

RAE - Revista de Administração de Empresas

ISSN: 0034-7590

rae@fgv.br

Fundação Getulio Vargas

Brasil

Rosa Diaz, Isabel Maria; Rondán Cataluña, Francisco Javier
Antecedents of the importance of price in purchase decisions

RAE - Revista de Administração de Empresas, vol. 51, núm. 4, julio-agosto, 2011, pp. 370-381

Fundação Getulio Vargas

São Paulo, Brasil

Available in: http://www.redalyc.org/articulo.oa?id=155119314004



Complete issue

More information about this article

Journal's homepage in redalyc.org



Scientific Information System

Network of Scientific Journals from Latin America, the Caribbean, Spain and Portugal Non-profit academic project, developed under the open access initiative

# **ARTICLES**

Submitted 24.11.2010. Approved 06.06.2011 Evaluated in a *double blind review* Scientific Editor: Eric Cohen

# ANTECEDENTS OF THE IMPORTANCE OF PRICE IN PURCHASE DECISIONS

ANTECEDENTES DA IMPORTÂNCIA DE PREÇO NAS DECISÕES DE COMPRA ANTECEDENTES DE LA IMPORTANCIA DEL PRECIO EN LAS DECISIONES DE COMPRA

#### **ABSTRACT**

This paper analyses the commercial and sociodemographic antecedents of the importance of price in buyers' decisions. The study uses ordinal regression in order to analyze the data obtained from a random sample of consumers of frequently purchased products; these consumers were surveyed in different stores. The results demonstrate that shopping enjoyment and brand loyalty have an influence over the importance of price. However, responsibility for shopping (purchase frequency) does not show a significant relationship. Furthermore, some interesting socio-demographic characteristics were found in the context of the study that can be analyzed in future research.

**KEYWORDS** Importance of price, brand loyalty, purchase frequency, enjoyment, ordinal regression.

Isabel Maria Rosa Diaz imrosa@us.es

Professor at Faculty of Economics and Business, Universidad de Sevilla - Sevilha, Espanha

Francisco Javier Rondán Cataluña rondan@us.es

Professor at Faculty of Economics and Business, Universidad de Sevilla - Sevilha, Espanha

**RESUMO** Este artigo analisa os antecedentes comerciais e sóciodemográficos da importância do preço nas decisões dos compradores. O estudo utiliza a regressão ordinal a fim de analisar os dados obtidos a partir de uma amostra aleatória de consumidores de produtos comprados com freqüência; as pesquisas com estes consumidores foram realizadas em lojas diferentes. Os resultados demonstram que o prazer de compra e a fidelidade à marca influenciam a importância do preço. No entanto, a responsabilidade pela compra (freqüência de compra) não demonstra relação significativa. Ademais, foram encontradas algumas características sóciodemográficas interessantes no contexto do estudo, as quais podem ser analisado em pesquisas futuras.

PALAVRAS-CHAVE Importância do preço, a fidelidade à marca, freqüência de compras, prazer, regressão ordinal.

Resumen Este artículo analiza los antecedentes comerciales y sociodemográficos de la importancia del precio en las decisiones de los compradores. El estudio utiliza la regresión ordinal para analizar los datos obtenidos a partir de una muestra aleatoria de consumidores de productos comprados con frecuencia; las investigaciones con estos consumidores fueron realizadas en negocios diferentes. Los resultados demuestran que el placer de la compra y la fidelidad a la marca influencian la importancia del precio. Sin embargo, la responsabilidad por la compra (frecuencia de compra) no demuestra relación significativa. Además, fueron encontradas algunas características sociodemográficas interesantes en el contexto del estudio, las cuales pueden ser analizadas en investigaciones futuras.

Palabras clave Importancia del precio, la fidelidad a la marca, frecuencia de compras, placer, regresión ordinal.

# INTRODUCTION

A key assumption in economic theory is that consumers tend to rather intensively process the prices of products they buy. At the same time, some behavioral and psychological theories of consumer behavior and information processing such as the adaptation level theory (HELSON, 1964), the assimilation-contrast theory (SHERIF and HOV-LAND, 1965), the Weber-Fechner law (MONROE, 1971), and the prospect theory (KAHNEMAN and TVERSKY, 1979) are rooted, at least implicitly, on the premise that consumers are aware of prices: prices are evaluated, codified, and integrated in memory. However, previous research in this area have shown this assumption not to be always correct (e.g., DICKSON and SAWYER, 1990; MCGOLDRICK and MARKS, 1987; VANHUELE and DRÈZE, 2002); consumers do not make a deliberate and conscious effort to process the prices of the products they buy (MAZUMDAR and MONROE, 1990).

When exposed to information, consumers act as 'stimulus processors': they select and interpret relevant information and translate it into an internal representation. This representation influences their actions and is stored in the memory to be retrieved when required (ZEITHAML and FUERST, 1983; DESAI and HOYER, 2000). The needs of consumers, as well as their values, level of involvement and expectations all play a fundamental role in this process of selecting and interpreting stimuli (CONOVER, 1989). When applied to pricing, this idea suggests that the importance of price as a purchase stimulus has a key role in price management since not only does it determine the way prices are perceived and valued, but it also influences consumer purchase decisions (ROSA, 2001; SIMON, 1989; VANHUELE and DRÈZE, 2002).

Studies of pricing have focused their analysis on the influence of the importance of price on different aspects of purchase behavior. Some of these are directly related to price: accuracy of consumers' knowledge of prices (KUJALA and JOHNSON, 1993; ROSA, 2004); attention to price (DICKSON and SAWYER, 1990); use of price information (MAZUMDAR and MONROE, 1990); and tendency regular price comparison (VANHUELE and DRÈZE, 2002). Other aspects of purchase behavior that have been analyzed in relation to the importance of price are customer satisfaction (ANDERSON, 1996) and the effects of advertising (KALRA and GOODSTEIN, 1998).

