THE CONSUMERS' INTENTION TO PURCHASE FOOD: THE ROLE OF PERCEIVED RISK

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ABSTRACT

Based on Theory of Reasoned Action, this study examines the effects of perceived risk on consumers' intention to purchase food in two situations: standard purchasing situation and a hypothetical food scare. Data were collected through a consumer survey conducted in Ho Chi Minh City (245 participants) and structural equation model approach is used to test hypotheses. Results indicate that attitudes have a positive effect on intention in two situations, perceived risk have a negative effect on intention in the case of a food scare. There are three risk-reducing strategies to reduce consumer perceived risk: "brand", "certificate", "and reference source". In addition, subjective norms have a positive effect on intention in the case of a food scare and subjective norms have a positive indirect effect via attitudes on intention in standard purchasing situation. The results provide an implication to the manager regarding the role of perceived risk and risk-reducing strategies in explaining the consumer' intention.

Keywords: Intention, TRA, Risk Perception, Food.

INTRODUCTION

Food is considered as a vital product that people consume daily in their meals. Due to the rapid development of science & technology, and the expansion of trade between regions and countries, food supply has become diverse and abundant. In spite of that, the issue of safety, hygiene and quality of food remains a complicated problem for the authorities as well as authentic companies and above all, a serious problem for consumers. Recently, the mass media has reported a wide range of information related to food safety, such as food insecurity: injecting tranquillizer into pigs before slaughtering, meat containing beta-adrenergic agonists, the antibiotic residues which are in excess of the allowed threshold, these all confuse consumers and cause damage to companies.

Currently, food insecurity issues are increasing at an alarming rate. This not only affects the development of agriculture and the business situation of food companies, but also threatens consumers' health. In the situation when food safety risks occur, risk perception plays an important role in explaining consumers' purchase intentions. In addition, it is difficult for consumers to recognize which food is safe or unsafe, which may leads to the increase of consumers' risk perception when choosing which food to buy.

There has been a wide range of studies in the world investigating consumer food choice behaviour, in which the aspect of food safety risk is emphasizes. However, the number of studies related to this topic in developing countries such as Vietnam is still relatively modest, only a few studies have addressed the risk-perception aspect of consumers when choosing fish products for daily meals, like studies carried out by Tuu & Olsen (2009:2012). However, these studies only examining normal situations while the occurrence of food safety incidents have not been

mentioned. Additionally, these studies have not considered the relationship between risk reduction strategies and risk perceptions in contexts which related to food safety. Hence, it is necessary to study how to reduce consumers' risk perceptions and the level of impact that risk perception has on customers' consumption intention in the Vietnamese market. Therefore, the main objective of this study is to determine the effect of risk perception on consumers' purchase intentions in situations when food safety incidents occur or not and the impact of risk reduction strategies on risk perception.

In Vietnam, pork is a popular dish in daily meals of every family. The price of pork is also modest compared to other types of meat; it is not too sensitive to risk and its risk is not too high. Besides, pork has been subject to several food safety incidents, so it is appropriate for the division of situations to conduct the research. For all the above reasons, pork is chosen to represent food in order to investigate consumers' purchase intention in the context of food safety risk.

CONCEPTUAL FRAMEWORK

Theory of Reasoned Action

The Theory of Reasoned Action (TRA) was proposed by Fishbein & Ajzen (1975). This theory assumes that an individual's behavior is determined directly by the intention of his or her behavior, the intention, in turn, is influenced by the attitude (the positive or negative evaluation when performing that action) and by subjective norms (feelings of social pressure to do or not to do that action). According to this theory, human behavior is a combination of behavioral belief and normative belief (Fishbein & Ajzen, 1975). Behavioral beliefs are beliefs in the outcomes of action, which produce positive or negative attitudes toward the behavior. Normative beliefs, on the other hand, relate to social pressure. As for behavioral intention, it is an estimate of the likelihood that he or she will engage in a given behavior (Thong & Olsen, 2012). According to Ajzen (1991), intention is considered as motivation to engage in a given behavior and it expresses an individual's expectations of their behaviors in a particular environment.

