The role of consumer satisfaction, consideration set size, variety seeking and convenience orientation in explaining seafood consumption in Vietnam

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ABSTRACT

The study examines the relationship between convenience food and seafood consumption in Vietnam through a replication and an extension of studies of Rortveit and Olsen (2007; 2009). The main purpose of this study is to give an understanding of the role of consumers’ satisfaction, consideration set size, variety seeking, and convenience in explaining seafood consumption behavior in Vietnam.

The study has applied the confirmatory factor analysis supported by the Amos 16.0 software to test the reliability, convergent and discriminate validity of the concepts. The analysis process was carried out on a secondary data with a survey of 500 Vietnamese households, who were invited to participate in a national survey of attitude, convenience, and fish consumption in three cities in the South of Vietnam (Can Tho, Ho Chi Minh, and Nha Trang).

The findings of the study indicate that consideration set size has a mediation effect between satisfactions and repurchase loyalty; convenience orientation and repurchase loyalty; perceived product inconvenience and repurchase loyalty; variety seeking and repurchase loyalty. Consideration set size has the greatest impact on repurchase loyalty. The results also show that convenience orientation has significant impact on repurchase loyalty, and on consideration set size, and on variety seeking, and perceived product inconvenience. The study also confirms earlier findings suggesting that perceived product inconvenience has a negative effect on both satisfaction and consideration set size. These results of the study will allow academics to better understand the effect of variables on seafood consumption and further develop future research in this area.

Keywords: Repurchase loyalty; Satisfaction; Consideration set size; Convenience orientation; Perceived product inconvenience; Variety seeking.
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Ninh Thi Kim Anh
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1. INTRODUCTION

1.1. Background

In Vietnam, fish is considered an important food and indispensable in the dining. The Vietnamese cuisine is known for their variety and consumers like to take advantage of this when they prepare their meals (Rortveit & Olsen, 2007). Because of health motivations among groups of people (Tudoran, Olsen, et al., 2009; Olsen, 2002), one can also expect that Vietnamese consumer varies their diet of health reasons as well (Olsen, 2002; Olsen, 2004). Tuu et al., (2008) suggested that consumption of a common food (fish) in Vietnam has been influenced by factors such as attitude/satisfaction, social norm, descriptive norms, behavioral control and intention. Moreover, Tuu and Olsen (2009) identified food risk and knowledge as elements effect on the relationship between satisfactions and repurchase loyalty in buying and consuming seafood in Vietnam. I am not aware of any study that has previously tried to investigate the relationship between satisfactions, consideration set size, convenience orientation, variety seeking and seafood consumption frequency in Vietnam. Thus, this study will concentrate on three factors above in explaining seafood consumption in Vietnam.

Satisfaction is believed as a determinant of consumer loyalty, and loyalty is believed to increase market share and profitability outcomes (Evanschitzky & Wunderlich, 2006). Thus the goal of gaining and sustaining customer loyalty through satisfying consumers is considered to be more important than the goal of achieving customer satisfaction (Agustin & Singh, 2005).

Exploring the role of consideration set in understanding seafood consumption behavior is important due to two reasons. First, consideration set is not only an indispensable consequence of satisfaction (Sambandam & Lord, 1995), but also a critical predictor of repurchase loyalty. Because consideration set is a final surrogate to consumer’s choice process and decision making (Terech, Bucklin, & Morrison, 2003), it conveys all information from other factors, such as involvement, knowledge, accessibility (Aurier, Jean, & Zaichkowsky, 2000; Sambandam & Lord, 1995), switching behavior (Sambandam & Lord, 1995), variety seeking (Ratner, Kahn, & Kahnewman, 1999), and so on, affecting on the frequency of consumption or repurchase loyalty. Second, a focus on consideration set size is expected to yield insights into diverse marketing phenomena including marketing strategy (Aurier et al., 2000), such as successful brand extensions, comparative advertising, the causes of market pioneer advantage (Ratneshwar, Pechmann, & Shocker, 1996), brand loyalty,
market share (Kardes, Kalyanaram, Chandrashekaran, & Dornoff, 1993; Swaminathan, Fox, & Reddy, 2001), the marketing mix (Roberts & Lattin, 1997) and so on.

The impact of changing lifestyles on demand has led to an increase in demand for convenience foods (Buckley et al., 2007). This is also considered to be a more important issue in Vietnam – particularly for “new generation” of consumers living and working in the big cities. Convenience is about time and effort (mental and physical) spent purchasing, storing, preparing and consuming food (Candel, 2001). Theoretically, convenience is defined as a value or attitude consumers have to save time and effort (Berry et al., 2002; Buckley et al., 2007; Candel, 2001). It is also defined as an attribute with a product or service. Convenience orientation is expected to have influence on convenience-related behavior (Candel, 2001; Scholderer & Grunert, 2005) and food consumption behavior (Buckley et al., 2007; Candel, 2001; Carrigan et al., 2006; Scholderer & Grunert, 2005), included fish consumption (Olsen et al., 2007; Rortveit & Olsen, 2009). Based on this analysis above, this study will intend to develop convenience orientation as saving time and effort (mental and physical) (Buckley et al., 2007) in relation to consumption of seafood.

There are many researchers studying the variety seeking behavior of individuals, i.e. switching among goods and service alternatives (Kahn, 1995). Exploring the impact of intrinsic variety-seeking on loyalty behavior is belonging to three reasons. First, according to Van Trijp et al. (1996), there are many studies argue that differences in loyalty for different products or consumer services may be due to the unequal presence of intrinsic variety-seekers. Second, O'Brien and Jones (1996) proposed that if no difference is made between variety-seekers and non-variety seekers, marketing efforts such as customer retention programs might be very inefficient. Third, as a basic feature of the market in a specific market, the intensity of variety-seeking may determine the potential market shares of brands and the marketing plans of manufacturers and distributors (Feinberg et al., 1992). Despite this discussion above, very little research has studied this topic in the seafood consumption.

1.2 Research issue and question

This study will test the effect of satisfaction, consideration set size, convenience on repurchase loyalty base on the result of the previous studies and explore the influence of variety seeking on seafood consumption frequency.
Thus, the purpose of this thesis is:
- To understand the role of consumers satisfaction, consideration set, convenience and variety seeking in explaining seafood consumption or loyalty in Vietnam
- To suggest marketing strategy implication.