Some earlier studies have shown price still as an important factor in purchase decision, especially for frequently purchased products, affecting choices for

store, product and brand (RONDÁN, 2004). Price is not equally important in all sectors and markets, although it is highly relevant in the retail of frequently purchased products. This is corroborated by frequent mention of price in the advertising of this sector (BARREIRO and RUZO, 2000). However, no detailed studies have been conducted yet on the commercial and socio-demographic antecedents affecting this variable, that is, the factors that lead consumers to consider price more or less relevant in a purchase decision. This paper aims to partially cover this gap in research.

This study has a double purpose, namely to assess the importance of price in consumers decisions regarding frequently purchased products and to determine whether such importance is influenced by some commercial variables and socio-demographic characteristics. This study may also contribute to a better cross-cultural understanding of price management, since it was conducted in Spain, an economic and socio-cultural context rarely investigated from this perspective.

The paper is divided into the following sections: firstly, a review of the most relevant literature was conducted in order to provide a theoretical background for the relationship between the importance of price in purchase decisions and the commercial and socio-demographic variables studied. Secondly, the design and results of an empirical study carried out to analyze those relationships are presented. Finally, the results obtained and their implications for pricing are discussed, and some guidelines for future research are suggested.

#### LITERATURE REVIEW

### The importance of price in purchase decisions

Research of price has frequently included the importance of price on purchase decisions; the present study, however, differs from them with regard its focus. The potential influence of price importance on the degree of price awareness among consumers was analyzed, and a significant percentage of those lacking price awareness affirmed they considered price as irrelevant (ROSA, 2004). It was also found that the greater the attention paid to prices, the more accurately they are remembered (DICKSON and SAWYER, 1990; KUJALA and JOHNSON, 1993). This suggests their importance in the decision-making process.

Other variables directly related to the importance of price in purchasing decisions are the use of price information and the comparison between prices of different brands. In this case, the results suggest that the greater the importance of price in purchase decisions, the greater the intensity of use of such information and the greater the amount of comparisons between competing brands (MAZUMDAR and MONROE, 1990).

In short, the importance of price has traditionally been analyzed in terms of the use of price information and the accuracy of price awareness and, in more general terms, as a variable related to consumer demographic characteristics and product attributes (GROEPPEL-KLEIN et al, 1999). Our aim in this research was to determine the influence of purchase frequency, brand loyalty and shopping enjoyment on the importance that consumers attribute to price in their decisions. These three variables were selected for being directly related to the consumer participation and implication in the purchase process. Additional reasons are detailed in the next sections. With regard to demographic characteristics of consumers, a review of the existing body of research on price management shows studies to lack consensus regarding their general results: in some studies these characteristics appear to fundamentally determine the attitudes of consumers in relation to price (ESTELAMI and LEHMANN, 2001), while in others, results generally show no significant relationship (ROSA, 2004). This division of results may derive from differences in the economic, sociocultural and temporal contexts of the studies (GENTRY et al, 2003), and it suggests that further studies on this issue are necessary. Therefore, the present investigation analyzes the influence of gender, age, marital status, education and income on price importance.

Finally, the importance of price for consumers is expressed in the following actions: 1) the intensity of search for price information, or the "intensity" dimension; 2) accuracy, or the "content" dimension; 3) interest in price, or the "consequences" dimension.

#### Frequency of purchase

Consumer participation in the purchase process includes preparation for purchase, communication with the salesperson during the purchase process and the salesperson's actions and suggestions after the purchase. According to Kellog et al. (1997), the intensity of this participation has a major influence over price sensitivity. Particularly when consumers intensively participate in the purchase process, buyers acquire greater knowledge of the value of the product or service and, therefore, their price sensitivity increases (STOEL et al, 2004). In this case, buyers basic needs are economic ones.

If the emotional aspect is taken into account, a greater participation in purchasing can create bonds between customer and supplier (covering social or relational needs in the case of highly interactive goods or services), which could lead to a reduced price sensitivity of buyers (HSIEH et al., 2004).

Considering the foregoing and the nature of the products analyzed in this study (frequently purchased and consumed products, implying medium-low level of consumer-supplier interaction), the basic argument regarding purchase decision frequency is as follows: the persons who usually purchase (in our study, frequently purchased goods) are more frequently in contact with prices. This could induce buyers to attribute greater importance to price in their decisions, i.e., a predominance of economic needs. Likewise, the lack of shopping habit leads purchasers to pay less attention to price (they are less familiar with prices), and to attribute greater importance to other variables that are more salient and easier to use. Therefore, the hypothesis proposed is the following:

Hypothesis 1: The frequency of purchase influences the importance of price in purchasing decisions. Specifically, the greater the frequency, the greater the importance of the price of frequently-purchased products with low consumer-supplier interaction.

#### **Brand loyalty**

With respect to brand loyalty, the commonly accepted argument is that the greater the loyalty, the lower the price sensitivity and, therefore, the lower its importance in purchasing decisions for this category of product (GABOR and GRANGER, 1969; KRISHNAMURTHI and PAPATLA, 2003). This argument is corroborated by the results of other studies which detect a significant relationship between brand loyalty and the accuracy of internal reference prices. 'Non-loyal' buyers are particularly more aware of the different prices of competing brands (ROSA, 2001; KOÇAS and BOHLMANN, 2008), and they show greater use of price information in their purchase decisions.