Although the TRA theory has been applied to explain the consumption intention in the food sector, the level of interpretation of the TRA is remained limited. In the context of food safety, some researchers have added risk perception to the model to increase the explanation for behavioral intention (Stefani et al., 2008). Stefani et al. (2008) suggest that in terms of consciousness, risk perception is viewed as belief in an outcome of a behavior, as for another approach emphasizing social and cultural processes, risk perception is considered as a structure which is separate from the belief in the outcome. The Theory of Planned Behavior (TPB) is developed from the TRA theory by adding a component of perceived behavioral control. Perceived behavioral control measures the level of confidence in an individual's ability to perform behavior (Lobb et al., 2007). However, in this study we select TRA because in Vietnam pork is a common and popular food, widely available and cheaper than other types of meat. For that reason, perceived behavioral control is not addressed.

Attitude

Behavioral attitude is defined as a psychological tendency expressed through the assessment of a particular object, such as a food product (Eagly & Chaiken, 1993). If a person is aware that the result of a behavior is positive, they will have a positive attitude to do it. In

contrast, they may also have negative attitudes if that behavior is judged as negative. Attitude is considered to be the main predictor of intention to purchase food, but the significance level of this correlation differs in each study (Scalco et al., 2017). In Vietnam, the correlation between attitude and intention to buy fish is in the range of 0.46 to 0.57 (Thong & Olsen, 2012; Tuu, 2015). Before further discussion, the following hypothesis is to be formulated.

> *H₁: Attitude has a positive effect on intention.*

Subjective Norms

Subjective norms refer to social pressure to perform or not to perform a behavior. Subjective norms may be influenced by relatives such as friends, family members, colleagues, doctors (Lobb et al., 2007). If the other involved people find that the behavior is positive and the individual is motivated to fulfil the expectations of those involved people, then there will be a positive subjective norm. If the other involved people consider the behavior to be negative and the individual wishes to satisfy the expectations of these people, then they may have a negative subjective norm. Subjective norms not only directly influence the intention (Lobb et al., 2007) but also indirectly influence the intention through the mediating role of attitudes (Bamberg et al., 2007; Tarkiainen & Sundqvist, 2005). Based on the above discussions, the following hypothesis is proposed.

> *H₂: Subjective norms have a positive effect on intention.*

> *H₃: Subjective norms have a positive effect on attitude.*

Perceived Risk

Risk perception related to food safety is considered as a crucial factor in explaining consumer behavioral intention. The development of the theory of risk perception in the field of buying behavior began in the 1960s. Cox (1967) argues that risk perception is a function of uncertainty and ultimate failure to meet its goal, the risk reduction can be achieved by increasing certainty or reducing the consequence. Conchar et al. (2004) indicate that in the theory of consumer behavioral, there has not been any widely accepted definition of risk perception and the definition of risk perception often differs according to research contexts. Dowling & Staeling (1994), for example, define risk perception as a negative and uncertain consequence of buying a product or service. Yeung & Morris (2001) suggest that risk perception is an individual's assessment of the probability of damaging consequences and the magnitude of those possible consequences.

Bauer (1967) states that consumer behavior is associated with risk, as consumers make purchases; they may receive positive or negative results which consumers can not anticipate. Risk perception has a considerable influence on buying decisions since consumers tend to avoid mistakes when choosing products rather than maximizing their utility (Mitchell, 1998). Many studies perceive risk perception as an independent variable and an intermediate variable which directly and indirectly affects purchase intention, such as Yeung & Morris (2001), Lobb et al. (2007). Most relationships between risk perception and buying intentions is negative, in other words, risk perception adversely affects the intention to buy food (Lobb et al., 2007).

In the area of food safety risk, Yeung et al. (2010) reveal that risk perception negatively influences the intention to buy food. Howerver, the findings of Klerck & Sweeney (2007)

indicate that risk perception which relates to health and quality aspects does not affect purchase intention of food but psychological risk perception, meanwhile, has a negative effect on buying intention. The research of Stefani et al. (2008) on intention to buy chickens in Italy suggests that risk perception indirectly impacts intention through the mediating role of attitudes presented in the TRA theory framework. Chen & Li (2007) also report similar results when attitudes are viewed as mediating factor between risk perception and purchase intention. Thus, the hypotheses are as follows:

H4: Perceived risk has a negative effect on intention.

H5: Perceived risk has a negative effect on attitude.

