Minh City towards frozen pangasius products and how the level of familiarity could affect their behavioral intentions. Important factors, which could dominate in predicting consumers' behavior such as product knowledge, product involvement, were also incorporated. Then, several previous studies will be reviewed in order to build up the research model with some hypotheses. Based on the results, aquaculture food-processing firms can enable to improve their business strategies to enhance customers' feeling of familiarity towards those products and attract their intention of purchasing. Besides, this study can also help firms that pay more attention to increasing the market shares. The next section presents the research methodology and then explain research results, which are analyzed by structural equation modeling. Finally, the final section discusses the main results together with implications and conclusions.

2. Literature Review

2.1 Consumer Familiarity

According to Sirgy (1981), product familiarity has become a fresh variable in the study of consumer behavior. Marks and Olson (1981) defined "product familiarity is conceptualized in terms of the cognitive structures of knowledge concerning the product stored in memory. Such knowledge could have been derived from direct or indirect experiences." There are two suggested major approaches for organizing and measuring product familiarity. One was measured by understanding "how much a person knows about the product" and the other is "how much a person thinks he/she knows about the product" (Park, 1981). These two approaches could be used separately or associatively. Besides, some other studies also used product familiarity to explain many consumer-related phenomena such as message acceptance (Marks & Olson, 1981), choice of decision rule (Parks, 1976; Tan & Dolich, 1981), product preference and purchase intention (Marks & Olson, 1981), product satisfaction and new learning (Johnson & Russo 1984). However, there are some conflicts in using product familiarity as an explanatory variable. Due to the ambiguity shown in the conceptualization and measurement of product familiarity, it might cause the lack of clarity of the precise role of product familiarity as a determinant of consumer behavior (Sirgy, 1981).

Besides, according to Sujan and Bettman (1989), product and brand categories are graphically represented in consumer memory. Many consumer behavior studies have shown that the higher the familiarity of a specific product is, the more outstandingly the memory presentation about that product would be differentiated (Johnson & Russo, 1984; Coupey et al., 1998). Another study has also determined the crucial role of product familiarity—a consumer's previous experience with the future product feature—in affecting new-product learning and evaluation (Alba & Hutchinson, 1987).

Obviously, the concept of product familiarity is considered as an essential explanatory variable in many previous studies (Johnson & Russo, 1984; Punj & Staelin, 1983; Bettman & Park, 1980). However, the problem here is that few studies have pointed out exactly what constructs constitute familiarity. The terms of product use, knowledge structure, and involvement have all been explored in line with the term familiarity (Zaichkowsky, 1985).

2.2 Consumer Behavior and Behavior Intention

Consumer behavior is defined as "the study of individuals, groups, or organizations and the processes they use to select, secure, and dispose of products, services, experiences, or ideas to satisfy needs and the impacts that these processes have on the consumer and society" (Kuester, 2012). According to Armstrong et al. (2000), customer behavior research is mostly based on consumer purchasing behavior, where the customers are playing the three different roles of user, payer, and buyer.

Behavioral intention is one type of consumer behavior in purchasing one typical product. It is defined as a person's perceived likelihood or "subjective probability that he or she will engage in a given behavior" (Committee on Communication for Behavior Change in the 21st Century, 2002, p. 31). Moreover, Ajzen (1991) argued that behavioral intention reflects how hard a person is willing to try and how motivated him or her to perform his or her behavior. In addition, Perner (2008) argued that behavior would occur either in individuals or the context of a group that influences such things like what kinds of clothes a person wears or what a person should behave in an organization. For another example, aggressive marketing of high-fat food or easy credit may lead to have serious consequences to the national health and the economy, respectively.

