

Full Length Research Paper

Determining how and why consumer purchasing of grocery and household products varies

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Accepted 30 July, 2010

In order to broaden the research on household consumption patterns, this paper aims to determine how and why consumer purchasing of grocery and household products varies. Several variables, such as shopping frequency, overall satisfaction with the stores and demographic characteristics of the household and the buyer have been examined. An *ad-hoc* survey has been used to test the influence of these variables on variety-seeking behaviour. The results support the existence of a direct relationship between the aforementioned variables and variety-seeking behaviour.

Key words: Consumer behaviour, fast-moving consumer goods, purchasing patterns, store choice, variety-seeking behaviour.

INTRODUCTION

“Variety-seeking” is a phenomenon in which a consumer’s choices vacillate over time among an acceptable set of alternatives (McAlister, 1982; McAlister and Pessemier, 1982). The consumption patterns that characterise variety-seeking have attracted substantial attention from marketing researchers over the past two decades. In the course of this research, numerous factors have been identified as variables that can enhance or undermine tendencies to engage in its practice (Roehm and Roehm, 2004).

Several authors, such as Oliveira-Castro et al. (2005), remark that an understanding of the patterns of consumers brand choices is crucial to the taking of well-grounded managerial decisions. Most individuals purchasing Fast-Moving Consumer Goods (FMCG) buy several brands within a product category over a period of time. Few individuals are exclusive buyers of one single brand. In the same way, cross-shopping behaviour between different stores is becoming more widespread, especially in highly competitive environments. In the retail grocery market, research has identified the presence of shopping variety-seeking behaviour whereby, when alternatives are available, shoppers regularly visit more than

one grocery store (Kahn and McAlister, 1997; McGoldrick

Previous research has focused on studying the antecedents of variety-seeking behaviour in grocery retail markets with specific reference to the multi-format strategies of retailers and loyalty to a particular regular store (Arrondo et al., 2002; Berné et al., 2005). However, households do not normally complete their purchases in just one store but rather in the same set of stores. In other words, the definition of variety-seeking has to be expanded. An individual may be stimulated not only by variety at the product category level, but also by variety within the context of shopping stores.

A regular store set is defined as those stores in which households regularly make purchases. These stores complement each other and may even belong to the same retail chain. The budget of the household (the consumption unit) is allocated among the different stores in the regular store set and, within this set, one store will typically capture the greatest proportion of expenditure, i.e., it is the first-choice store.

The composition of the store set for each household will change over time or not depending, presumably, on the factors that explain consumer variety-seeking behaviour. An understanding of variety-seeking behaviour in the store set is, therefore, important to provide guidelines for retail managers interested in defending and/or expanding their market share.

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and André, 1997; Gijbsbrechts et al., 2008).

The aim of this study is to explain the variety-seeking behaviour found in the regular (that is with a certain stability over time) store set. Different variables have been considered as potential determinants of the observed variation in the store set of each household. They are shopping frequency, overall satisfaction with the stores in the store set and demographic characteristics of the buyer such as his (or her) employment status, household size, and his (or her) age.

The present paper is organised as follows. After a review of the relevant literature, the empirical research begins with the formulation of hypotheses, which are then tested on a database built from an *ad-hoc* survey answered by the person in charge of household purchase decisions. Following this, conclusions and managerial implications are drawn, along with suggestions for future research on this topic.

LITERATURE REVIEW

During the last four decades, the study of variety-seeking behaviour has attracted attention in consumer behaviour research (Faison, 1977; Gijsbrechts et al., 2000; Hoyer and Ridgway, 1984). In the marketing area, Bass et al. (1972) were the pioneers of research into the variety-seeking tendency of individuals in determining consumer behaviour. Since then, different studies have been carried out in order to develop aggregate models of variety-seeking (Jeuland, 1978; McAlister, 1979; 1982). The consensus conclusion of these researchers is that individuals with a high need for stimulation will be more likely to engage in consumer variety-seeking than those with a low need for stimulation.