Risk Reduction

Bauer (1967) proposes that consumers can develop strategies to reduce risk in order to mitigate potential adverse events when they sense risk with unforeseeable consequences. When the risk perception of consumers is high, they may take action to reduce the risk. At this point consumers will devise different strategies to reduce risk such as buying branded or high quality products. Yeung & Yee (2003) say that previous studies have proposed 17 strategies to reduce risk in which consumers are likely to buy branded products or products from well-known stores during periods of food safety concerns since this will make consumers feel secure about the quality. If the brand image is associated with the quality of product, it can indirectly affect the purchase intention and thus consumers may become loyal to the brand that has made them satisfied and they are less likely to change as most of the time, they are not allowed to test food products before buying (Yeung et al., 2010).

Consumers also like brands that are sold by manufacturers that have a good history of quality, and hence Yeung et al. (2010) indicate that traceability also becomes a key factor. Additionally, in some cases, consumers can look for product information on signage or leaflets in stores to understand food processing and preservation since this is also considered important to reduce the risks of eating and drinking. The findings of Yeung et al. (2010) show that there are five factors in the risk reduction strategy, including buying branded products, quality, price, information and preservation. However, there are only three out of these five factors that have adverse effect on risk perception, which are buying branded products, buying informative products, and buying quality products. So the research hypothesis is:

H6: Risk reduction has a negative effect on perceived risk.

RESEARCH METHODOLOGY

Products and Respondents

Pork is a common and popular food in the daily meals of Vietnamese households. For this reason, this study chooses pork to represent food. The research surveys 245 consumers in Ho Chi Minh City by using convenience sampling method. The age of respondents are from 18 or over 18, have bought and eaten pork in the family's main meal daily. Specifically, there are 163 females, which make up 65.5% and 82 males, which constitute 33.5%. People in the 18-24 age group account for 26.9%, people aged 25-34 comprise 62.4%, 35-44 -year- olds are 10.2% and people who are 45-54 make up 0.4%. The majority of the surveyed consumers are college or

university graduates (which are 81.2%), post-graduates constitute 12.7% and the others account for 1.6% left. In terms of the average income, respondents who earn from 5 to 15 million per month make up 87.7% and the figure for those who are paid over 16 million a month comprise 12.3%. As regards the occupation of the consumers, most of them are office workers, which make up 54.3%, housewives, workers and civil servants constitute 14.6% and the rest belongs to other occupations.

Measurements

The data is gathered through questionnaires given directly to consumers, the questionnaire is based on a 5-point Likert scale, in which 1 means totally disagree and 5 means totally agree. The scales and questionnaires applied in this study are based on previous studies related to consumer food choice behavior. In particular, the attitude scale (A) consists of three items: "*When I eat pork, I feel: (1) Fairly satisfied; (2) Very satisfied; (3) Extremely satisfied.*" This scale is inherited from Tuu & Olsen (2009). The subjective norms scale (S) is measured by using 3 observed variables referred to the opinions of those in the family that have effect on them: "*My family encourages/wants/thinks/I should eat pork regularly.*" This scale is inherited from the study of Olsen (2001). The Risk-perception scale (R) includes three observed variables that indicate consumers' risk perception of the safety and quality of pork: "*When eating pork I'm worried that the taste is not satisfactory/the quality is not guaranteed/causes damage to health.*" The application of this scale is based on the study of Tuu & Olsen (2012).

The consumer purchase Intention scale (I) is divided into two situations, each of which contains three observed variables indicating intentions of pork consumption in the near future. The first one is the normal situation (the standard situation-Is) including three items: "*I intend to/want/I am willing to buy and eat pork in the near future.*" And 3 items for situations when there is information related to food incidents (the situation when food incidents happen-Ih) that may harm the health of consumers: "*I still have the intention/want/I am willing to buy and eat pork in the near future.*" This measurement is based on Lobb et al. (2007), Tuu (2015).

The risk Reduction Scale (RS) is inherited from Yeung et al. (2010). By using the qualitative research, the RS scale has been adjusted to suit the context of Vietnam. This scale comprises 14 questions, after conducting the exploratory factor analysis, the final scale then consists of 12 questions. The questions are presented in Table 1.