2.3 Hypothesis Development

2.3.1 The Relationship between Product Knowledge and Product Familiarity

The knowledge might come from actual product purchase or use in the past or from secondary sources. Past

experiences of typical products could possibly affect the familiarity feelings of customers. The spread of related news or information could also positively impact the familiarity among consumers. It is commonly assumed that there is a strong relationship between product familiarity and consumer knowledge (Bettman & Park, 1980; Johnson & Russo, 1984). Therefore, the hypothesis was developed as follows:

H1: Consumer's product knowledge has a positive effect on product familiarity.

2.3.2 The Relationship between Information Approach and Product Familiarity

Familiarity has been the central of empirical work in consumer research, which are related to information acquisition (Bettman & Park, 1980) or reaction to advertising (Marks & Olson, 1981). This could be analyzed by understanding the way people use to approach the information about the products or by which ways the product information could be delivered to its customers. Thus, the following hypothesis was conducted:

H2: Information approaching has a positive impact on product familiarity.

2.3.3 The Correlation between Product Involvement and Product Familiarity

For product involvement, McQuarrie and Munson (1987) develop five criterion measures adapted from Zaichkowsky (1985) and Laurent and Kapferer (1985) in order to gain deeper insights of involvement consequences. In addition, the relationship between familiarity and product involvement was tested by the study about the impact of familiarity on decision confidence, decision time, satisfaction, and use of other attributes (Park & Lessig, 1981). They found the noteworthy differences among low, medium, and high product familiarity subjects on the use of these decision heuristics and concluded that the subjects' level of involvement with the product category could have contributed to the results. The level involvement could vary between personal involvement and outside effects, which are from relatives, friends, or social media. In order words, product involvement is said to have an influence on product familiarity, as represented in the hypothesis below:

H3: Product involvement would have a positive impact on product familiarity.

2.3.4 The Relationship between Social-Environmental Impacts and Product Familiarity

Social-environmental impacts include human-related factors (i.e. other customers' behaviors) and environment-related factors (i.e. marketplace condition) (Kamphuis et al., 2006). Several studies have pointed out a positive impact of socio-environmental factors such as social supports from family and other persons on food intake (Kamphuis et al., 2006; Kamphuis et al., 2007; Wardle et al., 2004). In addition, the behavior of customers might affect the perception of a typical customer. In addition, the conditions at marketplaces could also impact on customers' frequency of visiting product counters. If the customers are attracted by those good conditions, they will feel familiar with the product even though they do not purchase it (Kamphuis et al., 2006; Kamphuis et al., 2007). Thus, a hypothesis is presented:

H4: Social-environmental factors could have a positive impact on product familiarity.

2.3.5 The Relationship between Product Familiarity and Behavioral Intention

According to McCarthy and Perreault (1984), one of the main objectives of a typical company is trying to satisfy its customers. Therefore, all activities will focus on the company's current customers and on attracting new ones. In order to develop its customer base, a company will also pay particular attention to consumers at large—its potential customers. In particular, it will look at consumers' wants, needs, and purchase intentions; all of which then will become valuable information for the company. As Armstrong et al. (2000) argued, purchase intentions are likely to provide better forecasts of future sales than a simple extrapolation.

Product familiarity could be used as a determinant of consumer behavior. According to Marks and Olson (1981) and Sabbe et al. (2008), the effect of product familiarity was related to message acceptance, product preference, and purchase intention. Product familiarity is also considered as an important role in the selection of decision rules (Tan & Dolich, 1981). In addition, Marks and Olson (1981) also stated that the more the subjects felt familiar with the product, the more likely they will recommend their purchase to other people. Basing on the previous literature, we conduct a hypothesis as follows:

H5: Product familiarity would have a positive impact on customer behavioral intention of purchasing.