Since then, several researchers have attempted to model this behaviour. These models are based on the idea that using one brand/product repeatedly decreases its utility, causing a "satiation" effect. Moreover, several review articles which illustrate various consumer behaviour perspectives on exploratory behaviour are available (Venkatesan, 1973; Faison, 1977; Raju and Venkatesan, 1980; Hirschman, 1980; McAlister and Pessemier, 1982). McAlister and Pessemier (1982) concluded that there were two schools of thought in explaining this behaviour: those who view variety-seeking behaviour as the result of other motivations (derived), and those who see variation as a motivation in and of itself (direct).

Van Trijp (1995) proposed the following definition of the term variety-seeking behaviour: "the biased behavioural response by some decision making unit to a specific item relative to previous responses within the same behavioural category, or to a set of items consumed simultaneously, due to the utility inherent in variation per se, independent of the instrumental or functional value of the alternatives or items, and is a function of psychological processes" (van Trijp, 1995, page 9).

Although the aforementioned studies have contributed

to an increased understanding of consumer variety-seeking behaviour, the empirical applications have been focused, above all, on physical goods. Direct applications in services are scarce and began later, in the middle of the 1990s (Keaveney, 1995; Dubé and Maute, 1996; Berné et al., 2001; Hu et al., 2002; Berné et al., 2005). Nevertheless, a significant number of indirect references exist to variety-seeking behaviour in the services sector. This research tries to analyse the relationships between service quality, the satisfaction/dissatisfaction of individuals (Westbrook and Newman, 1978; Westbrook, 1987; Folkes et al., 1987) and the subsequent attitudinal and behavioural loyalty (Homburg and Giering, 2001).

Variety-seeking behaviour research and the development of variety strategies by retailers have a great deal of potential for study. Kahn (1998) focused on high-variety strategies because she believed that they represent a way for a firm to obtain a key competitive advantage in the 21st century. She defined a variety strategy as one that offers more variety in a product line, thus allowing each consumer the opportunity to enjoy a diversity of options over time. She believed its advantages were that: (1) marketers can provide a product that uniquely fits consumer needs in order to ensure strong loyalty; (2) high-variety strategies allow retailers to obtain a higher market share in small markets and (3) this type of strategy can provide protection for the marketer from inaccurate forecasts of taste. In industries where tastes change quickly or are difficult to predict, such as the FMCG market, high-variety strategies can provide some insurance against risk by providing options to suit most consumer tastes. Nonetheless, there are clear disadvantages of such a strategy (in terms of consumers' ability to use more choice). For instance, Iyengar and Lepper (2000) suggested that, in a choice-making situation, even the provision of choices with uniquely good features does not appear to minimize decision aversion.

Regarding variety-seeking behaviour and its determinants, it is important to emphasize the work of Berné et al. (2001) who considered both intrinsic and extrinsic motivations in the choice behaviour of individuals (McAlister and Pessemier, 1982). The model of Berné et al. included the variety-seeking tendency of individuals and customer satisfaction with the catering service of three universities. The results suggested that variety-seeking negatively affected customer retention and lessened the impact of managerial efforts to improve service quality and customer satisfaction.

Homburg and Giering (2001) presented a cause-and-effect model that took into account certain personal characteristics of the individuals as moderating factors in the link between product satisfaction and loyalty. They highlighted the importance of discovering the most loyal segment of satisfied customers. In the context of durable goods, these authors concluded that, in the variety-seeking of the individual, age and income exercised an important moderating role on the relationship between

satisfaction and loyalty. For example, those who were younger and with a higher income tend to show higher levels of satisfaction. Nonetheless, the relationship was the opposite when talking about variety-seekers.

In the tourism sector, Hu et al. (2002) examined the variety-seeking behaviour of U.S. travellers whose primary motive for travelling was to visit friends and relatives (VFR). Using travelling motives and destination patterns, VFRs were classified into four types: single destination/single-purpose, multi-purpose, multi-destination and multi-destination/multi-purpose depending on several socio-demographic characteristics. Household size emerged as a significant demographic factor distinguishing the four VFR groups. Travellers from smaller households were more likely to make multi-destination and multi-purpose trips, while VFRs from large households tended to stay at one destination.