Table 1 DESCRIPTIVE STATISTICS OF INDICATORS RISK REDUCTION			
Item	**Indicators**	**Mean**	**Std. Error**
RS1	I buy pork from brands which I bought previously.	3.359	0.988
RS2	I choose a famous or popular brand.	3.208	0.840
RS3	I choose a reputable meat brand.	3.412	0.982
RS4	I buy pork which has third party certification.	3.538	1.121
RS5	I buy pork with clearly traceable origins.	3.628	1.132
RS6	I buy pork that has been checked by a government agency.	3.644	1.173
RS7	I read the instruction manual carefully.	3.387	1.105
RS8	I read information about the product introduction at stores.	3.775	1.083
RS9	I pay close attention to the expiry date.	3.122	1.004

| RS10 | I buy pork from sources recommended by friends. | 3.265 | 0.886 |
| RS11 | I buy pork from sources recommended by relatives. | 3.244 | 0.837 |
| RS12 | I buy pork from home sources recommended by relatives. | 3.359 | 0.825 |

Source: Investigated by the author.

Analytical Procedure

In this study, we apply the linear Structural Equation Modeling (SEM) to estimate the proposed theoretical model. As for the risk reduction strategy scale, the EFA analysis is conducted with the extraction method of Exploratory Factor Analysis and Promax rotation, the extracted result contains 4 factors with 12 observed variables, the KMO coefficient of Barlett's test equals to 0.762 (Sig=0.000) and the total variance explained is 78.03%. The first factor is buying "*brand*" meat which includes 3 observed variables showing the strategy of buying brand meat, prestige and buying the brand that consumers have bought previously. The second factor is buying meat with "*certification*", this factor consists of 3 observed variables indicating the strategy of buying meat certified by the government agency, having third party certification and having traceability certification. The third factor is buying meat from the "*recommended sources*" including 3 observed variables indicating the strategy of buying meat from sources introduced by relatives, friends or from home. The fourth determinant is buying "*informative*" meat which includes 3 observed variables presenting the strategy of buying meat after reading the information such as instruction manual, product introduction, and expiry date.

Prior to SEM model estimation, scales were tested for reliability by using the Cronbach's alpha coefficient and Confirmatory Factor Analysis (CFA). The criteria used for choosing the reliability of the scale are Cronbach's alpha ≥ 0.6 and item-total correlation ≥ 0.3. Selected criteria for EFA analysis are KMO ≥ 0.7 and total variance explained ≥ 50%. The criteria chosen for CFA analysis are TLI ≥ 0.9; CFI ≥ 0.9; RMSEA ≤ 0.08 and CMIN/df ≤ 3 (Browne & Cudeck, 1992). The standards used to assess SEM model are selected using similar criteria as CFA analysis. After conducting EFA analysis, the proposed model is adjusted as shown in Figure 1. Therefore, the theory *H6* is then adjusted:

H_6: Risk-reducing strategies: (a) buying "brand" meat, (b) buying meat with "certification", (c) buying "recommended sources" meat, (d) buying "informative" meat has a negative effect on perceived risk.
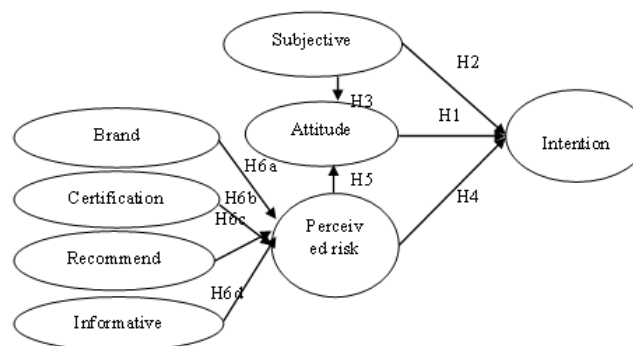
FIGURE 1
THE THEORETICAL MODEL

RESULTS

Reliability and Validity of the Measures

The result of testing the scale reliability shows that the Cronbach's alpha coefficients of these scales are in the range of 0.808 to 0.915 (Table 2) and the item- total correlations of all scales are greater than 0.3 which mean these scales meet the acceptable reliability. After that, the research continues to perform EFA, the results show that the KMO coefficient of Barlett's test is 0.801 (Sig=0.000), 8 factors are extracted and the total variance explained is 80.54% and all factor loadings are greater than 0.5.