2.4 Research Model

Based on those research variables as well as the hypotheses above, the following research model as well as hypotheses are conducted as presented in Figure 1. Furthermore, some demographic factors were also included to control demographic characteristics of correspondents.
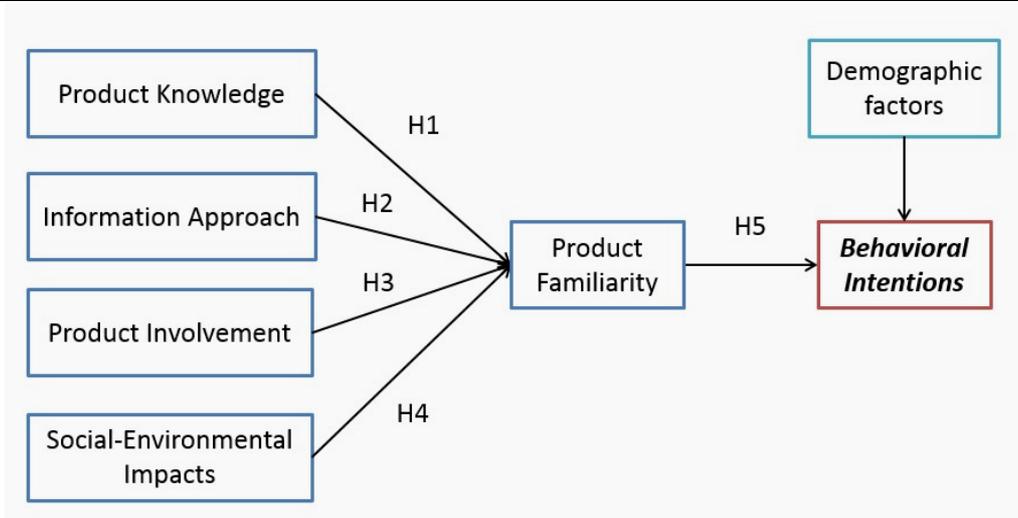
Figure 1. The research model

3. Methodology

3.1 Data Collection

In order to test our hypotheses, a survey questionnaire was developed and distributed in Ho Chi Minh City. We asked respondents who had known pangasius products and experienced in the last 12 months. A survey instrument was designed to ask interviewees if and how their behavioral intentions were affected by product familiarity, product knowledge, information approach, product involvement, and social-environmental factors.

The questionnaires include 29 questions about the product familiarity and behavioral intention towards frozen pangasius products among consumers in Ho Chi Minh City. We used 5-point Likert Scale from (1) *Strongly Disagree* to (5) *Strongly Agree* on the questionnaires to evaluate the items. The questionnaire also includes the demographic questions (age, income, career, gender and the frequency of product use. In preparing this study, we conducted a pilot test with 80 respondents to detect the weaknesses of our questionnaire in both Vietnamese translation and structure. Then, feedback from target respondents was collected so that the improvement of the questionnaires can be done. Data were collected by conducting both web-based and paper-based surveys with confident sampling methods, in which respondents were asked for filling in the survey. The survey was conducted in October of 2013. A total of 334 samples were received. After eliminating duplicate responses as well as those with low standard deviation in Likert Scale points (i.e. below 0.3), a total of 300 valid responses were included in the sample for analysis.

3.2 Variable Measurement

The independent variables are adapted from Johnson and Russo (1984), Bettman and Park (1980), McQuarrie and Munson (1987), Zaichkowsky (1985), and Kamphuis et al. (2006). Meanwhile, the indicators of the two dependent variables are adapted from Johnson and Russo (1984), Marks and Olson (1981), and Sabbe et al. (2008). The survey questions in details are illustrated in Table 1.

3.3 Data Analysis Instrument

In addition, we use two software including IBM SPSS Statistics 21 and SPSS AMOS 21 to analyze the dataset. Firstly, Exploratory Factor Analysis (*EFA*) is used to test the reliability of each factor and determine should the research model has any new extracted factors. Next, we use Confirmatory Factor Analysis (CFA) to evaluate the model fit from the factor structure extracted in EFA. Finally, to test the causal relationship, we explore Structural Equation Modeling (SEM), which implements the purposes similar to multiple regressions but in a more powerful method (Hair et al., 2010).