In the FMCG market, and incorporating the variety provided by a multi-format grocery retailer, Berné et al. (2005) provide a managerial model to estimate the quantity of customer variety-seeking behaviour that can be controlled by the executives. Berné et al. (2005) assumes that consumers spend part of their budget in other stores and identifies perceived customer satisfaction, alternative chains and barriers to change, as well as the variety-seeking tendency of individuals, as precedents which have an important effect on the variety in behaviour. The direct impact of customer satisfaction with their first-choice store (that is, the one in which the greatest proportion of the household budget is spent) on customer variety-seeking behaviour reinforces the idea that, with more focused management skills, the variety in behaviour may be reduced.

Summing up, it has been argued that, in practice, the choices of consumers can be very diverse depending on their opportunities and their tastes (Kahn, 1998) and, therefore, their shopping behaviour may be more or less varied.

Research hypotheses

The variety-seeking behaviour approach considered here is related to structural variety (Pessemier, 1985). Variety can be observed in the diversity (number) of stores that form the store set and in the different percentage of household budget spent in each store. It is assumed that variety-seeking behaviour will increase if the diversity of establishments in the store set is wider. As a consequence, the variation in the budget allocation between the different stores will be higher. The greater the variation in this sense, the less loyalty there will be to any one store.

This paper aims to explain structural variety-seeking behaviour by analysing: (1) shopping pattern variables such as shopping frequency, (2) satisfaction level with the stores belonging to the store set and (3) demographic characteristics such as the age and employment status of

the shopper as well as household size.

Shopping frequency

The need for variation of consumers can be affected by their shopping frequency. Frequently purchasing a product eventually leads to repetitive decision processes that can contribute to boredom with the choice task, thereby stimulating variety-seeking behaviour (Howard and Seth, 1969). That is to say, boredom or satiation is induced by an accumulated experience of the same brand (Givon, 1984). In other words, the smaller the inter-purchase timing is, or more intensely the consumer goes shopping, the sooner the consumer will become satisfied and the need for search will turn into boredom or satiation (Park et al., 1991). Hoyer and Ridway (1984) pointed out that frequently purchasing the same brand or product may result in boredom and thereby activate the variety drive. Nevertheless, van Trijp et al. (1996) in their empirical research do not find support for the hypothesis about shopping frequency and its influence on variety-seeking behaviour. In food purchasing, Berné and Múgica (2010) stated the relevance of shopping frequency in order to entail the differences in the variety cycle segmentation. Taking all this into consideration, the following hypotheses can be formulated:

H₁: The higher the shopping frequency at the stores in the store set, the greater the variety-seeking behaviour.

Satisfaction with the stores belonging to the store set

Overall satisfaction with stores has been used in the literature to explain loyalty and/or variety-seeking behaviour¹. Several authors have addressed the importance of consumer satisfaction, referring to the accumulated consumption experience and to the link between what they receive and they expect (Rust and Zahorik, 1993; Szymanski and Henard, 2001). In a product choice context, Hoyer and Ridgway (1984) postulated that the choice of a different brand/product is not the result of the need for variety; rather, it is the result of an evaluation that the existing brand is not fulfilling one's needs. For instance, brand switching, which occurs because one is dissatisfied with the current brand, and variety-seeking behaviour appear when a consumer is dissatisfied with the service received. A positive relationship has been reported between customer satisfaction and repurchase behaviour (Mittal and Kamakura, 2001; Szymanski and Henard, 2001). In addition, Swinyard and Whitlark (1994), Bansal and Taylor (1999) and Athanassopoulos (2000) identified dissatisfaction as an important determinant of the so-called store-switching behaviour. Therefore, the

¹ See Martínez-Ruiz et al. (2010) for a review of customer satisfaction in grocery stores.

greater the overall satisfaction, the smaller the variation in the store set will be. As a result, the following hypotheses are proposed:

H₂: The greater the overall satisfaction with the stores in the store set, the smaller the variety-seeking behaviour will be.