Next, all scales are taken to conduct the confirmatory factor analysis in both situations: normal (Model 1) and incident happens (Model 2). The CFA analysis of model 1 illustrates that the study has 8 concepts with 24 observed variables. The results of the CFA analysis report that criteria which meet the requirements are TLI=0.965; CFI=0.972; RMSEA=0.043 and CMIN/df=1.442. Hence, indicators such as TLI, CFI are greater than 0.9 and RMSEA is less than 0.08, CMIN/df is less than 2. Similarly, the CFA analysis of model 2 reveals that the study has 8 concepts with 24 observed variables. The CFA analysis shows the standards which meet the requirements are TLI=0.971; CFI=0.977; RMSEA=0.04 and CMIN/df=1.387. Scales was assessed by computing composite reliability coefficient and extracted variance for each construct. The standardised factor loadings and construct reliabilities for the measurement model are presented in Table 2. The individual item loadings on the constructs were all highly significant (p<0.000) with values ranging from 0.617 to 0.952.

Table 2 CONSTRUCTS AND INDICATORS					
Constructs	Item	Mean	Cronbach's alpha	Composite reliability	Extracted variance
Model 1					
Attitude (A)	3	3.103	0.901	0.902	0.755
Subjective norms (S)	3	2.453	0.895	0.896	0.742
Percieved risk (R)	3	3.415	0.876	0.878	0.707
Brand (RSb)	3	3.326	0.902	0.833	0.507
Certification (RSc)	3	3.604	0.931	0.906	0.764
Recommended sources (RSa)	3	3.289	0.825	0.830	0.622
Informative (RSi)	3	3.428	0.726	0.729	0.474
Intention (standard) (Is)	3	3.760	0.853	0.859	0.672
Model 2					
Attitude (A)	3	3.103	0.901	0.901	0.754
Subjective norms (S)	3	2.453	0.895	0.896	0.742
Percieved risk (R)	3	3.415	0.876	0.878	0.706
Brand (RSb)	3	3.326	0.902	0.838	0.510
Certification (RSc)	3	3.604	0.931	0.932	0.821
Recommended sources (RSa)	3	3.289	0.825	0.830	0.622
Informative (RSi)	3	3.428	0.726	0.730	0.475
Intention (scared) (Ih)	3	3.040	0.912	0.915	0.783

Source: Investigated by the author.

The Structural Relationships

The results of the SEM model test of model 1 (Purchase intention in the standard situation-no food incident) indicate that TLI=0.939; CFI=0.947 so these ratios are greater than 0.9; RMSEA=0.056 less than 0.08 and CMIN/df=1.773 which is lower than 2; P=0.000. This result suggests that the theoretical model is consistent with the research data. The relationship estimation by the SEM model shows that the relationship between risk reduction strategy and risk perception includes 3 statistically significant relationships at a 5% significance level, which are relationships between RSb, RSc, RSa and R. Only RSi is not statistically significant. The negative beta coefficient illustrates the inverse relationships between RSb, RSc, RSa and R. The components of the risk reduction strategy can explain 21.4% (R^2=0.214) the variation of risk perception. The model also demonstrates that only attitude is statistically significant to purchase intention, subjective norms and risk perception are not statistically significant to purchase intention. However, subjective norms directly affect attitude, which means subjective norms indirectly affect the intention through the mediating role of attitude. The variables in the model can explain 27.2% the variation of purchase intention.

The results of the SEM model test of model 2 (Purchase intention in the situation scared) reveal that TLI=0.947; CFI=0.954 so these indicators are greater than 0.9; RMSEA=0.054 which is less than 0.08 and CMIN/df =1.707 which is lower than 2; P=0.000. This result shows that the theoretical model is consistent with the research data. The relationship estimation by the SEM model suggests that the relationship between the risk reduction strategy and the risk perception is similar to that in model 1, to be more specific, there are 3 relationships that are statistically significant at the 5% significance level, which are relationships between RSb, RSc, RSa and R. Only RSi is not statistically significant. The negative beta coefficient expresses the inverse relationships between RSb, RSc, RSa and R. Model 2 also indicates that attitude, subjective norms and risk perceptions have a statistically significant effect on purchase intention, the risk perception, meanwhile, still does not have a statistically significant effect on attitude. Similar to model 1, subjective norms directly affect attitude, this means subjective norms not only directly affect intention but also indirectly influence intention through the mediating role of attitude.

After analyzing and testing the fit of the SEM model, the research then tests the hypotheses. The results of estimating the model are shown in Table 3.

Hypothesis H₁: Attitude has a positive influence on buying intention. The result shows that H₁ is accepted in both situations with a significance level of 5%. The relationship between attitude and purchase intention (β=0.368) in the standard situation and (β=0.208) in the situation when food incident happens. These relationships are positive.