Table 1. Constructs and item measurements

Construct	Code	Measurement	References
		Pangasius is…	Johnson and Russo (1984)
Product Knowledge	PK1	A nutritional food	
	PK2	Delicious and being favored by most consumers	
	PK3	Can be stored for a long time in fridge	
	PK4	A safe food because it is free from preservative	
Information Approach	PK5	Informative packaged.	Bettman and Park (1980)
	IA1	Your friends and your family already mentioned about this product	
	IA2	You know this kind of product because of the supermarket promotion	
	IA3	You used to see this kind of product at frozen food counter in many supermarkets	
	IA4	You used to see this kind of product at many Trade Fairs	
Product Involvement		You love to use frozen pangasius products	McQuarrie and Munson (1987); Zaichkowsky (1985)
	PI1	Your family usually uses frozen pangasius products in daily meals	
	PI2		
		You used to give your friends and relatives this kind of product as a gift.	
	PI3		
		You usually store frozen pangasius products in my fridge	
Social-Environmental Impacts	PI4	You have seen many people buy frozen pangasius products	Kamphuis et al. (2006)
	SE1	You have seen your friends and your relatives using that kind of product.	
	SE2	You have seen many people choosing this kind of product at supermarket or convenient store	
	SE3	Frozen pangasius products are always at easy-to-be-seen location in most supermarkets	
	SE4	You used to be attracted by the images or advertising panels of frozen pangasius products in supermarket.	
Product Familiarity	SE5	You know differently of frozen products from pangasius	Johnson and Russo (1984); Marks and Olson (1981)
	PF1	This is the top-of-mind when you think about frozen food.	
		You have tried various kinds of that product	
	PF2	You know how to cook it	
		You know many different brand names of that product	
	PF3		
	PF4	It did not take you much time to decide which one to buy when you purchase frozen pangasius products	
Behavioral Intentions	PF5		
		You will put it as your priority in purchasing food	Sabbe et al.

PF6	You will stay loyal to frozen pangasius products even when there is something better.	(2008)
BI1	In the future, you will only buy frozen pangasius products from familiar brand names	
BI2		
BI3		
BI4	You will only buy what others recommend.	
BI5	You will introduce this kind of product to others	

4. Data Analysis and Results

4.1 Sample Demographic

Table 2. Sample demographic

Factors	Items	Frequency	Percentage (%)
Gender	Male	95	31.7
	Female	205	68.3
Age	18-25 years old	207	69
	26-35 years old	48	16
	Over 35 years old	45	15
Income	Under 5 million VND per month	179	59.7
	5-10 million VND per month	67	22.3
	11-20 million VND per month	34	11.3
Occupation	More than 20 million VND per month	20	6.7
		169	56.3
	Student	115	38.3
	Officer	16	5.3
	Housewife		

Among 300 responses collected, there are 68.3% females and 31.7% male from different age ranges, occupation, and financial condition. Therefore, these responses could partly reflect the differences in perception, feelings, and psychology of respondents. The correspondents of ages 18-25 (69%) accounted for the biggest proportion of the sample. Additionally, nearly 60% of the respondents' income were under 5 million VND per month, followed by the range from 5 to 10 million VND per month. With occupation, it can be observed from the table above that over a half of survey participants were students (e.g. high school, university, college students).

4.2 Main Survey Results

4.2.1 Reliability Test and Factor Analysis

Firstly, Cronbach's alpha is used to test whether each item of each factor is reliable or not. In order to have a reliable data, Cronbach's alpha should be above 0.7; however, values above 0.8 are preferable (Hair et al., 2010; Pallant, 2011). Furthermore, the Corrected Item-Total Correlation values shown in the Item-Total Statistics should be greater than 0.3 (Pallant, 2011). Therefore, all the items used in this study are reliable and preferable (see Table 3).