Demographic variables

Variation in the store set might also be explained by exogenous factors, not controllable by the companies, such as demographic variables (Jones et al., 2000; Berné et al., 2001; 2005). Several studies have pointed out that large households in which the shopper is employed and middle aged (25 to 44 years) have a tendency to exhibit loyal behaviour, since their family commitments and time restrictions are greater and, thus, they avoid the variety-seeker trait (East et al., 1997). People with less free time will concentrate their purchases in a limited number of stores in order to spend less time and effort on shopping (McGoldrick and André, 1997). Consequently, the greater the commitments, the smaller the variety-seeking behaviour will be.

By increasing the commitments and time restrictions in a household, several factors, such as the employment status and age of the shopper, reduce the time available for shopping. Therefore, several hypotheses about the demographic characteristics of the buyer –employment status, household size and age– have been posited.

Time-pressured shoppers tend to strive for efficiency (Herrington and Capella, 1995). Shoppers who work outside the home will be more loyal to their first-choice store (Mason, 1991; McGoldrick and André, 1997; Fox et al., 2004) and their variety-seeking behaviour will be less. Hence, the next hypothesis is formulated as follows:

H₃: The greater the work commitment, the smaller the variety-seeking behaviour will be.

Regarding household size, in larger households, there will be more chances to have different tastes and needs (Seetharaman and Chintagunta, 1998) and more variety-seeking behaviour will be expected. However, it is possible that larger households have less time to go shopping and tend to concentrate their purchases in one store (Mägi, 2003). If this is so, less variety-seeking behaviour will be observed. Therefore, based on the last argument, the next hypothesis is formulated:

H₄: The bigger the household, the smaller the variety-seeking behaviour will be.

Finally, the relationship between the age of the buyer and variety-seeking behaviour has to be considered. Age has been negatively related to first store loyalty in several studies (East et al., 1995; 2000; Mägi, 2003). So, it seem

Table 1. Number of stores belonging to the store set of purchase.

# store(s)	Frequency	Percent
1	16	8.9
2	44	24.6
3	68	38.0
4	48	26.8
5	2	1.1
6	1	0.6
Σ	179	100.0

seems plausible that the older the shopper, the greater will be the variation in the store set. One possible explanation is that retired people have more time at their disposal and, thus, are able to spend more time on shopping and using several stores (East et al., 2000). Hence,

H₅: When the buyer is retired, the greater the variety-seeking behaviour will be.

METHODOLOGY

Research design, sampling and procedure

The empirical research was based on a database built from a survey delivered to a sample of 179 individuals from a city in the United Kingdom (37,655 households) conducted during August 2006 (sample error: 7.3%). The information in the database consisted of monthly budget; share of grocery and household expenditure in the stores of the store set; satisfaction of the shopper with the stores; and the personal characteristics of the buyers. The empirical research was carried out in the retailing sector, with the unit of analysis being the member of the household responsible for the purchase of groceries and household products. The household, represented by its principal buyer, will have a certain store set formed by one, two or more regularly used stores, one of which will be the first-choice store and the others will be complementary stores, depending on the percentage of the household budget spent at each store.

The regular store set consisted of a maximum of six stores. Table 1 summarises the percentage of the sample that solved their shopping needs in just one store, in two stores, and so on. It should be highlighted that 8.9% of the sample solved their shopping needs at just one store, while 24.6% split their purchases between two stores and the rest (66.5%) at three or more stores.

With regards to the demographic characteristics of the individuals in the sample, the descriptive frequencies of these socio-demographic variables are shown in Table 2.

Summing up, 69.2% of them work outside the home and 73.2% are women. Finally, 45.8% are two-person households, whilst 7.9% are individual (one person) households and only 5.6% contain five or more members.

Measurement of the variables

The dependent variable of the model is the Hirschman-Herfindahl index (HHI) and the independent variables, that determine variety-seeking behaviour, are the following: shopping frequency at the

Table 2. Sample demographic characteristics.