This study will use an attitudinal approach (Eagly and Chaiken, 1993) to explain variation in food consumption behavior. It will use constructs or theories from both marketing (Oliver’s 1999 approach to consumer loyalty) as well as studies of food consumption behavior (Grunert, 2002; Olsen, 2004) Satisfaction has been proposed affecting repurchase loyalty not only directly but also indirectly through mediators (Olsen, 2002; Olsen, 2007). I will test the direct effect of satisfaction on seafood consumption frequency in Vietnam, as well as the relationship between consideration set size, convenience orientation, perceived product inconvenience and variety and consumption frequency of seafood.

In the studies of Rortveit and Olsen (2007; 2009), they investigated that consideration set size has positive effect on consumption frequency and attitude toward fish has positive influence on consideration set size. The same studies also include variables such as convenience orientation and product convenience. Convenience orientation is related to fish consumption through perceived product inconvenience. On the other hand, Rortveit and Olsen (2009) investigated the effect of convenience orientation on fish consumption is direct and negative. This study will test their models in a Vietnamese context; explore the effect of convenience orientation on variety seeking.

1.3. Method

Data used in this study is from a collection that was performed in three cities in the South of Vietnam (Can Tho, Ho Chi Minh, Nha Trang). A representative sample of 500 Vietnamese households was invited to participate in a national survey of attitude, convenience, and fish consumption. To test the reliability, convergent and discriminate validity of the measurements, this study have applied the confirmatory factor analysis which was conducted using Amos 16.0 software. I also use structural equation modeling (SEM) to investigate the simultaneous relationship among the constructs.
1.4. Structure of thesis

Following this part (part 1 – introduction), is Part 2 a discussion of theoretical and conceptual framework. Part 2 briefly introduce the theory of satisfaction, repurchase loyalty, consideration set, convenience, variety seeking, and hypothesis, then discuss aspects of the constructs within the framework. Data and method in Part 3 focus on the measures, techniques for testing reliability and mean difference, factor analysis, and structural equation modeling. The Part 4 presents the results from data analysis and model establishments. The Part 5 discusses issues related to the results, conclusion and suggestions for future research.
2. THEORETICAL FRAMEWORK

The relationship between convenience orientation, consideration set and fish consumption has been explored by Rortveit and Olsen (2009). In their study of Norway, they argue for a positive relationship between consideration set size and consumption frequency. Further, they argue for a relatively weak direct effect of convenience orientation on attitude and consumption. My study builds on the research of Rorveit and Olsen in the context of Vietnam.

In this study, I will use loyalty as an indicator of consumption frequency; a somewhat broader construct that frequency – and more use in the marketing literature – and in previous studies of seafood consumption in Vietnam (Tuu et al., 2008). Satisfaction will be used as an indicator of attitude (are the same; but many studies use satisfaction as attitude in marketing (Johnson et al., 2001; Olsen, 2002; 2007); and also used in previous studies in Vietnam (Tuu et al., 2008). I suggest convenience as an important factor in forming a consideration set size because consumers need to save time, related to shopping, meal preparation, and cooking before making their decision about what to have and their consideration over time (Buckley et al., 2007; Rorveit and Olsen, 2007; 2009). My study replicates model of Rorveit and Olsen (2009) in Vietnam, which will extend the construct with variety seeking variable. An overview of my study is presented in Figure 2.1

![Figure 2.1: The conceptual model and hypothesis](image-url)
2.1. Loyalty toward fish

There are many ways to define and measure loyalty (Jacoby and Chestnut 1978). Loyalty has been suggested as the relationship between relative attitude and repeat patronage (Dick & Basu, 1994). Oliver (1997) determined loyalty as “a deeply held commitment to rebuy or repatronise a preferred product or service in the future” (p. 392). It is recognized by researchers such as Macintosh & Lockshin (1997) and Oliver (1999) that loyalty can be studied as a chain from cognitive loyalty (e.g., price and quality), affective loyalty (general evaluation or attitude), connective loyalty (a desire to intend an action) and action loyalty. This study will classify conception of repurchase loyalty as a combination of intention and action loyalty covering both behavioral frequency (Jacoby & Chestnut, 1978; Nijssen et al., 2003; Olsen, 2002) and intention of consumption/purchase (Pritchard et al., 1999; Szymanski & Henard, 2001) toward a given product category (Olsen, 2007). This definition will be in accordance with Oliver’s (1997) suggestion that loyalty may include a commitment to repurchase a product in the future.

2.2. Satisfaction

The concept of satisfaction that appeared in the past decade of research is identified as a post choice evaluative judgment concerning a specific purchase decision (Bearden & Teel, 1983; G. Churchill & Suprenant, 1982; Oliver, 1980; Oliver & DeSarbo, 1988). According to Oliver (1997), satisfaction is suggested as “the consumer’s fulfillment response, the degree to which the level of fulfillment is pleasant or unpleasant” (p. 28). Prior studies have recognized satisfaction as transaction-specific product episodes (Boulding et al., 1993), other research claimed satisfaction as the customer’s overall experiences to date—as cumulative satisfaction, like attitudes (Johnson et al., 2001; Olsen, 2002). Cumulative satisfaction construct has been considered as more important advantage in comparison with transaction-specific viewpoint due to its higher ability to augur behaviors and economic performance in the future (Johnson et al., 2001). As to the relationship between satisfaction and loyalty, conception of satisfaction as a cumulative satisfaction over more transaction–specific is that it is better able to predict subsequent behaviours and economic performance (Johnson et al., 2001; Olsen, 2002; 2007). Satisfaction is believed as a determinant of consumer loyalty, and loyalty is believed to increase market share and profitability outcomes (Evanschitzky & Wunderlich, 2006). Thus
the goal of gaining and sustaining customer loyalty through satisfying consumers is considered to be more important than the goal of achieving customer satisfaction (Agustin & Singh, 2005).