Table 3. Results of the reliability test

Construct	Measurement Item	Cronbach's α	Correlated Value Range	Number of Items
Product Knowledge	PK1, PK2, PK3, PK4, PK5	0.735	0.409–0.563	5(5)
Information Approach	IA1, IA2, IA3, IA4	0.882	0.655–0.791	4(4)
Product Involvement	PI1, PI2, PI3, PI4	0.805	0.588–0.630	4(4)
Social-Environmental impacts	SE1, SE2, SE3, SE4, SE5	0.818	0.593–0.753	5(5)
Product Familiarity	PF1, PF2, PF3, PF4, PF5, PF6	0.868	0.631–0.703	6(6)
Behavioral Intention	BI1, BI2, BI3, BI4, BI5	0.843	0.612 – 0.689	5(5)

Note. Initial Items (Final Items).

Secondly, we come to EFA test. According to Hair et al. (2010), KMO value must be above 0.5 and significant result must be below 0.05. In addition, factor loadings of each item in Pattern Matrix are preferable if it is greater than 0.5. In our case, the KMO value (0.779) and significant results ($p<0.001$) are appropriated after eliminating some invalid items. As a result, the KMO value changed to 0.777, with all indicators exceed the threshold of 0.5 in outer loading. The final results of EFA analysis are reported as follows:

Table 4. Exploratory factor analysis results

Item	Factor					
	PF	BI	IA	SE	PI	PK
PF5	.781					
PF3	.748					
PF2	.748					
PF4	.710					
PF6	.708					
PF1	.663					
BI4		.755				
BI2		.751				
BI3		.736				
BI1		.702				
BI5		.656				
IA2			.868			
IA1			.842			
IA3			.827			
IA4			.703			
SE2				.873		
SE1				.741		
SE3				.709		
SE4				.644		
PI1					.744	
PI2					.730	
PI4					.717	

PI3	.667	
PK1		.712
PK2		.664
PK4		.645
PK3		.556

Note. Extraction Method: Principal Axis Factoring.

Rotation Method: Promax with Kaiser Normalization.[a]

[a] Rotation converged in 5 iterations.

4.2.2 Confirmatory Factor Analysis (CFA)

An initial analysis identified inadequate fit indices with coefficients among some variables. To adjust the model, we add covariance between some errors and remove those variables. The table below shows the initial and final fit index of the model.

Table 4. Initial and final index off it of the model

Index	Final analysis		Criteria	References
	Initial	Final		
Chi-squared/Degrees of freedom	1.708	1.262	≤ 2-5	
p-value	0.000	0.000	≤ 0.05	
GFI—Goodness-of-fit	0.881	0.916	≥ 0.9	Hair et al. (2010);
AGFI—Adjusted Goodness of Fit Index	0.856	0.896	≥ 0.8	Byrne (2010); Tabachnik &
CFI—Comparative Fit Index	0.928	0.976	≥ 0.9	Fidell (2001)
RMSEA—Root Mean Squared Error of Approximation	0.049	0.03	≤ 0.08	

Table 4 demonstrates the removal of non-significant relationships and the insertion of covariance led to a substantial improvement in the values of adjustment when compared to the original model proposed. This table shows the fit indices values which satisfied the minimum requirements recommended by Hair et al. (2010). Therefore, we can conclude that constructs used in this research satisfy the reliability and validity criteria.

4.2.3 Results of the structural model (SEM)

Table 5. Estimates of structural path coefficients

Path	P-value	Path Estimate	Result
Product Knowledge → Product Familiarity	**	0.144	Supported
Information Approach → Product Familiarity	0.177	-0.086	Not Supported
Product Involvement → Product Familiarity	*	0.122	Supported
Social-Environmental Impacts → Product Familiarity	*	0.115	Supported
Product Familiarity → Behavioral Intention	***	0.287	Supported
Age → Behavior Intention	0.148	-0.088	Not Supported
Gender → Behavior Intention	0.477	-0.046	Not Supported

Note. * denotes p< 0.1, ** denotes p <0.05, and *** denotes p < 0.01.