In short, brand loyalty is apparently one of the fundamental reasons why buyers do not always pay attention to price (DICKSON and SAWYER, 1990; MEYER-WAARDEN, 2008; RONDÁN, 2004). This is due to the fact that they have higher internal reference prices and greater preference for quality, innovation and prestige (STAMER and DILLER, 2006). Consequently, the hypothesis proposed with respect to this variable is:

Hypothesis 2: Brand loyalty influences the importance of price in purchase decisions. Specifically, the greater the loyalty, the lower the importance of price.

#### **Enjoyment associated with purchasing**

Shopping has become a "lifestyle", associated not only to the acquisition of necessary goods and services, but also experience stimulated by social and personal reasons (BLOCH et al, 1994). In this sense, many consumers associate 'going shopping' and integrating a consumption context with leisure (ARNOLD and REYNOLDS, 2003). It also represents a means of obtaining intrinsic satisfaction (GUIRY et al, 2006).

The phenomenon of hedonistic motivation in shopping has been studied in relation to different variables, such as the repurchasing intentions of the buyer, satisfaction and the socio-cultural profile (CAI and XU, 2006; HART et al, 2007). In this study, the relationship which is of interest is that between the hedonistic nature of purchasing and the importance of price in the purchase decision.

Those who consider shopping as 'leisure' tend to devote more time to the activity and shop with greater attention to detail. This could lead them to compare prices more often and to give greater weight to the price variable in their purchase decisions (URBANY et al, 1996; SEOCK and BAILEY, 2006). Even hedonism may be at the core of the satisfaction generated by finding the best purchase option, or value for money, (ARNOLD and REYNOLDS, 2003; KIM, 2006). This idea falls within the attributional theory of motivation and emotion (MICK and FAURE, 1998), which holds that individuals are continuously seeking explanations for events in their lives; those explanations generate positive or negative primary emotions depending on the "value" they provide.

In this context, our hypothesis considers that the consumers who associate enjoyment to the purchase of frequently purchased products (i.e., the products analyzed in this research) can be divided into two main profiles. One is the "economic shopper": a rational, price-sensitive consumer who associates the enjoyment and satisfaction of shopping with its functional aspects, predominantly, price. The second profile is the "mission specialist", even more price-sensitive than the "economic shopper" and whose prime motivations include optimizing "purchases for others" (KIM, 2006; NGUYEN et al, 2007). Consumers have two basic motivations: acting as "efficient shoppers" (by selecting the best value for money) and "well-informed shoppers"

(by searching and processing of price information) (GROEPPEL-KLEIN et al, 1999). Therefore, the study's hypothesis with regard to this variable is:

Hypothesis 3: The enjoyment associated to shopping influences price importance in purchasing decisions, i.e., the greater the enjoyment, the greater the importance of price.

### **Socio-demographic characteristics**

The reviewed literature lacks consensus regarding the role of socio-demographic characteristics in purchase behavior in relation to price (in our study, the importance of price in decision-making). In some cases, these characteristics appear to have a fundamental role (ESTELAMI and LEHMANN, 2001; URBANY et al, 1996), while in others, the results generally show no significant relationship (ESTELAMI, 1998; KIM et al, 1999; VANHUELE and DRÈZE, 2002).

This diversity of results could derive from the differences in the economic, socio-cultural and temporal contexts of the studies (GENTRY et al, 2003), and it suggests that further studies on this issue are necessary. For this reason, the present study included socio-demographic variables (gender, age, marital status, education, income and size of the family unit).

With regard to gender, social changes (such as women's increased education level average and their massive inclusion in workplaces) have provoked transformations in traditional shopping roles within families. Men and women are increasingly sharing household tasks, and the involvement of children is also growing. Therefore, since the traditional housewife role is being progressively spread among family members, it is reasonable to predict that gender does not cause significant differences in the importance attached to price in purchase decisions (ESTELAMI, 1998).

However, some of the empirical evidence in this area suggests that women have greater knowledge of prices than men, at least regarding goods most frequently purchased and used. This suggests that they attribute greater importance to price (ESTELAMI and LEHMANN, 2001). One possible explanation for these findings could be that, in certain socio-economic and cultural contexts, women still take on more housework responsibilities (including shopping) than men. This is true even where these differences are decreasing (MCGINNIS et al, 2003; MCGOLDRICK et al, 1999; PUTREVU, 2001). This trend is particularly marked in Spain (INSTITUTO NACIONAL DE ESTADÍSTICA DE ESPAÑA, 2003).

As with gender, empirical evidence regarding the impact of age on price importance is contradictory. Some studies fail to identify any significant influence (MCGOLDRICK and MARKS, 1987; TURLEY and CABANISS, 1995), while others show a clear influence (URBANY et al, 1996). In the case of Spain, the socio-cultural context of this study, significant differences between older and younger generations should be stressed, regarding, for example, available time and income level (INSTITUTO NACIO-NAL DE ESTADÍSTICA DE ESPAÑA, 2003). In addition, older age groups in Spain belong to a stricter generation who has experienced difficult times in the past. This could be the cause of greater price sensitivity. Furthermore, younger age groups show a marked tendency to delegate shopping to other family members, which makes them less sensitive to price (SARALEGUI and SEOANE, 1999).

Based on these arguments, it is reasonable to predict that middle-aged and older groups would attach greater importance to price.

With regard to marital status, single persons can be expected to attach less importance to price. This is because this group is largely composed of either young people living with parents, who account for most of domestic provisions, or people living in single-person households without family responsibilities. They consequently have greater purchase power than married households, especially those with children (INSTITUTO NACIONAL DE ESTADÍSTICA DE ESPAÑA, 2003). Widowed persons are mostly in the older age groups, who, as mentioned earlier, are expected to attach greater importance to price.