The strong focus on satisfaction is based on an implicit assumption that there is a strong positive relationship between customer satisfaction and loyalty (Babin & Griffin, 1998; Szymanski & Henard, 2001), but varies between products, industries and situations (Johnson et al., 2001). In addition, several research have showed that attitudes are considered one of the important factors in explaining food choice, including seafood consumption behavior (Bredahl & Grunert, 1997; Olsen, 2001; Olsen, 2003; Olsen et al., 2007; Rortveit & Olsen, 2007; 2009; Shepherd and Raats, 1996). Olsen (2003) confirmed that the more positive the individual’s attitudes to eating fish, the more likely he/she would be to repurchase fish. Based on numerous prior studies, I argue that satisfaction will have a positive effect on the seafood repurchase loyalty in Vietnam. Thus, the following hypothesis is suggested:

**H1: Satisfaction has a positive effect on repurchase loyalty.**

In three experiences of Priester et al. (2004) have examined that attitudes positive affect on consideration as well as indirect impact choice through the consideration. Although there are some research establishing the relationship between attitude and set size (Paulssen & Bagozzi, 2005; Priester et al., 2004), the influence of attitude on set size in fish consumption is rarer. Recent years, Rorveit and Olsen (2007; 2009) investigated that there is a direct positive effect between attitude and consideration set size as well as indirect affect fish consumption frequency through the partial mediator consideration set size. My study will test the direct influence of satisfaction on consideration set size. I find it to present the following hypothesis:

**H2: Satisfaction has a positive effect on the consideration set size.**

### 2.3. Consideration set size

When consumers decide what to have for the meals and try to balance their diet throughout the day, especially their dinner, they always make their choices among a set of considered alternatives (Rortveit & Olsen, 2007; 2009). This set is called the consideration set.

There are many different conceptions about consideration set that have been studied by marketing researchers. According to Howard & Sheth (1969), in early marketing usage, the concept “evoked set,” this can be seen as the precursor of the consideration set. Howard and
Sheth (1969) defined evoked set as “those brands the buyer considers when he (or she) contemplates purchasing a unit of the product class”. Hauser and Wernerfelt (1990) investigated the theoretical construct of a consideration set and found that consumer considers brands seriously when making a purchase and/or consumption decision. Although there are many conception of consideration set have been given, Rortveit and Olsen (2007) argued that the definition of Nedungadi (1990) has been widely used by many researchers. Nedungadi (1990) determined consideration set as: “the set of brands brought to mind on a particular choice occasion” (p.264). Desai and Hoyer (2000) showed the characteristics or component of the consideration set as: “stability or how consistent the set is across similar situations; size, or how large the set is; variety, or how distinct the products within the set are; and preference dispersion or how equal the preferences are toward the set products” (p. 309). Set size is considered the number of products in a set (Desai & Hoyer, 2000). It is possible to argue further that the across-product size of consideration set (i.e., the number of products/brands within a category or the relative size of a category) increases degree to which this category will be chosen. Rortveit and Olsen (2007) explained that the relative size that the brand category occupies in an individual’s consideration set is therefore of major for the likelihood of the given category to be chosen. Based on above discussions, this study will concentrate on as set size of a food product category, in the case fish/seafood, affects the choice of this category (Rortveit & Olsen, 2007).

Two studies in Denmark and Norway of Rortveit & Olsen (2007; 2009) are concerning the consumption of fish have investigated that the choosing of fish for dinner could be viewed as two-step choice process also involving the consideration stage. Their model was based on prior research, suggesting for the inclusion of consideration set as a preceding state of choice, mediating antecedents of choice such as knowledge and attitude (Alba & Chattopadhyay, 1985; Aurier et al., 2000; Nedungadi, 1990; Paulssen & Bagozzi, 2005; Priester, Nayakankuppam). They identified that consideration set size positive effect on the consumption frequency of fish as well as a partial mediator between attitude and consumption frequency. Based on the discussion, the hypothesis is shown as follow:

**H3: The consideration set size has a positive effect on repurchase loyalty**
2.4. Convenience orientation

Copeland (1923) denoted convenience goods are products that require minimal time, physical and mental effort in purchasing. As we known, we can use money in investment to have profit but we never can expand time. Time is a finite and scarce resource. Therefore, the marketing literature showed the relationship between time scarcity and consumers’ desire for goods and services that offer convenience (Berry et al., 2002). Morganosky (1986) defined that person who seeks to “accomplish a task in the shortest time with the least expenditure of human energy” is a convenience oriented consumer. More research, for example Brown (1990), Voli (1998), explored convenience orientation as the value consumers place on goods and services with inherent time or effort saving characteristics. Berry, Seiders & Grewal (2002) proposed that consumers’ convenience orientation involve to all products that save consumers time and effort – both “labor-saving” goods (e.g., frozen dinners) and services (e.g., child care). Anderson and Shugan (1991), Kelley (1958) investigated the elements of manufactured goods such as: product size, preservability, packaging and design, which can reduce consumers’ time and effort in purchasing, storage, and use, have been related to convenience orientation. As the above definition indicates, my thesis used the concept of convenience orientation as the time, physical energy and mental effort savings in connection to the consumer’s food-related activities (Buckley et al., 2007).

Candel (2001); Gofton (1995); Scholderer & Grunert (2005) investigated that meal convenience is related to different stages in the consumption process: planning, acquisition/purchasing, preparation, cooking, consumption/eating, and disposal. Convenience measured as “fish is readily available in shop,” is proved to be an insignificant item in predicting fish purchasing among a random sample of about 300 UK consumers (Leek et al., 2000). However, in an American study, Kinnucan et al. (1993) showed that convenience was a main antecedent influencing the decision to purchase lobster, but not for catfish, shrimp or codfish. Other studies of the US seafood market confirmed that convenience in some cases has a related to seafood consume (Gempesaw et al., 1995). In addition, Olsen and Kristoffersen (1999) explored that Norwegian households would have bought more fresh seafood if it were more available. Furthermore, Olsen (2003) argued elderly consumers perceive seafood as more convenient compared with younger consumers. This may be explained by more time allocated to buying and meal preparation and more knowledge accumulated over years by planning, providing and preparing seafood meals (Olsen, 2003). Almost researchers have same idea about convenience orientation has an important effect on consumers’ buying decisions and food choice (Berry et al., 2002; Candel, 2001; Costa et al.,
2007; Jaeger & Meiselman, 2004; Olsen et al., 2007; Scholderer & Grunert, 2005). Rorveit and Olsen (2009) explored that the relationship between convenience orientation and fish consumption through a partial mediator consideration set size. The result of their study confirmed that convenience orientation has a negative influence on consideration set size. However, Buckley et al. (2007) showed that changing lifestyles on demand lead to increase demand for convenience foods. In addition, consumers always consider the different kinds of meals along different determinants such as: convenience, ingredients, price, brand, nutrients, health, etc (Rorveit and Olsen, 2007; 2009). Thus, I suggest that when convenience orientation for fish increases, consideration set size for fish will high. I give hypothesis as:

**H4: Convenience orientation has a positive effect on consideration set size**

Olsen et al. (2003; 2007) found that the convenience orientation has direct positive effect on fish consumption frequency. However, this relationship was not significant at the 5% level. Thus, we can say that their study did not explain a direct the relationship between convenience orientation and fish consumption frequency. In a Norwegian study, Rorveit and Olsen (2009) investigated that convenience orientation has direct negative effect on fish consumption frequency. In several prior researches, the authors showed that convenience food is considered a major element for consumer behavior toward food product (Buckley et al., 2007; Candel, 2001; Carrigan et al., 2006; Scholderer & Grunert, 2005). In an Italian study, Romani (2005) reflected this more positive effect of convenience food on family consumption. Base on discussion, I will expect that convenience orientation has a direct related to repurchase loyalty in seafood consumption. Hypothesis is given follow:

**H5: Convenience orientation has a positive effect on repurchase loyalty.**

Olsen (2007); Rortveit & Olsen (2009) indicated that convenience orientation has indirectly related to consumption and attitude through perceived product inconvenience. Olsen (2007) supposed that the reason of the positive relationship between convenience orientation and the perceived product inconvenience is convenience orientated consumers tend to “amplify” the relative inconvenience of fish in their perception. In their study, consumers perceive fish as inconvenient is a challenge for the fishing industry, leading a need to develop more convenience products, improve consumers’ beliefs, attitudes and knowledge about fish as an convenience product, easy to buying, preparing, cooking (Olsen, 2007). Olsen (2007) also indicated that some consumers perceived fish as convenient, probably because of their knowledge of and experience with fish (Gofton, 1995). Base on discussion, I will expect that convenience orientation of fish will increase lead to inconvenience of fish will be decrease.

**H6: Convenience orientation has a negative effect on perceived product inconvenience.**
Candel (2001) suggested that the relationship between convenience orientation and variety seeking as underlying the scores on the original convenience orientation scale, were inversely related. This may point to the dietary behavior of convenience seekers being one–sided (Candel, 2001). To my knowledge, the relationship between convenience orientation and variety seeking has been investigated in one study (Candel, 2001). My study believes that the inclusion of variety seeking contributes to explain how and why the convenience orientation affects the consumption frequency of fish. Different from the result of Candel (2001), I suppose that when consumers’ perceived fish is convenience orientation, they like to consume fish more (hypothesis 5 is given) and look for a lot of kind of fish because consumers do not like to maintain only one kind of fish for their meals. My study will explore the relationship between convenience orientation and variety seeking. Base on discussion, hypothesis is expected as:

**H7: Convenience orientation has a positive effect on variety seeking.**

### 2.5. Perceived product inconvenience

In the following, I want to take a link between convenience orientations (Buckley et al., 2007; Candel, 2001) and perceived product inconvenience (Darian & Cohen, 1995; Lockie et al., 2002; Steptoe et al., 1995).

Gofton (1995) proposed that fish is not considered convenience because of consumers have to spend more time and effort, and devote special resources to various stages of the providing process.

According to Olsen et al. (2007), perceived product inconvenience has a direct negative effect on attitude. Rortveit and Olsen (2009) found that perceived product inconvenience is inversely related to consideration set size.

Base on results of prior researches and given the theoretical discussion above, this study presents the following hypotheses:

**H8: Product inconvenience has a negative effect on consideration set size.**

**H9: Product inconvenience has a negative effect on satisfaction.**

### 2.6. Variety seeking:

There are many prior researchers defining variety seeking in a different ways. Kahn (1995) studied the importance of variety-seeking in retail and service management and defined variety-seeking in purchase behavior as “the tendency of individuals to seek in their choices
of services or goods” (p.139). Kahn et al. (1982) and Ratner et al. (1999) proposed that variety-seeking as the tendency for an individual to switch away from a choice made on last occasion. According to McAlister and Pessemier (1982), there are two kinds of varied behavior as derived variety-seeking behavior and direct variety-seeking behavior. Derived variety-seeking was related to some other motivation not a desire for variety and this type appeared as a result of ‘multiple needs, multiple users or multiple situations’. Direct variety-seeking behavior was the result of intrapersonal motives: when a person wants to satisfy her/his desire for change or novelty or satiation with product attributes, she/he does not want to remain loyal to just one, she/he prefers diversity of choice that is called variety-seeking. However, other researchers for example: Kahneman and Snell (1990); Simonson (1990) show that preference uncertainty as another motivation for variety-seeking. So that, Kahn (1995) suggests three major motivating factors for variety-seeking behavior. The first factor is direct variety-seeking that be called satiation. Derived variety-seeking that be defined external situations has been proposed the second factor. Future preference uncertainty has been investigated as a third motivation (Kahn, 1995; Berne et al., 2001). It was recognized by authors such as Ratner et al., (1999) that individuals like to change their option, and they will change suddenly from preferred to less preferred choices despite lower satisfaction. Previous research has proved the influence of variety on product acceptance (Zandstra et al., 2000). Zandstra et al., (2000) studied consumption meat sauce once a week at dinner at home for a period of 10 weeks. The author shown that repeating consumption of a meat sauce once a week at dinner at home for a long time (over a 10 week period) lead to large increase in boredom and decrease in acceptance rating. It means that consumers do not like to maintain loyal only one. Product boredom or need for variety that has been illustrated in a choice behavior model on variety seeking has explained in past study such as Van Trijp (1994); Van Trijp & Steenkamp (1992); Van Trijp et al., (1996). More over, dietary variety in individual’s meals is very important to supply and maintain an adequate intake of macro- and micro-nutrients for young children (Kant, 1996; Krebs- Smith et al., 1987). Food and products include fish and seafood. Consumers like to fish variety seeking to decrease boredom and supply nutrient food for their family. Van Trijp (1994) showed that the affect of person-related and product-related elements on variety-seeking in product choice behavior. In study of Lahteenmaki and Van Trijp (1995), they explained that if their study with a consumption of two sandwiches, a choice of two different fillings would bring about maximum possible variety. Whereas their study with the consumption of eight sandwiches, eight different fillings are required to bring about maximum possible variety. It is quite likely
that in the latter instance liking for alternatives will limit the variety in choices (Lahteenmaki and Van Trijp, 1995). This study will explore the impact of variety seeking on consideration set size. Hypothesis is shown as:

**H10: Variety seeking has a positive effect on consideration set size.**

Further more, the negative effect of variety seeking on customer retention for services has explored in the study of Bern et al., (2001). Lahteenmaki and Van Trijp (1995) identified that variety-seeking tendency has a strongly negatively related to total consumption. In addition, very little research has argued the role of variety seeking on the seafood consumption. Thus, this study will test the relationship between variety-seeking on consumption frequency of fish. As the above discussion, I will indicate follow hypothesis:

**H11: Variety seeking has a negative effect on repurchase loyalty.**
3. DATA AND METHOD

The process of data collection, questionnaires and analysis methods are going to be demonstrated in this section. An advantageousness survey of attitudes towards and consumption of fish was done by Vietnamese consumers. The part presents the designing items to measure the constructs. The main methods mentioned in this section are factor analysis, structural equation modeling, and testing for the reliability of constructs and mean difference.

3.1. Sample and procedure

Survey data were collected by questionnaire in the South of Vietnam (Can Tho, Ho Chi Minh and Nha Trang). The individually interview has been performed at home and completed a questionnaire requiring 30-45 minutes of their time. From 500 questionnaires interviewed, 487 valid questionnaires were completed and chosen for the study, which means a response rate of 97.4%. The sample was concentrating on the population regarding age (above 18), gender, married status, education, family income, region, and the size of households. The average family income in the sample is between 5 and 9 million VND. The age of the respondents ranged from 18 to 55 years old. 68 percent of the respondents were married, 32 percent were single. 55.6 percent lived in a household of three to four persons. The sample distribution is 29.7 percent in Can Tho, 30.8 percent in Ho Chi Minh city, 39.5 percent in Nha Trang. The respondents were divided into two groups depending on whether they were graduated from high school or not (categories of low education with lower or equal high school and high education with higher high school). Altogether 67.4 percent of the respondents were female, 32.6 percent were male. Female has considered as person who has more concerned in food behavior/preparing in their families, so that they are more major decision maker for meals in the households (Tuu et al, 2008).

The table 3.1 shows details of the sample
### Table 3.1 Socio-demographic characteristics of the sample (% of respondents, \( n = 487 \))

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<tr>
<td>Married</td>
<td>68.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( \leq 12 ) years</td>
<td>63.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; 12 years</td>
<td>36.5</td>
<td><strong>Age</strong></td>
<td>( \leq 25 ) years</td>
<td>28.1</td>
</tr>
<tr>
<td><strong>Income family (per month)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 5 millions</td>
<td>22.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 - 9 millions</td>
<td>63.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; 9 millions</td>
<td>14.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Family size</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( \leq 2 ) persons</td>
<td>1.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 - 4 persons</td>
<td>55.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 - 6 persons</td>
<td>34.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; 7 persons</td>
<td>8.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Region</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCM City</td>
<td>30.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Can Tho City</td>
<td>29.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nha Trang City</td>
<td>39.5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 3.2. Measurements of constructs

*Repurchase loyalty* was measured by the question: “How many times on average during the last year have you eating fish as your main course at home?”, “Could you please estimate how many times during the last 7 days have you eating fish as your main course at home?”, “Could you please estimate how many times during the coming 7 days you expect to eat fish as your main course at home?”. These items were measured on a seven-point Likert scale ranging from (-3) (“totally disagree”) to (+3) (“totally agree”). The items has been developed from many past researches as: Olsen (2003); Olsen et al., (2007); Rorveit and Olsen (2007, 2009); Verbeke and Vackier (2005).

*Satisfaction* was measured using a seven-point semantic differential/numerical scale ranging from “Unsatisfied” to “Satisfied”, “Unpleasant” to “Pleasant” and “Bad” to “Good” by the statement: “When I eat fish as the main meal in my home, I feel…”. The first two items are
used to measure food attitudes in many studies such as: Bagozzi, Gurhan-Canli, and Priester (2002); Berndsen and Van der Pligt (2004); Olsen (2001); Rortveit and Olsen (2007).

**Consideration set size** was measured by three items on a seven-point Likert scale ranging from “Totally disagree” (-3) to “Totally agree” (+3). The items are: “How many species (carp, anchovy, mackerel, pike, snapper, tilapia…etc) would you usually consider?”, “How many conservation forms (fresh, frozen, dried, canned, salted fish…etc) would you normally consider?”, “How many ways of preparing a meal (cooked, fried, grilled, soup, steamed…etc) would you usually consider?” These items had been used in many prior studies as Rortveit and Olsen (2007, 2009) and were explored with relying on earlier researches of set size (Aurier et al., 2000; Paulssen & Bagozzi, 2005).

**Convenience orientation** was measured using the following four items: “I prefer meals that are easy to plan, buy (provide), prepare and cook”, “The less physical effort (work, energy) I need to plan, buy, prepare/cook a meal, the better”, “I prefer meals that are quick to plan, buy (provide), prepare and cook”, “I want to spend as little time as possible on planning, buying, and preparing/cooking of what to have for meals”. These items were measured on a seven-point Likert scale ranging from (-3) (“totally disagree”) to (+3) (“totally agree”). These items were consistent with previous researches as Candel (2001), Rortveit and Olsen (2009).

**Perceived product inconvenience** was measured using the following three items: “It is difficult to plan, provide, prepare and cook fish for a meal”, “It takes much effort to plan, buy (provide), prepare and cook”, “It takes a lot of time to plan, provide, prepare and cook fish for a meal (dinner)”. These items were measured on a seven-point Likert scale ranging from (-3) (“totally disagree”) to (+3) (“totally agree”). The items were developed following Lockie, Lyons, Lawrence and Mummery (2002); Olsen et al., (2007); Rortveit and Olsen (2009).