As can be seen from Table 8, Hypothesis 1, which proposed that product knowledge would have positive impacts on product familiarity, is confirmed. Hypothesis 2, which proposed that information approach would have positive impacts on product familiarity, is not confirmed because its p-value is above 0.1 at 90% of confident interval; therefore, a rejection of this hypothesis was conducted. In contrast, hypothesis 3 confirmed a positive impact of product involvement on product familiarity. Similarly, hypothesis 4 showed a significant relationship between social-environmental impacts and product familiarity. Besides, hypothesis 5, which proposed product familiarity would positively affect behavioral intention, was supported. Finally, demographic factors (i.e. age and gender) had no influence on the behavior intention, illustrated by their high p-values.

Besides, among the three factors, product knowledge, product involvement, and social-environmental factors, it can be seen that product knowledge has the strongest influence on product familiarity of customers with a path estimate value of 0.127; however, this value does not dominate the other impact power values. Furthermore, it should be noticed that product familiarity plays an important role in predicting consumers' behavior intention to buy pangasius products thanks to its high path estimate value (0.279). The final model in this study is showed in figure 2.
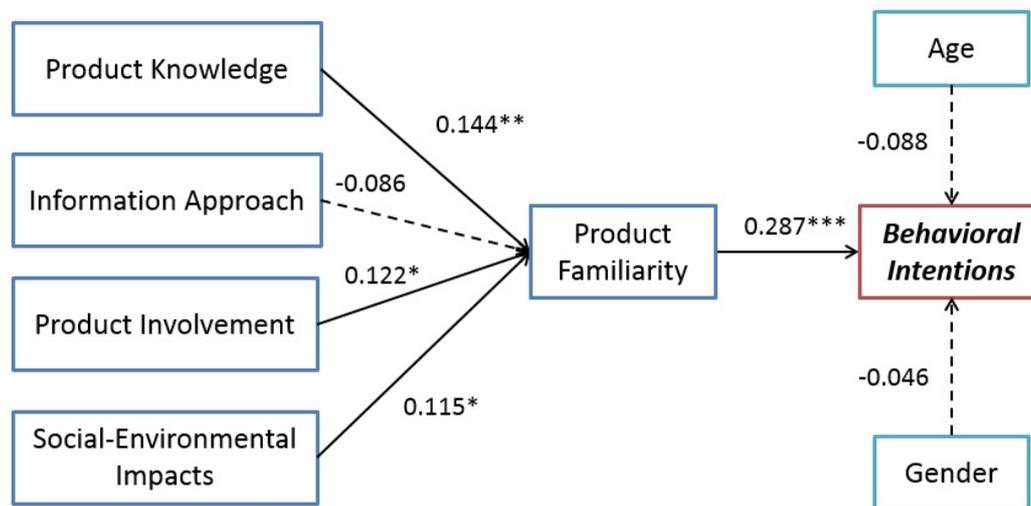

Figure 2. Final research model (*p<0.1, **p<0.05, and ***p<0.01)

5. Discussion

This study investigated the impact of product knowledge, information approach, product involvement, and social-environmental factors on product familiarity and consumers' purchase intention towards frozen pangasius products in Ho Chi Minh City. All the independent others than information approach were found to positively affect product familiarity, which in turn, has a significant impact on behavioral intention.

Firstly, this research found that product knowledge was positively associated with product familiarity towards frozen pangasius products. This finding is consistent with the initial hypothesis, meaning that the more people know about that product, the more likely they would use it. When consumers had usage experiences, they would be classified as high familiarity with that product (Park & Lessig, 1981).

Secondly, the way product information gets to consumers has no impact on their familiarity towards that product. This finding is inconsistent with our hypothesis. However, this situation could be explained in the context of Vietnamese market. Obviously, frozen foods have become more popular in Vietnam; however, there is almost no advertisement for frozen pangasius products on TV and some popular newspapers. Therefore, it would be difficult for consumers to approach information about those products.