With regard to education level, higher levels are usually associated to a greater capacity to process price information (ZEITHAML and FUERST, 1983; TURLEY and CABANISS, 1995), more favorable employment situations and higher incomes, which probably lowers the importance of price (ESTELAMI and LEHMANN, 2001; GABOR and GRANGER, 1969).

Moreover, family size limits shopping budget for household supplies, which could increase price sensitivity in households with more members (MC-GOLDRICK and MARKS, 1987).

Finally, it is noteworthy that although different research have found little or no relationship between demographic variables and price sensitivity (KIM et al, 1999), such factors should be included in studies in order to prevent potential interference in results (HSIEH et al, 2004).

#### **EMPIRICAL STUDY METHODS**

#### Sample selection and data collection

The present study, which targeted consumers in general regardless of socio-cultural and demographic characteristics, is part of a wider study of consumption and purchase behavior. The research was conducted in the city of Seville, Spain. A random sample of 600 consumers was chosen (absolute sampling error = 4%; confidence level = 95%), with different socio-cultural and demographic characteristics. Respondents were selected at random and interviewed inside or outside stores of different sizes as they finished shopping. Data were collected using personal interviews. In order to keep

Table 1 – Descriptive statistics for socio-demographics variables

Gender	Percentage
Male	35.3
Female	64.7
Age	
<18	3.5
18 to 25	9.5
26 to 35	22.0
36 to 45	20.3
46 to 55	17.1
56 to 65	15.5
> 65	12.2
Marital status	
Single	22.0
Married/Cohabitating	67.2
Separated	2.7
Divorced	1.1
Widowed	7.1
Education level	
No education	22.1
Primary	26.6
Secondary	26.8
College	24.5
Incomes level	
Low	26.8
Medium	43.3
High	29.8
Number of household members	
1	8.7
2	22.5
3	23.7
4	26.2
5	13.8
6	3.5
7	0.8
8	0.8
Total	100%
·	

the interviews within feasible time limits, each respondent was asked about one product only (ESTELAMI and LEHMANN, 2001). A total of 25 frequently-purchased products were analyzed, including both food and nonfood products (ground coffee, instant coffee, cocoa powder, soft drinks, orange squash/lemonades, olive oil, sunflower oil, washing powder, dishwasher detergent, fabric softener, shampoo, shower gel, toothpaste, apples, kiwis, pears, tomatoes, milk, margarine, water, yogurt, juice, canned tuna, breakfast cereals and toilet paper). Descriptive statistics for the sample composition are shown in Table 1.

#### **Variables and measurements**

The variables of the study were measured as follows: The price importance for purchase decision was evaluated using the method of Mazumdar and Monroe (1990), comprising a scale of 1 to 5, where 1 is the lowest importance and 5 is the highest.

Three levels were defined for the variable "frequency of purchase" (HSIEH et al, 2004): 1. One person responsible for household shopping - maximum frequency; 2. Shared responsibility for household shopping - medium frequency; 3. Occasional household shopping - low frequency.

Brand loyalty was evaluated by asking respondents whether the brand they had just bought was their usual brand. The possible answers were "yes" or "no" (KRISH-NAMURTHI and RAJ, 1991).

Finally, the level of enjoyment associated to purchasing was defined as a dichotomic variable: the question was "Do you normally enjoy doing this kind of shopping?" and the two possible answers were "yes" or "no" (URBANY et al, 1996).

Table 2 shows the main descriptive statistics for these variables.

Price was found to be a relatively important element in purchase decisions for the respondents. A slight predominance of respondents who were the sole responsible for shopping was found, as well as a clear predominance of respondents loyal to one brand and respondents who associate shopping with enjoyment.

#### Statistical tool

Data were analyzed using ann ordinal regression technique. Regression methods involving one ordinal dependent variable and qualitative or quantitative independent variables are an interesting variation known as ordinal regression. This method allows the modeling of the dependence of a polytomous ordinal response on a set of predictors, which may be factors or co-variables. SPSS software was used for the ordinal regression..Its linear procedure involves minimizing the sum of squared differences between the dependent variable and a weighted combination of independent variables. The estimated coefficients reflect the way changes in predictors affect the dependent variable. The response is considered numeric since changes in response level are equivalent in

Table 2 – Descriptive statistics for commercial variables

Importance of price	Frequency	Main statistics		
No importance	21 (3.5%)	Mean	3.24	
Little importance	134 (22.3%)	Median	3.00	
Medium importance	181 (30.2%)	Mode	4	
Very important	211 (35.2%)	Tip. Deviation	1.01	
The most important	53 (8.8%)	Variance	1.01	
Frequency of purchase				
Sole responsible	290 (48.3%)	_	_	
Shared responsibility	196 (32.7%)	_	_	
Sporadic buyer	114 (19.0%)	<del>-</del>	_	
Brand loyalty				
Yes	380 (67.6%)	_	_	
No	182 (32.4%)	_	_	
Hedonic purchase				
Yes	382 (63.7%)	_	_	
No	218 (36.3%)	_	_	
Total	600 (100%)		_	

the whole range of options (PÉREZ, 2005). Therefore, in these cases, ordinal regression is preferred to similar categories (AGRESTE, 1989) or the multinomial method, which disregards the ordinal information contained in the dependent variable (MANOR et al, 2000).

# **RESULTS OF THE STUDY**

This section contains the most relevant results of the data analysis after ordinal regression. Firstly, Table 3 shows a measure of goodness of fit of the model.

Table 3 - Model adjustment information

Model	-2 log likelihood	Chiq-square	d.f	sig.
Only Intersection	1497.336			
Final	1257.228	240.107	15	0.000

This table shows that, according to the chi-square test, the final model significantly improves the model using only the constant (sig.= 0.000), thereby providing a good measure of goodness of fit.