**Variety-seeking** was measured by four items on a seven-point Likert scale ranging from “Totally disagree” (-3) to “Totally agree” (+3). The items are: “When I eat out, I like to try the most unusual items, even if I am not sure I would like them”, “I find it is fun to try out new items I am not familiar with”, “I am curious about food products I am not familiar with”. The items have been developed from several previous researches such as: Candel (2001), Kahn et al. (1986), Van Trijp and Steenkamp (1992).
3.3. Analytical procedures

This study conducted a confirmatory factor analysis using Amos 16.0 software to test the reliability, convergent validity and discriminate validity. A number of indexes will be used to assess overall model fit (measurement and construct model) as: Chi-square ($\chi^2$), Comparative fit index (CFI); Goodness – of – fit index (GFI); Nonnormed fit index (NNFI); Root mean square error of approximation (RMSEA). Chi-square ($\chi^2$) is traditional test exact fit, it has been considered as inappropriate for large sample size and used to statistical tests of close fit (Rortveit and Olsen, 2007). RMSEA (Root mean square error of approximation) should have value less than 0.08 to indicate reasonable fit while values less than 0.05 to indicate close fit (Browne & Cudeck, 1992). Acceptable model fits are indicated by Comparative fit index (CFI); Goodness – of – fit index (GFI); Nonnormed fit index (NNFI) have value from 0.9 to 1.0 (Bagozzi et al., 1991; Rortveit and Olsen, 2007).

This study will use the value of Chi-square, RMSEA, and CFI, GFI as criterion to examine the Goodness of Fit of the models.

The next section will present the results of analysis procedures.
4. RESULTS

4.1. Confirmatory factor analysis and validation of measures

Confirmatory factor analysis of the six latent constructs, variety-seeking, convenience orientation, consideration set size, perceived product inconvenience, satisfaction, repurchase loyalty was performed to determine the constructs’ convergent and discriminate qualities. At the beginning, confirmatory factor results with 34 items produced results. Items with large residuals and cross-loading to other constructs were removed from the analysis. This process resulted in eleven items of the variety seeking construct (“When preparing foods and snacks, I like to try our new recipes”), (“I eat a wide variety of foods compared with other people, my diet is pretty monotonous”), (“I find myself eating many of the same foods day after day”), (“Most people do not eat as many different foods as I do”), (“I do not usually change the food in my diet much from day to day”), (“I do not usually change the food in my diet much from day to day”), (“My diet is higher in variety than most people I know”), (“I rarely eat the same food two days in a row”), (“Other people seem to eat a greater variety of foods than I do”), (“I prefer to eat food products I am used to”), (“I vary with food, but only with few kinds of food”), (“My variation in food is limited to some basic kind of food”) and three items of the satisfaction construct (“Dull/Exiting”), (“Negative/Positive”), (“Dislike very much/Like very much”) were removed from analysis because of their standarized factor loadings less than 0.5.

Table 4.1 Standardized confirmatory factor analyses coefficients and construct reliability

<table>
<thead>
<tr>
<th>Constructs and indicators</th>
<th>St. factor loadings</th>
<th>t-value</th>
<th>Composite reliability</th>
<th>Variance Extracted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repurchase loyalty</td>
<td>0.93</td>
<td>.82</td>
<td>21.69</td>
<td>.93</td>
</tr>
<tr>
<td>How many times on average during the last year have you eating fish as your main course at home?</td>
<td>.82</td>
<td>21.69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Could you please estimate how many times during the last 7 days have you eating fish as your main course at home?</td>
<td>.95</td>
<td>27.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Could you please estimate how many times during the coming 7 days you expect to eat fish as your main course at home?</td>
<td>.94</td>
<td>27.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td>0.90</td>
<td>.87</td>
<td>23.22</td>
<td>0.76</td>
</tr>
<tr>
<td>Bad/ Good</td>
<td>.87</td>
<td>23.22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unsatisfied/ Satisfied</td>
<td>.87</td>
<td>23.43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unpleasant/ Pleasant</td>
<td>.87</td>
<td>23.23</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

19
Table 4.1 (Continued)

<table>
<thead>
<tr>
<th>Constructs and indicators</th>
<th>St. factor loadings</th>
<th>t-value</th>
<th>Composite reliability</th>
<th>Variance Extracted</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Consider – ration set size</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many species (carp, anchovy, mackerel, pike,</td>
<td>.86</td>
<td>21.62</td>
<td>.81</td>
<td>.60</td>
</tr>
<tr>
<td>snapper, tilapia…etc) would you usually consider?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many conservation forms (fresh, frozen,</td>
<td>.52</td>
<td>11.59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>dried, canned, salted fish…etc) would you</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>normally consider?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many ways of preparing a meal (cooked,</td>
<td>.89</td>
<td>22.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>fried, grilled, soup, steamed…etc) would you</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>usually consider?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Convenience orientation</strong></td>
<td>.82</td>
<td>.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The less physical effort (work, energy) I need</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>to plan, buy , prepare/cook a meal, the better</td>
<td>.66</td>
<td>15.16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I prefer meals that are quick to plan, buy (provide),</td>
<td>.82</td>
<td>19.44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>prepare and cook</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I want to spend as little time as possible on</td>
<td>.83</td>
<td>19.91</td>
<td></td>
<td></td>
</tr>
<tr>
<td>planning, buying, and preparing/cooking of what</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>to have for meals</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Perceived product inconvenience</strong></td>
<td>.90</td>
<td>.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is difficult to plan, provide, prepare and</td>
<td>.81</td>
<td>20.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cook fish for a meal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It takes a lot of time to plan, provide, prepare</td>
<td>.92</td>
<td>25.24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>and cook fish for a meal (dinner)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It takes much effort to plan, buy (provide),</td>
<td>.85</td>
<td>22.38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>prepare and cook</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Variety seeking</strong></td>
<td>.75</td>
<td>.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>When I eat out, I like to try the most unusual</td>
<td>.67</td>
<td>13.97</td>
<td></td>
<td></td>
</tr>
<tr>
<td>items, even if I am not sure I would like them</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I find it is fun to try out new items I am not</td>
<td>.77</td>
<td>16.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>familiar with</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am curious about food products I am not familiar with</td>
<td>.67</td>
<td>13.77</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note:* Chi – Square = 174.562, d.f = 120, p-value = .000; RMSEA = .031; GFI = .96; CFI = .99; N = 487