Demographic		Frequency	Percent
employment	In full-time employment	103	57.54
	In part-time employment	21	11.73
	Not in employment	55	30.73
	Σ	179	100.00
Household size	One person	32	17.88
	Two-people	82	45.81
	Three-people	23	12.85
	Four-people	32	17.88
	Five or more people	10	5.59
	Σ	179	100.00
age	Under 35 years old	29	16.20
	Between 35 and 54 years old	65	36.31
	Between 55 and 64 years old	42	23.46
	Over 65 years old	43	24.03
	Σ	179	100.00

Table 3. Modelling the determinants of variety-seeking behaviour.

Independent variables	Dependent variable	Hypothesis	Expected sign
Shopping frequency at the stores in the store set		H ₁	+
Overall satisfaction with the stores in the store set		H ₂	-
Employment	Variety-seeking behaviour in the household' store set (Hirschman-Herfindahl index)	H ₃	+
Household size		H ₄	-
Age of the buyer		H ₅	+

Source: Own elaboration

stores in the store set, satisfaction with the stores, employment, household size and age. The model used to test the aforementioned hypotheses is specified Table 3.

Next, the measurement of the dependent variable and the measurement of the independent variables in the model will be explained.

To measure variety-seeking behaviour, we have used the Consumer Behaviour Hirschman-Herfindahl Index (HHI) (Theil and Finke, 1983; Meulenber, 1989; Van Trijp, 1995), calculated monthly using the following expression:

$$HHI = - \sum_{j=1}^m [p_j]^2$$

Where: "p_j" is the percentage of expenditure in store "j" in month "t" and "m" is the total number of stores belonging to the store set of each household.

The measurement of variety-seeking behaviour allows us to state that the variation in the store set is smaller when the percentage of the budget allocated to the first-choice store is bigger, when the number of stores belonging to the store set is smaller, and when the percentage of budget allocated to the complementary stores is smaller.

Regarding the measurement of the independent variables, firstly, shopping frequency measures the number of visits of the buyer to the stores in the store set in a certain time (Appendix A). Secondly, the variables measuring the satisfaction of the shoppers with the stores employ an 11-point Likert scale, ranging from 0 (very dissatisfied) to 10 (Very Satisfied) as can be seen in Appendix B. These variables capture the different dimensions of satisfaction (location, prices, product quality, product range, service and opening hours) at the stores in the store set. Appendix B presents the measurement of the Store satisfaction Variable.

Finally, the variables referring to the demographic characteristics of the shopper are employment, household size and age of the buyer.

Table 4. Parameter estimates of the model and their significance.

	Coefficient (Non standardised)	Coefficient (standardised)	T-statistic	Std error	Hypothesis	Result
Shopping frequency at the first-choice store	0.057	0.29	0.485	0.117	H ₁	Rejected
Shopping frequency at the second-choice store	0.216	0.196	3.308	0.065	H ₁	Accepted
Shopping frequency at the third-choice store	0.069	0.85	1.432	0.048	H ₁	Rejected
First-choice store overall satisfaction	-0.260	-0.297	-4.997	0.052	H ₂	Accepted
Second-choice store overall satisfaction	-0.254	-0.388	-6.543	0.039	H ₂	Accepted
Third-choice store overall satisfaction	-0.249	-0.416	-7.016	0.036	H ₂	Accepted
Employment	0.255	0.135	2.274	0.112	H ₃	Accepted
Household size	-0.089	-0.87	-1.467	0.061	H ₄	Rejected
Age of the buyer	0.299	0.199	3.347	0.089	H ₅	Accepted

R² = 0.524

RESULTS

In order to test the aforementioned hypotheses, a regression analysis has been applied, parameter estimates are provided in Table 4.

Regarding shopping frequency, it can be said that, at the second-choice store, the more shopping trips made, the more the variation in the regular store set. However, the shopping frequencies at the first-choice and third-choice stores do not seem to have an effect on variety-seeking behaviour; these coefficients are not significant at the 95% level, so is not possible to accept H1.