Table 4 shows the pseudo R-squared, indicating that the higher its value, the greater the amount of variance explained by the model. These values do not correspond but approximately to the linear correlation coefficient, and their maximum value is 1. Few studies in literature have found pseudo R-squared values over 0.7 (BELL and BUCKLIN, 1999; BELL and LATTIN, 2000). Therefore, values such as those found for Cox and Snell and Nagelkerke statistics, over 0.35, are at an intermediate significance level.

Table 4 - Pseudo R-square

•	
Cox and Snell	0.350
Nagelkerke	0.372

Table 5 shows estimated parameters, including coefficients of dependent variables, as well as their signs and degrees of influence over the dependent variable "importance of price."

The variables with highest influence on price importance in purchase decisions are shown in this table. Furthermore, this analysis shows which levels of nominal variables influence the dependent variable. The variables

with regression coefficients significantly different from 0 and a confidence level of 95% are shown in bold.

With regard to the three variables affecting the purchase behavior analyzed in this study, enjoyment associated to shopping and brand loyalty appear to significantly influence the dependent variable. However, responsibility for shopping (purchase frequency) does not show a statistically significant relationship.

With regard to signs for influential variables and the categories of these variables with closest relationships, respondents who reported shopping enjoyment for the products analyzed tend to attach greater importance to price, since the coefficient for this variable is positive. Hypothesis 3 is therefore accepted. Moreover, customers who are loyal to a particular brand attach less importance to price (negative relationship). Therefore, hypothesis 2 is also accepted. However, hypothesis 1 is not accepted, since statistical evidence is insufficient to demonstrate a relationship between frequency (or responsibility for shopping) and the importance of price.

Age, number of family members and income level were the demographic variables that significantly influenced the importance that respondents attached to price. Moreover, gender, marital status and education level did not appear to have a significant influence on the dependent variable.

With regard to signs for influential variables, age has a negative influence on the importance of price, that is, the older the respondent, the lower the importance of price. This sign is also applicable to income: persons with higher incomes tend to attach less importance to price. However, the sign of the coefficient for the number of people in households is positive, indicating that the larger the household, the more important the price in purchase decisions.

# DISCUSSION OF RESULTS AND PRICING IMPLICATIONS

Studying price importance in consumer decisions is important for businesses for various reasons. Firstly, it can provide valuable insights regarding the types of information consumers use at stores while making purchase decisions, since the numerous factors affecting price (i.e., cost, demand, competition, regulations and product life cycle) make it difficult to establish general formulas for optimal decision-making in pricing. It is necessary to determine which factors are relevant and set the appropriate prices based on these factors.

**Table 5 – Estimated parameters** 

	Estimation	Tip.Error	Wald	d.f	Sig.	Confidence interval 95%	
	ESUMATION	прыно	waiu	u.i		Limit inferior	Limit superior
Age 1	-0.149	0.073	4.141	1	0.042	-0.292	-0.005
Number of persons	0.144	0.069	4.314	1	0.038	0.008	0.279
Entered	-0.716	0.135	28.366	1	0.000	-0.980	-0.453
[sex=1]	0.081	0.206	0.155	1	0.694	-0.323	0.486
[sex=2]	0(a)	•	•	0			•
[marital s=1]	0.215	0.426	0.254	1	0.614	-0.620	1.049
[marital s=2]	0.054	0.345	0.024	1	0.876	-0.623	0.731
[marital s=3]	0.476	0.606	0.617	1	0.432	-0.712	1.663
[marital s=4]	-0.855	0.862	0.984	1	0.321	-2.546	0.835
[marital s=5]	0(a)			0			
[n informed=1]	0.298	0.316	0.884	1	0.347	-0.323	0.918
[n informed=2]	0.431	0.262	2.700	1	0.100	-0.083	0.945
[n informed=3]	-0.200	0.238	0.704	1	0.401	-0.600	0.267
[n informed=4]	0(a)			0			
[loyalty 1=1]	- 1.791	0.198	82.229	1	0.000	-2.178	-1.404
[loyalty 1=2]	0(a)			0	•		
[freq br2=1]	0.166	0.197	0.704	1	0.402	-0.221	0.533
[freq br2=2]	0.014	0.269	0.003	1	0.959	-0.514	0.542
[freq br2=3]	0(a)			0			•
[distrac =1]	0.943	0.198	22.613	1	0.000	0.554	1.331
[distrac =2]	0(a)			0			

This paper analyses several commercial and sociodemographic antecedents of the importance of price in buyers' decisions. The results demonstrate that shopping enjoyment and brand loyalty influence the importance of price. However, responsibility for shopping (frequency of purchase) does not show a significant relationship. Age, number of family members and income level were the demographic variables that significantly influenced the importance that respondents attached to the price.

The results obtained in the study confirmed hypotheses 2 and 3, but not hypothesis 1.

The interpretation of these results with regard to brand loyalty leads us to conclude that non-loyal consumers take price into greater consideration in their purchase decisions than loyal ones. It is thereby confirmed that brand loyalty reduces price sensitivity, while considering a wider range of competing brands leads

buyers to decide more "economically." These results are in line with those obtained in previous studies of different socio-economic and cultural contexts (KOÇAS and BOHLMANN, 2008; KRISHNAMURTHI and PAPATLA, 2003; MEYER-WAARDEN, 2006). They should prompt company price managers to closely study the number of loyal customers compared to non-loyal ones, since these figures could radically affect pricing decisions.