In addition, the study results showed that product involvement has significant impacts on product familiarity. Product involvement shows how confident the consumers are when buying/using specific products and what level they could be affected by the others when making decision. Therefore, if they feel familiar with frozen

pangasius products, they will spend less time in purchasing/using the product and feel easy to choose an appropriated product type.

On the other hand, social-environmental factors also have positive effects on product familiarity. This finding is consistent with our initial prediction. This could be explained that consumers would feel more familiar with a typical product if they were provided information from other people (e.g. friends, relatives). Besides, consumers may also be attracted by one typical product in their usual shopping places through nice arrangement, large quantity, beautiful packages, or seeing many other people also buy that product. Once these positive feeling increases, the familiarity feeling also increases. Specifically, we find there is no difference in gender and age in purchasing intentions.

Finally, product familiarity plays an important role in predicting behavioral intention among customers as well. Consumers will be more confident in purchasing frozen pangasius products if they feel familiar with that product. Once they know a specific kind of product, its attributes, whether or not it is good for their health, or usage direction, they will feel safe when using it. Once the familiarity of consumer increases, the probability they would purchase it will increase as well.

6. Conclusion and Implications

6.1 Conclusion

This study is conducted to see what factors affecting product familiarity among consumers in Ho Chi Minh City, Vietnam towards frozen pangasius products and how the product familiarity can influence their behavioral intentions. Four independent factors were used to test their impact on product familiarity (i.e. product knowledge, information approach, product involvement, and social-environmental impacts). The statistics from 300 respondents showed a significant influence of familiarity feelings on the behavioral intention to purchase pangasius products. Based on this study result, producers in frozen pangasius industry can build their marketing and branding strategies to promote their products and gain more market shares.

6.2 Practical Implications

This study proved that consumers' familiar feelings about frozen pangasius products depend on their knowledge about those products. Thus, pangasius processing companies can conduct some strategies to enhance consumers' perception about their commodities. For example, food-processing firms should widely provide positive attributes of products such as healthiness, good taste, and safety through their marketing campaign. In addition, those firms should also create more chances for consumers to try their products because the more consumers believe in their experience, the more likely their familiarity towards frozen pangasius products will increase.

Furthermore, product involvement is considered as a crucial role in increasing product familiarity of consumers toward frozen pangasius products. Therefore, it is important that food-processing enterprises should clearly identify the focus of consumers' involvement. They need to know exactly what consumers consider to be personally relevant: a product or brand, a behavior, an event, a situation, an environment, or several of these together (Peter and Olson, 2011). Increasing the intrinsic self-relevance and improving consumer's situational self-relevance are also some essential ways to enhance the involvement of consumers and products.

This study also proved that social and environmental factors do have positive impacts on consumer familiarity towards frozen pangasius products. Therefore, creating the social trends and improving a shopping environment for frozen pangasius products are what the processing firms need to consider in order to capture the largest market shares. An appropriate way to conduct promoting frozen pangasius products is to focus on young consumers (university students and young officers) whom easily to be affected by social trends. Therefore, food companies should pay attention in creating advertisements with interesting and meaningful messages for teenagers or students. Besides, those companies can also offer some special product lines for a typical segmentation, which can provide enough energy and nourishing for university students. Last but not least, it is necessary for pangasius products to be tidily arranged in shopping places like supermarkets in order to catch consumers' attention more easily.

7. Research Limitations and Recommendation for Further Studies

This study has investigated only the determinants of product familiarity to find out their influences on the behavioral intention of pangasius products. Future research can add in the research model and includes some other determinants like social norms, perceived usefulness, and so forth. In addition, this study could also be conducted in some other big cities in Vietnam such as Hanoi, Danang, Cantho. The research could expand the area of study to gather more insights about the larger pangasius market.

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