Hypothesis H₂: Subjective norms positively influence the buying intention. The result indicates that H₂ is accepted in model 2 (β=0.243), this means in the situation that food incidents occur, subjective norms are statistically significant at the 5% significance level. In the situation when there is no food incident, this hypothesis is not supported.

Hypothesis H₃: Subjective norms positively indirectly influence the purchase intention through the mediating role of attitude. At the 5% significance level, subjective norms do not directly affect the intention in the situation when there is no food incident but subjective norms directly affect attitude. In case of food incidents, subjective norms directly affect the purchase intention (β=0.243) and the indirect effect through attitude is (β=0.116). The total effect is (β=0.375). Thus, the hypothesis H₃ is accepted.

Hypothesis H$_4$: Risk perception negatively affects the purchase intention. Model 1 reports that this hypothesis is not supported but the results of model 2 show that in case of food incidents, the risk perception negatively affects the buying intention (β= -0.218). Thus, the hypothesis H$_4$ is supported.

Hypothesis H$_5$: Risk perception adversely indirectly affects the buying intention through the mediating role of attitude. The findings of the two models do not support the relationship between risk perception and attitude. Hence, the hypothesis H$_5$ is rejected.

Hypothesis H$_6$: The group of hypothesis H6 consists of 4 hypotheses, in which hypotheses H$_{6a}$, H$_{6b}$, H$_6$ are accepted. The results reveal that in the standard situation, the risk reduction strategies which are buying "Brand" meat (β= -0.364), "Certification" (β= -0.240) or "Recommended source" β= -0.169) would reduce risk perception at a 5% significance level. The "Informative" variable does not affect risk perception. In case of food incidents, the risk reduction strategies which includes buying "Branded" meat (β= -0.366), "Certification" (β= -0.125) or from "Recommended source" (β= -0.167) would reduce risk perception at the significance level of 5%. The "Informative" variable does not impact risk perception. Thus, hypotheses H$_{6a}$, H$_{6b}$, H$_{6c}$ are supported and the hypothesis H$_{6d}$ is rejected.

Table 3 ESTIMATES FOR DIRECT EFFECTS						
Structural paths			Coefficient estimate	S.E.	C.R.	P
Model 1						
R	←	RSb	-0.364 (-0.397)	0.061	-5.989	***
R	←	RSc	-0.24 (-0.156)	0.051	-2.431	0.015
R	←	RSi	0.105 (0.100)	0.077	1.375	0.169
R	←	RSa	-0.169 (-0.148)	0.077	-2.190	0.029
A	←	R	0.049 (0.047)	0.064	0.764	0.445
A	←	S	0.555 (0.562)	0.066	8.456	***
Is	←	S	0.074 (0.094)	0.063	1.170	0.242
Is	←	A	0.368 (0.459)	0.068	5.435	***
Is	←	R	-0.077 (-0.091)	0.054	-1.424	0.155
Model 2						
R	←	RSb	-0.366 (-0.398)	0.061	-6.007	***
R	←	RSc	-0.125 (-0.157)	0.051	-2.452	0.014
R	←	RSi	0.107 (0.101)	0.077	1.388	0.165
R	←	RSa	-0.167 (-0.146)	0.077	-2.164	0.030
A	←	R	0.051 (0.049)	0.063	0.807	0.420
A	←	S	0.557 (0.563)	0.066	8.461	***
Ih	←	S	0.243 (0.254)	0.077	3.151	0.002
Ih	←	A	0.208 (0.215)	0.077	2.702	0.007
Ih	←	R	-0.218 (-0.216)	0.065	-3.350	***

Note: ***p<0.01.

DISCUSSIONS

The findings of the research suggest that attitude is the factor that affects intention in both situations. This result therefore reaffirms the important role of attitude in the TRA model that has been applied by many researchers to predict purchase intentions in the food sector. Subjective norms influence the intention in situation which food incidents happen, in normal situations; subjective norms indirectly impact intention through the mediating role of attitude (Tarkiainen & Sundqvist, 2005). Ajzen (1991) concludes that more than 50% of studies do not support the relationship between subjective norms and behavioral intentions. We find that the effect of subjective norms on our intentions depends on whether or not food incidents occur. Under normal circumstances, the pressure of family members may not interfere with consumers'

intention to buy food. However, in case of food safety risks and especially food incidents occur, the pressure of family members becomes important and affects their buying intentions.