With regard to enjoyment associated to shopping, the results also confirm the hypothesis proposed. Buyers who associate shopping for these products to leisure, or at least consider it enjoyable, tend to consider price as more relevant. This, therefore, reinforces the argument that greater interest in and attention to shopping translate into more price comparisons (SEOCK and BAILEY, 2006), increased search for best value-for-money (KIM, 2006) and attempts to optimize the

role of efficient, well-informed shopper (GROEPPEL-KLEIN et al, 1999). Under these premises, price assumes a particularly relevant role. Quantifying this sector of consumers is a key factor that should be considered in pricing decisions of companies, since these customers attach greater importance to price. They are more price-sensitive and ready to change brands in order to achieve better value in their shopping.

However, the first hypothesis was not corroborated by the results. No significant influence of shopping frequency on the importance of price (in purchasing decisions) was found. Both frequent and occasional shoppers consider prices in their purchase decisions with the same intensity. This result could be partly explained by the nature of the products analyzed, which involves a low degree of company-customer interaction. This interaction does not create an emotional association between frequent buyers and companies that might lead to reduced price sensitivity. In addition, although shopping frequency and responsibility are sporadic, purchases are agreed to by consensus at home, in a general household pattern of behavior that prevails over the preferences of the individual doing the shopping.

Age, number of persons in the household and income level appear to be the demographic variables with highest influence on purchase behavior. The results suggest that household size is a key factor for the importance of price, since the larger it is, the greater the importance of price. A possible explanation is that households with more members require higher shopping budget, which makes price more relevant to purchase behavior.

With regard to income, it seems clear that persons with higher incomes are less likely to seek small savings in frequently-purchased goods, which makes price less important as a decisive element in purchase decisions. For these customers, values such as time, brand image, quality, added services and others acquire a more relevant role in purchase decisions.

With regard to age, the older the consumer, the lower the importance of price. This could derive from a number of reasons. One of them is that as people get older, their relative income tends to increase (due to greater professional stability and less family responsibilities), leading to a lower weighting of price in comparison to other factors that influence shopping.

The relevance of these results have several implications for company pricing policies. particularly regarding the design of price-based marketing strategies. Knowledge of loyalty degree in the target segment can guide the implementation of more appropriate marketing policies aimed at improving customer relations (RONDÁN, 2004). This is particularly relevant since most loyal customers are less sensitive to price; therefore, loyalty maintenance should be more based on aspects such as adequate service and attention (NGUYEN et al, 2007). In addition, the relationship between price and brand loyalty is heterogeneous and dynamic, since brand loyalty changes over time (KRISHNAMURTHI and PAPATLA, 2003).

Secondly, impulse buying should be particularly taken into consideration in the context of shopping for frequently-purchased goods due to the relationship between shopping enjoyment (more time spent in the activity) and the importance of price. Price appears to have a greater role in more 'reflexive' shopping than in impulse buying. Therefore, the percentage of customers of a given brand who buy on impulse is relevant in order to define the most decisive marketing elements (elements other than price, depending on the results obtained) for this kind of shopping behavior.

Finally, although no significant relationship was found between shopping frequency and the importance of price, it is once again necessary to stress the low degree of comsumer-company interaction for the categories of products analyzed. Involvement degree (higher for durable goods and services) should be therefore incorporated into the analysis; further analysis should be conducted for other categories of product, particularly durable goods and services, in order to study different levels of involvement in the purchase (HSIEH et al, 2004; SHANKAR and KRISHNAMURTHI, 1996).

Price dispersion should also be included, since it can be positively correlated to costs that consumers are willing to accept, as well as market heterogeneity (ZHAO, 2006).

Other factors to be included in future research with price importance as a dependent variable are: budget restrictions and the perceived utility of money (ALFORD and BISWAS, 2002); product use and context of use (BISWAS and BLAIR, 1991); differences perceived between prices (SIBLY, 2007); product differentiation (ÁLVAREZ and VÁZQUEZ, 2008); information available (DODDS et al, 1991); and perception of brand and establishment (CAMPBELL, 1999).

Finally, we recommend extending the sample to other countries in order to analyze the influence of cultural differences – social distance (TROPE et al, 2007) - over the importance of price, as well as possible commercial and socio-demographic antecedents.

## **REFERENCES**

ALFORD, B. L; BISWAS, A. The effects of discount level, price consciousness and sale proneness on consumers' price perception and behavioral intention, *Journal of Business Research*, v. 55, n. 9, p. 775-783, 2002.

ALVAREZ, B; VÁZQUEZ, R. Effects of price decisions on product categories and brands. *Asia Pacific Journal of Marketing and Logistics*, v. 20, n. 1, p. 23-43, 2008.

ANDERSON, E. W. "Customer satisfaction and price tolerance", Marketing Letters, v. 7, n. 3, p. 265-274, 1996.

ARNOLD, M; REYNOLDS, K. E. Hedonic shopping motivations. *Journal of Retailing*, v. 79, p. 77-95, 2003.

BARREIRO, J. M; RUZO, E. *Análisis de valor de marca a través del logit multinomial: un estudio empírico*. In: ACTAS DEL XII ENCUENTRO DE PROFESORES UNIVERSITARIOS DE MARKETING, 167-183, 2000. Santiago de Compostela (A Coruña), 2000.

BELL, D. R; BUCKLIN, R. E. The role of internal reference points in the category purchase decision. *Journal of Consumer Research*, 26, 128-143, 1999.

BELL, D. R; LATTIN, J. M. Looking for loss aversion in scanner panel data: the confounding effect of price respond heterogeneity. *Marketing Science*, v. 19, n. 2, p. 185-200, 2000.

BISWAS, A; BLAIR, E. A. Contextual effects of reference prices in retail advertisements. *Journal of Marketing*, v. 55, p. 1-12, 1991.