It has been verified that a higher level of satisfaction with the first-choice, second-choice and third-choice stores leads to a smaller variety-seeking behaviour. All the statistics are significant at the 95% level, so these results affirm that hypothesis H2 can be accepted.

Shoppers who work outside the home will be more loyal to the first-choice store, while those who are not in employment have more variety-seeking behaviour. Consequently, H3 can be accepted.

It has been posited that the larger households

(with more than 3 people) will exhibit a smaller variety-seeking behaviour than the small households. However, the coefficient is not significant, so it is not possible to accept H4. For this reason, an in-depth analysis of the influence of this variable should be considered in further research in order to clarify whether a non-linear relationship exists between household size and variety-seeking behaviour. It is possible, for instance, that the smaller and larger households exhibit a higher variety-seeking behaviour than the medium-sized ones.

Regarding age, it could be said that young buyers show a smaller variety-seeking behaviour than adult and retired buyers. Retired shoppers have a greater variety-seeking behaviour, so hypothesis H5 can be accepted.

It is possible to conclude that variety-seeking behaviour is present in the regular store set of households, and that the variables that exercise influence on variety-seeking behaviour are the shopping frequency at the second-choice store, satisfaction with the stores of the store set, the employment status of the buyer, and his (or her) age. All these effects (estimated coefficients) are

highly significant. However, there is no evident relationship between shopping frequency at the first- and third-choice store and variety-seeking behaviour, and household size does not seem to exercise influence on variety-seeking behaviour. Summing up, hypotheses H₂, H₃ and H₅ have been confirmed while hypotheses H₁ and H₄ have been rejected.

These results support previous research on variety-seeking behaviour which used a primary database built from an *ad hoc* survey delivered to a sample of 260 individuals in a city of Spain (Berné and Martínez-Caraballo, 2009). The information in this database consisted of monthly budget; share of grocery and household expenditure in the stores of the store set; satisfaction of the shopper with the stores; and the demographic characteristics of the buyers.

The regular store set of Spanish households considers a maximum of three stores. The 8.1% of the sample solve their shopping needs at just one store; while 24.2% split their purchases between two stores and 67.7% at three stores. If we bear in mind the demographic characteristics of the individuals, 158 (of 260) work outside the

home and 210 are women. Regarding the age, a high percentage of the sample (48.1%) is middle age. With regard to the size of the households, the 35% are composed by four persons, whereas only the 10.8% are one-person households and the 9.6% are households with five or more members.

The results of the research carried out in a city of Spain show that, when there are available alternatives, households complement their purchases at their first-choice store with purchases at other stores and that the variables that have the greatest effect on variety-seeking behaviour are purchase frequency and the level of overall satisfaction with location, prices, product quality, product range, service and opening hours of the stores in the store set. Nevertheless, a significant relationship does not exist with the demographic profile of the buyer in Spain.

If we consider the results obtained in Spain and the United Kingdom, we can say that shoppers use several stores to cover their shopping needs and being frequent buyers influence their variety-seeking behaviour. It can be said that the more the number of shopping trips; the more the variation in the regular store set of households. However, demographic characteristics of the buyer –such as household size, employment and age of the person responsible for FMCG purchases– seem to be more significant in the UK than in Spain.

DISCUSSION

Variety-seeking behaviour between alternative stores is an extended practice in consumer markets, especially in the FMCG market. This study contributes to consumer behaviour research since, to our knowledge, no previous work has examined the antecedents of variety-seeking behaviour in the context of a store set used for the purchase of frequently used products. The results reported here are consistent with those obtained in previous studies in a brand choice context and using store scanner databases, in which it has been shown that there is a considerable variation across retailers, across product categories, and within a product category for a given retailer.

In short, the present study has demonstrated that the pattern of switching among stores is not atypical for frequently purchased, nondurable goods. Moreover, a group of drivers of variety-seeking behaviour has been identified: the shopping frequency at the second-choice store, satisfaction with the stores of the store set, and the employment status and the age of the buyer. In contrast, the shopping frequency at the first- and third-choice store and the size of the household do not seem to exercise the expected impact on variety-seeking behaviour.

Based on these results, several managerial implications for the implementation of multi-format and variety strategies in retailing can be provided.

First, bearing in mind that variety-seeking behaviour in the FMCG market is widespread, multi-format retailers should consider this phenomenon when making decisions concerning the variety and location of store formats. In other words, variety-seekers can be considered as targets for retailers with expansion plans.

By carrying out surveys, the retailer can discover which customers at its existing stores have a variety-seeking profile and locate its complementary stores in an appropriate way to capture a larger share of the household budget, always bearing in mind market conditions, the structure of the store set, and so on.

A convenient location –very close to the customer base target– is essential. Two strategies can be used to reduce the impact of competition on the loss of a customer household budget share. First, defensive strategies to minimize the loss of household budget share to other neighbouring stores must be articulated through a search for increased satisfaction, mainly through location, prices, product quality, product range, service and opening hours. Second, offensive strategies of locating a new store in the area should be focused on the opening of differentiated formats to allow the capture of the household budget share which is spent outside of the first-choice store for reasons of format restrictions and assortment gaps.

Regarding the demographic characteristics of the buyer, it can be said that the employment status and age of the person responsible for FMCG purchases have an influence on variety-seeking behaviour. However, store managers have no control or influence on demographic characteristics.

Future research in this area, from a methodological perspective, should attempt to confirm the relationships between the variables by applying multi-sample analysis based on Structural Equations Models. This analysis could improve our understanding, across a heterogeneous population, of the antecedents of variety-seeking behaviour. For instance, the model could include different kinds of consumers classified according to the format or retail chain that they use most.

Other questions that could be addressed in the future are: does the total expenditure of the household increase if a consumer has a broader or smaller store set? Do consumers maintain the same attitudes and behaviour in the complementary stores as in the first-choice one? These issues could be explored by using different information sources such as household panel data or store scanner data. To conclude, it is necessary to replicate the study by using different databases and by trying to overcome a clear limitation of this study, namely, the limited external validity of the analysis reported here.

The intention is to continue the investigation, starting from propositions like the relationship between variety-seeking behaviour in the regular store set and loyalty to a retail chain. Other lines for further research include considering the evolution of the variation of the store set

(that is, a dynamic scheme) and carrying out an in-depth analysis of the geo-demographic characteristics of households.

Finally, this research may be broadened and the managerial implications enriched through the analysis of the synergy between the defensive strategies, variety strategies and multi-format strategies of retail companies.

ACKNOWLEDGEMENTS

The authors wish to thank the financial support received under the MICINN Research Project ECO2010-20880 and they express their gratitude to the support offered by the Institute for Retail Studies of the University of Stirling. "La Rentabilidad del Marketing y la Participación de los Clientes en Sistemas de Distribución de Servicios". They also express their gratitude to the support offered by the Institute for Retail Studies of the University of Stirling.

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APPENDIX**Appendix A: Measurement of the Shopping Frequency Variable**

Shopping frequency. How often do you shop at your first/second/third choice of store?

- i) More than twice a week
- ii) Twice a week
- iii) Once a week
- iv) Once a fortnight
- v) Once a month

Appendix B: Measurement of the Store satisfaction Variable

Indicate from 0 (Very Dissatisfied) to 10 (Very Satisfied) your level of satisfaction with the following characteristics of your first/second/third choice of store:

Characteristic	Very dissatisfied										Very satisfied	
Location	0	1	2	3	4	5	6	7	8	9	10	N/A
Prices	0	1	2	3	4	5	6	7	8	9	10	N/A
Product quality	0	1	2	3	4	5	6	7	8	9	10	N/A
Product range (choice)	0	1	2	3	4	5	6	7	8	9	10	N/A
Service	0	1	2	3	4	5	6	7	8	9	10	N/A
Opening hours	0	1	2	3	4	5	6	7	8	9	10	N/A
Home delivery service	0	1	2	3	4	5	6	7	8	9	10	N/A
Overall satisfaction with this store	0	1	2	3	4	5	6	7	8	9	10	N/A