Risk perception does not affect buying intentions in standard situations, but it does have effect on buying intention in situations when food incidents occur. The impact of risk perception on buying intention has been revealed in numerous studies. Nonetheless, there are studies which suggest that there is no relationship between risk perception and purchase intention (for example, Klerck & Sweeney, 2007). In this study, the results indicate that the influence of risk perception on purchase intention depends on whether there is a presence of food incidents or not. When food incident happens, it is clear that risk perception plays a vital role in explaining purchase intention. The relationship between risk perception and buying intention is negative. In other words, the higher the risk perception of consumers is, the lower the purchase intention becomes (Grewal et al., 2007).

The risk reduction strategy consists of 4 component strategies, in which there are three strategies that negatively affect risk perception. The results of Yeung et al. (2010) also identify that only three out of the five components of the risk reduction strategy impact risk perception. This study indicates that consumers may be able to reduce the risk of buying meat from well-known, reputable, familiar brands or from where they previously bought, this is called buying "*Branded*" meat. The purchase of certified meat (referred to as "*Certification*") which was checked by a government agency or third party (such as VietGap certificate) or buying meat with a clear origin also helps to decrease the risk perception of consumers. What is more, consumers can reduce their risk perceptions by buying meat from recommended sources (which is "*Recommended sources*"), such as meat recommended by friends, relatives or from home sources introduced by relatives. This result is also accepted by consumers in the qualitative research as they think that they often buy food from home since most of HCM City residents are migrants from other provinces.

The results of differential analysis for variables such as occupation, age, education level and income suggest that there are only differences in intention to buy meat between males and females in case of food incident and differences between incomes in normal situations at a 5% significance level. In particular, in normal situations, the intentions to buy meat of people who have considerably higher incomes (high-income people) are higher. In case of food incidents, women tend to have lower purchase intentions than men. This is in line with the cultural characteristics of Vietnam since women are usually the primary person in charge of choosing food for daily family meals.

CONCLUSION AND IMPLICATIONS

The main objective of this study is to examine the effect of risk perception on consumers' purchase intentions in the HCM City area by using the basis of the theory of reasoned action. Based on the TRA model as well as the inheritance from previous studies, the author built a research model consisting of two components of the TRA model, which are attitude, subjective norms and a third component is added to the model, which is risk perception. Furthermore, the author also considers the impact that risk reduction strategy may has on risk perception in the expanded TRA model. The model is implemented in two situations, namely the normal situation and the situation when food incidents occur.

The research reveals that attitude is the factor which influences buying intentions in both situations. This means that when consumers have a positive attitude, their buying intention will be positive. Subjective norms directly affect the purchase intention in case of food incidents but

these norms do not directly affect the intention in normal situations. However, in normal circumstances, subjective norms influence the intention indirectly through the mediating role of attitude. Similarly, in normal situations, risk perception does not affect the intention but in the situation when food incidents occur, risk perception has a negative impact on intention. This means that when an incident happens leading to concern about food, a high risk perception will reduce purchase intention. Moreover, the study reports that there are three risk reduction strategies affecting risk perception, including the "*Branded*", "*Certification*" and "*Recommended source*". Descriptive statistics also show that consumers appreciate the risk reduction by buying products that have been tested or certified by a government agency, certified by a third-party, or products with traceable origins.

The results provide evidence of the relationship between risk perception and food purchase intention in case of food incidents to managers and government regulators in the food industry. Reducing risk perception is an important measure to increase food consumption, in order to reduce risk perception, enhancing credibility, branding food products or certificating food safety or traceability should be implemented. In addition, at present when food incidents happen, consumers often buy food from recommended sources as a way to reduce risk perception. One more thing is that when there is food safety risk, the pressure from family members is a factor that considerably influences their buying intentions. Thus, this should be focused when develop policies on food safety.

LIMITATIONS

This study has some limitations. For example, the sample is collected using convenience sampling method. The study only surveyed consumers in Ho Chi Minh City area but does not expand to other areas so that it can be able to evaluate factors more fully. Risk perception in this study is measured in terms of two aspects, namely quality and health without mentioning other aspects such as time, finance, lifestyle (Yeung et al., 2010). Moreover, food purchase intention in general and pork purchase intention in particular are influenced by many factors that this study has not mentioned such as habits, past behavior, trust. Therefore, further research should expand the research scope, other sampling methods may also be applied and more variables could be added to the model.

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