BLOCH, P. H; RIDGWAY, N. M; DAWSON, S. A. The shopping mall as consumer habitat. *Journal of Retailing*, v. 70, n. 1, p. 23-42, 1994.

BYOUNGHO, J; STERQUIST, B; KOH, A. Price as hedonic shopping. *Family and Consumer Sciences Research Journal*, v. 31, n. 4, p. 378-402, 2003.

CAI, S; XU, Y. Effects of outcome, process and shopping enjoyment on online consumer behavior. *Electronic Commerce Research Applications*, v. 5, n. 4, p. 272-281, 2006.

CAMPBELL, M. C. Perceptions of price unfairness: antecedents and consequences. *Journal of Marketing Research*, v. 36, p. 187-199, 1999.

CHUN, S; MCQUILLAN, J. A Review of gendered consumption in sport and leisure. *Academy of Marketing Science Review*, 5. 2003. Disponible en: http://findarticles.com/p/articles/mi\_qa3896/is\_200301/ai\_n9203309/. Acess 06.06.2011.

CONOVER, J. N. The pricing decision: a strategic planner for marketing professionals. In SEYMUR, D.T. (Ed) *Consumer be-bavior foundations for pricing*, Chicago: Probus Publications Company, 1978. p. 93-110.

DESAI, K. K; HOYER, W. D. Descriptive characteristics of memory-based consideration sets: influence of usage occasion frequency and usage location familiarity. *Journal of Consumer Research*, v. 27, p. 309-323, 2000.

DICKSON, P. R; SAWYER, A. G. The price knowledge and search of supermarket shoppers. *Journal of Marketing*, v. 54, p. 42-53, 1990.

DODDS, W. B; MONROE, K. B; GREWAL, D. Effects of price, brand and store information on buyer's product evaluation. *Journal of Marketing Research*, v. 28, p. 307-319, 1991.

ESTELAMI, H. The Price Is Right...or is it? Demographic and category effects on consumer price knowledge. *Journal of Product and Brand Management*, v. 7, n. 3, p. 254-266, 1998.

ESTELAMI, H; LEHMANN, D.R. The impact of research design on consumer price recall accuracy: an integrative review. Journal of the *Academy of Marketing Science*, v. 29, n. 1, p. 36-49, 2001.

GABOR, A; GRANGER, C. Pricing strategy. In: TAYLOR, B.; WILLS, G. (Eds.) The pricing of new products, London: Staples 1969. p. 541-555.

GENTRY, J.W; COMMURI, S; JUN, S. (2003). Review of literature on gender in the family, *Academy of Marketing Science Review*, 1, Disponible en: http://www.amsreview.org/articles/gentry01-2003.pdf Acess 06.06.2011.

GROEPPEL-KLEIN, A; THELEN, E; ANTRETTER, C. The impact of shopping motives on store-assessment. In: BERNARD DUBOIS; TINA M. LOWREY; L. J. SHRUM, MARC VANHUELE (Eds.) European Advances in Consumer Research, vol. 4: Provo, UT: Association for Consumer Research, 1999. p. 63-72.

GUIRY, M; MÄGI, A.W; LUTZ, R.J. Defining and measuring recreational shopper identity. *Journal of the Academy of Marketing Science*, v. 34, p. 74-83, 2006.

#### ARTICLES ANTECEDENTS OF THE IMPORTANCE OF PRICE IN PURCHASE DECISIONS

HART, C; FARRELL, A; STACHOW, A; REED, G. Enjoyment of the shopping experience: impact on customers' repatronage intentions and gender influence. *Service Industries Journal*, v. 27, n. 5, p. 583-604, 2007

HELSON, H. Adaptation level theory. Harper and Row: New York, 1964.

HSIEH, A, TIEN, A; TING, W. The effect of consumer participation on price sensitivity, *Journal of Consumer Affairs*, 38, 282-296, 2004.

INSTITUTO NACIONAL DE ESTADÍSTICA DE ESPAÑA. Anuario estadístico de España. 2002-2003.

KAHNEMAN, D; TVERSKY, A. "Prospect theory: an analysis of decision under risk". *Econometrica*, v. 47, n. 2, p. 263-291, 1979.

KALRA, A; GOODSTEIN, R. C. The impact of advertising positioning strategies on consumer price sensitivity. *Journal of Marketing Research*, v. 35, p. 210-224, 1998.

KELLOGG, D. L; YOUNGDAHL, W. Y; BOWEN, D. E. On the relationship between customer participation and satisfaction: two frameworks. *International Journal of Service*, v. 8, n. 3, 206-219, 1997.

KIM, B; SRINIVASAN, K; WILCOX, R. T. Identifying price sensitive consumers: the Kolodinski relative merits of demographic vs. purchase pattern information. *Journal of Retailing*, v. 75, n. 2, 173-193, 1999.

KIM, H. Using hedonic and utilitarian shopping motivations to profile inner city consumers, *Journal of Shopping Center Research*, v. 3, n. 1, p. 57-78, 2006.

KOÇAS, C; BOHLMANN, J. D. Segmented switchers and retailer pricing strategies. *Journal of Marketing*, v. 72, p. 124–142, 2008.

KRISHNAMURTHI L; PAPATLA P. Accounting for heterogeneity and dynamics in the loyalty-price sensitivity relationship. *Journal of Retailing*, v. 79, n. 2, p. 121-135, 2003.

KRISHNAMURTHI, L; RAJ, S. P. An empirical analysis of the relationship between brand loyalty and consumer price elasticity. *Marketing Science*, v. 10, n. 2, p. 172-183, 1991.

KUJALA, J.T; JOHNSON, M.D. Price knowledge and search behavior for habitual, low involvement food purchases. *Journal of Economic Psychology*, v. 14, p. 249-265, 1993.

MANOR, O; MATTHEWS, S; POWER, C. Dichotomous or categorical response? Analysing self-rated health and lifetime social class. *International Journal of Epidemiology*, v. 29, p. 149-157, 2000.

MAZUMDAR, T; MONROE, K. B. The effects of buyers' intentions to learn price information on price encoding, *Journal of Retailing*, v. 66, n. 1, p. 15-32, 1990.

MCGOLDRICK, P. J; MARKS, H. J. Shoppers' awareness of retail grocery prices. *European Journal of Marketing*, v. 21, n. 3, p. 63-76, 1987.

MCGOLDRICK, P. J; BETTS, E. J; WILSON, A. F. Modelling consumer price cognition: evidence from discount superstore sectors. *The Service Industries Journal*, v. 19, p. 171-193, 1999.

MEYER-WAARDEN. L. The influence of loyalty programme membership on customer purchase behavior. *European Journal of Marketing*, v. 42, n. 1/2, p. 87-114, 2008.

MICK, D.G; FAURE, C. Consumer self-gifts in achievement contexts: the role of outcomes, attributions, emotions, and deservingness. *International Journal of Research in Marketing*, v. 15, n. 4, p. 293-307, 1998.

MONROE, K.B. (1971), "Psychophysics of prices: a reappraisal", *Journal of Marketing Research*, Vol. 8, pp. 248-251.

MONROE, K. B. Política de precios. McGraw-Hill: Madrid, 1992.

NGUYEN, T. T. M; NGUYEN, T. D; BARRETT, N. J. Hedonic shopping motivations, supermarket attributes, and shopper loyalty in transitional markets: evidence from Vietnam. *Asia Pacific Journal of Marketing and Logistics*, v. 19, n. 3, p. 227-239, 2007.

PÉREZ LÓPEZ, C. Métodos Estadísticos Avanzados con SPSS, Ediciones Paraninfo, 2005.

PUTREVU, S. Exploring the origins and information processing differences between men and women: implications for advertisers. *Academy of Marketing Science Review*, 10. 2001. Disponible en: http://www.amsreview.org/articles/putrevu10-2001.pdf. Acess 06.06.2011.

RONDÁN CATALUÑA, F. J. Precio versus lealtad hacia la marca en la elección de compra. *Investigaciones Europeas de Dirección y Economía de la Empresa*, v. 10, n. 1, p. 165-188, 2004.

ROSA DÍAZ, I. M. La valoración y el conocimiento de los precios por la demanda. 2001. Tesis de doctorado del Departamento de Administración de Empresas y Marketing, Universidad de Sevilla. 2001.

ROSA DÍAZ, I. M. Price knowledge: effects of consumers' attitudes towards prices, demographics, and socio-cultural characteristics. *Journal of Product Brand Management*, v. 13, n. 6, p. 406-428, 2004.

SARALEGUI, J; SEOANE, P. La familia española según el panel de hogares de la UE, *Revista Fuentes Estadísticas*, v. 37, n. 9. p. 9-10. 1999.

SEOCK, Y; BAILEY, L. R. The influence of college students' shopping orientations and gender differences on online information searches and purchase behaviours. *International Journal of Consumer Studies*, v. 32, p. 113–121, 2006.

SHANKAR, V; KRISHNAMURTHI, L. Relating price sensitivity to retailer promotional variables and pricing policy: an empirical analysis. *Journal of Retailing*, v. 72, n. 3, 249-272, 1996.

SHERIF, M; HOVLAND, C. *Social judgment*. Yale University Press: New Haven and London, 1965.

SIBLY, H. Loss aversion, price and quality. Journal of Socio-Economics, v. 36, n. 5, p. 771-788, 2007.

SIMON, H. *Price management*. Elsevier Service Publishers. North-Holland: Amsterdam, 1989.

SOLÉ MORO, M. L. Los consumidores del siglo XXI. Madrid: Esic, 1999.

STAMER, H. H; DILLER, H. Price segment stability in consumer goods categories. *Journal of Product Brand Management*, v. 15/1, p. 62–72, 2006.

STOEL, L; WICKLIFFE, K. Attribute beliefs and spending as antecedents to shopping value. *Journal of Business Research*, v. 57, p. 1067-1073, 2004.

TROPE, Y; LIBERMAN, N; WASKLAK, C. Construal Levels and Psychological Distance: Effects on Representation, Prediction, Evaluation, and Behavior, *Journal of Consumer Psychology*, v. 17, p. 83-95.

TURLEY, L. W; CABANISS, R. F. Price knowledge for services: an empirical investigation, *Journal of Professional Services Marketing*, v. 12, n. 1, p. 39-47, 1995.

URBANY, J. E; DICKSON, P. R. Consumer normal price estimation: market versus personal standards. *Journal of Consumer Research*, v. 18, p. 45-51, 1991.

URBANY, J. E; DICKSON, P. R; KALAPURAKAL, R. Price search in the retail grocery market. *Journal of Marketing*, v. 60, p. 91-104, 1996.

VANHUELE, M; DRÈZE, X. Measuring the price knowledge shoppers bring to the store. *Journal of Marketing*, v. 66, p. 72-85, 2002.

ZEITHAML, V. A; FUERST, W.L. Age differences in response to grocery store price information. *Journal of Consumer Affairs*, v. 17, n. 2, p. 402-419, 1983.

ZHAO, Y. Price dispersion in the grocery Market. *The Journal of Business*, v. 79, n. 3, p. 1175-1192, 2006.

9)