The factor analysis confirmed that all items in the measurement model reflected the theoretical constructs as expected. The factor loadings ($\lambda$s) were ranged from 0.52 to 0.95 and significant for all six constructs; t-values associated with the loadings, ranging from 11.59 to 29.83, were all significant (P<0.001) (Table 4.1), confirming that all items in the
measurement model reflect the theoretical constructs as expected. This satisfies the criteria for convergent validity for the six internal constructs (Bagozzi, Li, & Phillips, 1991). The measure of close fit RMSEA (0.031) for the measurement model was below the critical value of 0.05 (Browne & Cudeck, 1992). The other goodness-of-fit measures (GFI = 0.96 and CFI = 0.99) also showed acceptable values (higher than 0.90) (Table 4.1). Results in Table 1 suggest that a six factor solution for this study’s factor analysis is reliable and the model fits the data well. Fornell and Larcker (1981) stress the importance of examining composite reliability and variance extracted as criteria for construct reliability, and suggested that composite reliability should be greater than or equal to 0.60 and variance extracted should be greater than or equal to 0.50. In this study, composite reliability measures were above 0.75 and variance extracted was greater than 0.5 (Table 4.1).

The correlations among the measures used in the study are illustrated in table 2. The measures of variety seeking, convenience orientation, consideration set size, perceived product inconvenience, satisfaction and repurchase loyalty were tested to prove discriminant validity. Fornell & Larcker (1981) investigate that if the average variance extracted from two constructs is higher than the square of the correlation between the two constructs, discriminant validity will exist.

**Table 4.2 Construct mean, standard deviations, and correlations of the constructs**

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Variety seeking</td>
<td>5.05</td>
<td>1.74</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2. Convenience orientation</td>
<td>5.73</td>
<td>1.37</td>
<td>.31</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3. Consideration set size</td>
<td>4.26</td>
<td>2.27</td>
<td>.31</td>
<td>.40</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4. Product inconvenience</td>
<td>3.74</td>
<td>1.84</td>
<td>.06</td>
<td>-.23</td>
<td>-.39</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5. Satisfaction</td>
<td>5.69</td>
<td>1.30</td>
<td>.20</td>
<td>.24</td>
<td>.38</td>
<td>-.28</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6. Repurchase loyalty</td>
<td>5.68</td>
<td>2.74</td>
<td>.03</td>
<td>.30</td>
<td>.51</td>
<td>-.32</td>
<td>.40</td>
<td>-</td>
</tr>
</tbody>
</table>

\[
\chi^2 (d.f), p \quad - \quad - \quad 174.562 (120), p = .001
\]

GFI \quad - \quad - \quad .96

CFI \quad - \quad - \quad .99

RMSEA \quad - \quad - \quad .031

The correlations among the measures used in the study are illustrated in table 4.2. The measures of variety seeking, convenience orientation, consideration set size, perceived product inconvenience, satisfaction and repurchase loyalty were tested to prove discriminant validity. Fornell & Larcker (1981) investigate that if the average variance extracted from two constructs is higher than the square of the correlation between the two constructs, discriminant validity will exist. All factor inter-correlation are significant at p<0.01 and
correlations below the diagonal of the matrix. Further, the all of the correlation between the constructs are significant (p<0.01) and ranges are all less than 0.51 (see table 4.2). These analyses approve that the measurement model is either valid as well as reliable.

4.2. Structural analysis and model testing

Table 4.3 presents the results of examined the conceptual model of this study using structural equation analysis. The $\chi^2$ for the model was 205.88 with 124 degrees of freedom (p = 0.00). However, $\chi^2$ statistic is not an appropriate measure of goodness-fit if the sample size was large. The appropriate measure of model fit in data with a large sample size is RMSEA, which in this case was 0.037. This is within the level of reasonable fit (less than 0.08) (Browne & Cudeck, 1992). The goodness of fit index (GFI) and comparative fit index (CFI) were 0.96 and 0.98, respectively, satisfying the recommended level of 0.90 (Bollen, 1989). The overall model fit was therefore satisfactory, explaining 34% ($R^2 = 0.34$). Using structural equation modeling (SEM), the relationships among the latent constructs, variables and items can be estimated simultaneously, which is a unique advantage compared with single equation modeling (Bollen, 1989).

**Table 4.3 Results of hypotheses tests and structural model**

<table>
<thead>
<tr>
<th>Hypothesized paths</th>
<th>Hypothesis</th>
<th>Estimate</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction $\rightarrow$ Repurchase loyalty</td>
<td>H1</td>
<td>.24</td>
<td>5.23***</td>
</tr>
<tr>
<td>Satisfaction $\rightarrow$ Consideration set size</td>
<td>H2</td>
<td>.21</td>
<td>4.59***</td>
</tr>
<tr>
<td>Consideration set size $\rightarrow$ Repurchase loyalty</td>
<td>H3</td>
<td>.43</td>
<td>7.75***</td>
</tr>
<tr>
<td>Convenience orientation $\rightarrow$ Consideration set size</td>
<td>H4</td>
<td>.22</td>
<td>4.18***</td>
</tr>
<tr>
<td>Convenience orientation $\rightarrow$ Repurchase loyalty</td>
<td>H5</td>
<td>.14</td>
<td>2.82*</td>
</tr>
<tr>
<td>Convenience orientation $\rightarrow$ Perceive product inconvenience</td>
<td>H6</td>
<td>-.23</td>
<td>-4.39***</td>
</tr>
<tr>
<td>Convenience orientation $\rightarrow$ Variety seeking</td>
<td>H7</td>
<td>.30</td>
<td>5.03***</td>
</tr>
<tr>
<td>Product inconvenience $\rightarrow$ Consideration set size</td>
<td>H8</td>
<td>-.30</td>
<td>-6.05***</td>
</tr>
<tr>
<td>Product inconvenience $\rightarrow$ Satisfaction</td>
<td>H9</td>
<td>-.28</td>
<td>-5.72***</td>
</tr>
<tr>
<td>Variety seeking $\rightarrow$ Consideration set size</td>
<td>H10</td>
<td>.22</td>
<td>4.15***</td>
</tr>
<tr>
<td>Variety seeking $\rightarrow$ Repurchase loyalty</td>
<td>H11</td>
<td>-.19</td>
<td>-3.65***</td>
</tr>
</tbody>
</table>

*p < .01; **p <.001; ***p <.0001

ns: non-significant.

$\chi^2 = 205.88$; $df = 124$; p = .000

GFI = .96

CFI = .98

RMSEA = .037

22
All path coefficients are presented in table 4.3. This study found positive significant relationship between satisfaction and repurchase loyalty, with a path coefficient of 0.24 (t = 5.23, p < 0.0001). This supports hypothesis 1. The result prove that satisfaction had a positive influence on consideration set size with $\beta = 0.21$ (t = 4.59, p < 0.0001). The path coefficient between consideration set size and repurchase loyalty was 0.43 (t = 7.75, p < 0.0001) proved a positive effect of consideration set size on repurchase loyalty. Convenience orientation had a positive effect on consideration set size ($\beta = 0.22$, t = 4.18, p < 0.0001). The path coefficient between consideration set size and repurchase loyalty was $\beta = 0.43$ (t = 7.75, p < 0.0001) proved a positive effect of consideration set size on repurchase loyalty. Convenience orientation had a positive effect on consideration set size ($\beta = 0.22$, t = 4.18, p < 0.0001). The direct effect of convenience orientation on repurchase loyalty was positive, with a path coefficient of 0.14 (t = 2.82, p < 0.01). Convenience orientation had a negative effect on perceived product inconvenience with a path of coefficient of (-0.23) (t = -4.39, p < 0.0001). All of the results support hypothesis 4, hypothesis 5 and hypothesis 6.

The positive path estimate of 0.3 (t = 5.03, p <0.0001) between convenience orientation and variety seeking indicates that this result agrees with hypothesis 7.

This study showed a negative effect of perceived product inconvenience on consideration set size ($\beta = -0.30$, t = -6.05, p <0.0001). This result supports hypothesis 8.

The negative relationship between perceived product inconvenience and satisfaction was (-0.28) (t = -5.72, p <0.0001), which was encourage hypothesis 9.

Variety seeking had a positive effect on consideration set size ($\beta = 0.22$, t = 4.15, p <0.0001) and negative effect on repurchase loyalty ($\beta = -0.19$, t = -3.68, p <0.0001), which are support hypothesis 10 and hypothesis 11.
5. DISCUSSION CONCLUSION

The purpose of this study was to explore the relationship between satisfaction, consideration set size, convenience orientation, perceived product inconvenience, variety seeking and repurchase loyalty of fish among Vietnamese consumers. The study advanced element hypotheses, and using SEM to estimate the strength and direction of the hypothesized relationships.

My first supported hypothesis was that satisfaction is positively related to the repurchase loyalty ($\beta = 0.24$). This relationship has been shown in prior studies (Olsen, 2002; Olsen, 2007). It is suggest that satisfaction is a very effective predictor of behavior. The second confirmed hypotheses suggesting a positive effect of satisfaction on the number of fish alternatives ($\beta = 0.21$). Bettman et al. (1998) explained the reason for this is that the consideration and choice phases are related very closely together, given that both reflect part of the decision process. According to Nedungadi (1990), the consideration phase represents “what” and “how” alternatives that are brought to mind and the choice phase represents how these alternatives are evaluated.

My findings indicate that taking consideration set size into account helps to improve the ability to predict the repurchase loyalty, which is consistent with previous studies (Andrews & Srinivasan, 1995; Siddarth et al., 1995; Rortveit and Olsen, 2007; 2009). The number of fish, conservation forms and ways of preparing fish had a significant direct effect ($\beta = 0.43$). The impact of consideration set size on repurchase loyalty was almost triple as strong as in prior research (Rortveit & Olsen, 2007) and twice as strong as in research of Rortveit and Olsen (2009). This result confirmed that the number considered dinner alternatives have a significant positive influence on repurchase loyalty. It means that the number of fish alternatives considered will have a direct effect on the repurchase loyalty of fish. Therefore, Fishery Processing Company should to illustrate and communicate their product as being suitable for as many dishes and situations as possible (Rortveit & Olsen, 2009).

Furthermore, convenience orientation has a direct positive effect on consideration set size ($\beta =0.22$), and a direct positive influence on the repurchase loyalty ($\beta = 0.14$). This result differs from the result of Rortveit & Olsen (2009). They found a direct negative relationship between convenience orientation and consumption frequency, whereas Olsen et al. (2007) could not find this direct relationship for in their study. This study further confirmed that the effect of convenience orientation on variety seeking is direct positive ($\beta =0.3$) and convenience orientation has a direct negative impact on perceived product inconvenience.
Perceived product inconvenience has a negative influence on satisfaction ($\beta = -0.23$) and consideration set size ($\beta = -0.28$) and consideration set size ($\beta = -0.3$).

Variety seeking has a strong direct positive effect on consideration set size ($\beta = 0.22$) and a direct negative effect on repurchase loyalty ($\beta = -0.19$).

One important contribution of this study is the structural relationship between satisfaction, consideration set size, convenience orientation, perceived product inconvenience, variety seeking and repurchase loyalty. First, convenience orientation has both direct and indirect effect on repurchase loyalty through consideration set size and variety seeking. Convenience orientation has indirect impact on satisfaction through perceived product inconvenience. Second, perceived product inconvenience has indirect related to repurchase loyalty through satisfaction and consideration set size. Third, this study explore that variety seeking has both direct and indirect influence on repurchase loyalty through consideration set size. Thus, this study suggests that consideration set size has a mediation effect between satisfaction and repurchase loyalty; convenience orientation and repurchase loyalty; perceived product inconvenience and repurchase loyalty; variety seeking and repurchase loyalty. To my knowledge, this structure is not discussed in earlier studies. This study contributes understanding of the role of variety seeking in explaining in consumption frequency of fish/seafood.

The finding of this study has given several of managerial implication. First, the manufacturers should seek to diversify variety kinds of product, e.g. fish sticks, fish tenders, fish cakes, fish au gratin, etc. If consumers’ choices of fish products are diversity, this would lead to an increase of purchase ability since the diversity of products may meet the diversity of consumers’ needs. Second, the manufacturers should provide more fish products to customers, which could help consumers to save their time on food processing, e.g. supplying convenience products. Third, the manufacturers should find various ways to help consumers improve their knowledge about fish products; this would lead to an attraction of consumers’ beliefs in fish products. By doing so, the companies can expand their market share on the market.

Although the findings and suggestions are significant to the seafood industry as well as academic literature, there are some limitations of the study. The results in this study are only significant in three regions of Vietnam. The results should not be generalized for the whole countries.
Reference:


