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**Submission to the EIRASS**

**Retail brand equity: A PLS Approach**

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## **Retail brand equity: A PLS Approach**

### **Abstract :**

In large retail stores, France is characterized by market saturation and even a decline of several retail concepts such as variety stores, or even supermarkets and hypermarkets (Cliquet, 2000). This situation leads to a fierce competition and raises questions which affect marketing strategies of French retail companies. Given the legal context, the French retailers can increase sales through retail brands which appear to be henceforth among the most effective marketing tools. Indeed, product innovation, sophisticated packaging and retail brands - from generic products to premium retail brands (Kumar and Steenkamp, 2007) - could create consumer value. There are thus today real retail branding strategies consisting in creating consumer value leading to the idea of retail brand equity.

This paper focuses on retail brand equity to understand where this retail brand value stems from and how to measure it in the French retail context. Adapting the brand equity literature to the retail brand opens large perspectives in the way of considering this type of brands helping managers to examine the importance of components in the shaping of their brand value and finally to develop better strategic and tactical decisions concerning retail brand positioning.

Keller's contributions (Keller, 1993), qualitative methodology and confirmatory analysis are used to first conceptualise and measure a model of retail brand equity. All measures of the model built here are validated. The model is validated through a Path-PLS modelling process. This methodological choice is recommended when formative and reflective variables are integrated in the model (Jarvis *et al.*, 2003). A replication is made to confirm the model validity.

Retail brand equity is composed of two components: awareness, and retail brand image (which is measured by perceived quality, price image, personality, brand name and store service). All of these components influence positively and significantly the retail brand purchase (except the store service which influence negatively the retail brand purchase). Retail brand awareness and perceived quality are the two main components which determine the retail brand purchase. Results show also that the retail brand image is a partial mediator on the relation between retail brand awareness and its purchase. This research reveals finally that the retail brand equity can be moderated by the product category and the retail brand strategy. The retail brand equity is higher on basic products than on symbolic ones. The strategy of service brand applied to retail brands seems to be more favorable than classical private label strategy.

**Keywords :** retail brands, brand equity, retailers' strategies, confirmatory analysis, Path-PLS.

## **Introduction**

The French retail market is characterized at the national level by a fierce competition, mostly due to a relatively small number of large retailers whereas locally things can be very different (Dromard and Visseyrias, 2008). Moreover, the saturation and even the decline of several retail concepts such as variety stores (Cliquet, 2000), supermarkets and hypermarkets enhance the competition. This situation raises questions which affect both marketing and management of French retail companies. Given the legal context, French retailers can increase sales<sup>1</sup> through retail brands which appear to be henceforth among the most effective tools. Indeed, qualitative innovation<sup>2</sup>, sophisticated packaging and a wide range of retail brands - from generic products to value innovator retail brands (Kumar and Steenkamp, 2007) - could create consumer value. There is a tendency towards an increasing perceived quality level of retail brands in many European countries such as Belgium, the Netherlands, Switzerland and the United Kingdom (Quelch and Harding, 1996; Johansson and Burt, 2004; Oubina *et al.*, 2006). Unlike earlier in the past there is today a real retail brand marketing consisting in creating consumer value (Ailawadi and Keller, 2004; Kumar and Steenkamp, 2007). And one of the sources of retail brand success is the perceived quality<sup>3</sup> leading to store differentiation, and to store loyalty (Burt and Sparks, 2002; Corstjens and Lal, 2000; Halstead and Ward, 1995; Richardson, 1997; Rondan Cataluna *et al.*, 2006). However, retail brand policies developed by European retailers seem to be different from one country to another and from one retailer to another within the same country. This paper studies the situation of retail brands in France which is at an intermediate performance level of retail brand between the United Kingdom and Italy. It focuses on retail brand equity to understand where this retail brand value stems from and how to measure it in the French retail context. Based on Ailawadi and Keller's propositions (2004) a model of retail brand equity emerges and its measures are tested empirically. In other words, the first objective of this article is to conceptualise the retail brand equity that means to identify the main components which create and maximise the value of this brand. Keller's model is used as a primary conceptual framework because the cognitive process used by consumers to perceive brands could be the same between retail brand and manufacturer brand. But as retail brands seem to be closer to service brands a new model is proposed in order to reveal specific dimensions of retail brand equity. The second objective aims at confirming the validity of the measures of these components through a confirmatory analysis following a PLS approach. Expected contributions of this work are both conceptual and

managerial. Indeed, because of a dearth of literature on retail brand equity, this research tends at first to provide theoretical contributions on how to conceptualise and measure this concept. Adapting the brand equity concept to retail brand offers then new perspectives to managers in defining value components and developing retail brand positioning strategies.

The article is organised as follows. In the first section, the Keller's conceptual framework of brand equity is adapted to retail brands in order to suggest a theoretical retail brand equity model. In the second section, a confirmatory research strives to test measure reliability, convergent and discriminant validity of the main retail brand equity model components. In the final section, main results show at first which are the main components of the retail brand equity model that maximise the creation of retail brand's value. Other results show then which are relationships between these components and finally moderators of the model are measured. At the end of this research, one can appreciate the conceptualisation, the measure of the retail brand equity and its variations.

## **1. Brand equity and retail brands**

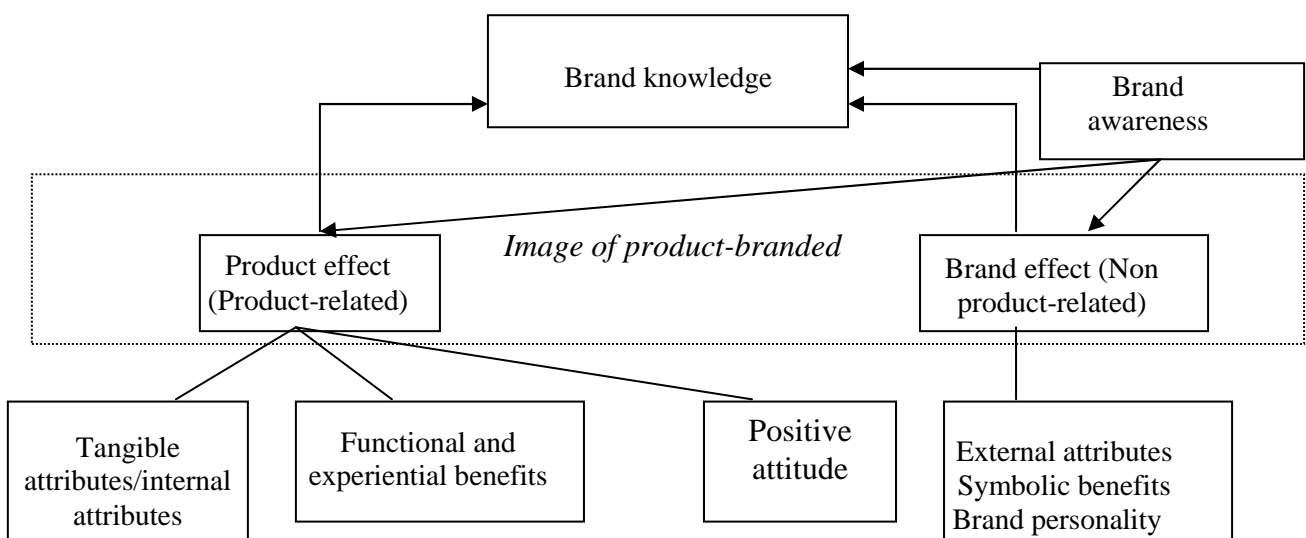
The Keller's model (1993) is first described before being adapted to retail brands and determining various marketing policies.

### **1.1. Keller's brand equity model**

Keller (1993) defines brand equity as "The differential effect of brand knowledge on consumer response to the marketing of the brand". He suggests that consumer assessments concerning a product with a brand name should be compared to an unnamed product (without brand). Comparing these two products could then explain the preference, the intention to buy, or even the final consumer choice. This author considers two general components: brand awareness and brand image. "Brand awareness relates to the likelihood that a brand name will come in mind and the ease with it does so". Brand awareness is composed by brand recognition (which requires a brand well known by consumers to come spontaneously in their mind) and by brand recall (by testing consumers' ability to remind brand names according for example to a specific the product category). "Brand image is defined here as perceptions about a brand as reflected by the brand associations held in consumer memory". These brand associations form the meaning of the brand in consumers' mind. Associations are not homogeneous. Currently, three categories of brand associations emerge (according to the abstraction level of the association):

- The attributes correspond to “descriptive features that characterize the product”. Their differentiations stem from the direct performance of the product. For example, price information, packaging appearance and brand personality<sup>4</sup> are non product-related attributes unlike ingredients.
- The benefits correspond to “the personal value consumers attach to the product attributes that is, what consumers think the product can do for them”. Three categories of benefits can be distinguished: functional benefits obtained from physical product-related attributes, experiential benefits from product-related attributes such as sensory pleasure, variety and cognitive stimulation, and symbolic benefits from non product-related attributes such as personal expression and social approval).
- The brand attitudes corresponding to “consumers’ overall evaluations of a brand” are important because they can explain consumer behaviour (e.g. brand choice). They are also related to both product (attributes, functional and experiential benefits) and symbolic benefits. A correct specification or identification of associations is difficult, and the real attitude concept can be misidentified. Thus, researchers suggest to separate attitude from the other associations. Multi-attribute models of consumer preference have then been built to include a general component of attitude towards the brand.

Finally, three dimensions can summarize the Keller’s approach (shown in figure 1): 1) brand awareness; 2) dimensions related to the product (product effect); 3) non product-related dimensions (brand effect).



**Figure 1: Synthesis of Keller’s framework**

According to Keller's model (1993), brand equity occurs "when the consumer is familiar with the brand and holds some favorable<sup>5</sup>, strong<sup>6</sup> and unique brand associations in memory".

Figure 1 shows also relationships between constructs. Indeed, one can observe that :

- 1) the brand awareness influences positively and directly the brand knowledge and finally the consumer's response;
- 2) the brand awareness influences positively and directly all components of the retail brand image;
- 3) all components of the brand image influence positively and directly the brand knowledge and finally the consumer's response;
- 4) the brand image seems to be a mediator variable on the relationship between brand awareness and brand knowledge. In other words, brand awareness influences indirectly the brand knowledge and finally the consumer's response by the retail brand image.

### **1.2. Various retail brand equity for various retail-marketing policies**

In France, the article #62 of Act called "Nouvelles régulations économiques" (New Economic Regulation) (May 15, 2001) defines a retail brand as follows:

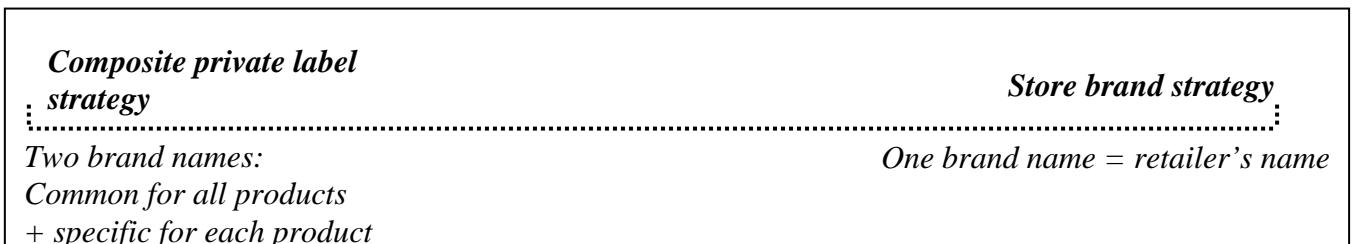
"A product is considered sold under a retail brand when its characteristics are defined by the retail company which owns the brand"<sup>7</sup>.

Unlike Kumar and Steenkamp (2007) who treat store brands, retail brands, private labels as synonymous, here a distinction is made between private labels and store brands which are considered as two types of retail brands. A store brand strategy consists in giving the same brand name as the retailer's name or fascia to products selected for supporting this store brand whereas private label strategy consists in giving for each product a specific brand name which differs from the retailer's name. Hence, store brand follows an umbrella branding strategy. In the French food retail market and more specifically among the 6 largest French retailers (*Carrefour, E.Leclerc, Auchan, Système U, Cora, Intermarché*), strictly private label strategies were recently given up because of a change in regulation: retailers have been able to advertise on TV spots since January 1<sup>st</sup>, 2007. Hence two types of retail branding policies can be now observed:

1. Store brands like: *Auchan, Carrefour, Casino* or *Cora*.
2. "Composite" private label (a brand name is specified for each category of products but the retailer adds a generic brand name for every category of

products) as used by *E. Leclerc* company which offers for example a “composite” private label for shower gel named *Manava Marque Repère* where *Manava* is the private label and *Marque Repère* the umbrella brand (Randall, Ulrich and Reibstein, 1998) for categories of products selected by the retail company to support its branding policy. Advertising is used as a promotion policy to link the umbrella brand and the name of the retailer or fascia.

Thus, these two retail-branding policies differ only on the type of brand name labelled on products and what it means to customers. To understand better the different retail branding policies one can summarize them by this continuum (figure 2).



**Figure 2: Synthesis of retail branding policies**

This point is not specific to the French context but can be also observed on the American market (Dhar and Hoch, 1997) and on the British market (Burt, 2000).

### **1.3. Developing retail brand equity model**

A retail brand equity model must be developed according to the differences between retail brands, characterized by its service component, and manufacturer brands. Retail brands differ from manufacturer brands because retailing is a service business (Berry, 1986; 2000). As retail brands are linked to a real store, associations with the store image should be included in their brand image (Ailawadi and Keller, 2004; Burt, 2000; Burt and Sparks, 2002; Fullerton, 2005). As a service brand, nothing links a retail brand to a product like in manufacturer brand cases (consumer packaged goods) but with a retail company and its stores. As defined from the literature on service brands (Berry, 2000; Blankson and Kalafatis, 1999; Brodie, Whittome and Brush, 2008; De Chernatony, Drury and Segal-Horn, 2003; De Chernatony and Dall’Olmo Riley, 1999; Hardaker and Fill, 2005; Padgett and Allen, 1997), a service brand is composed of tangible attributes (product-related) on the one hand and associations related to the experience with the company on the other hand (intangible attributes). Hence, service-brand-building process implies a holistic process meaning a corporate view of the brand. In retailing, the company is characterised by its stores and the store is considered as the product of the

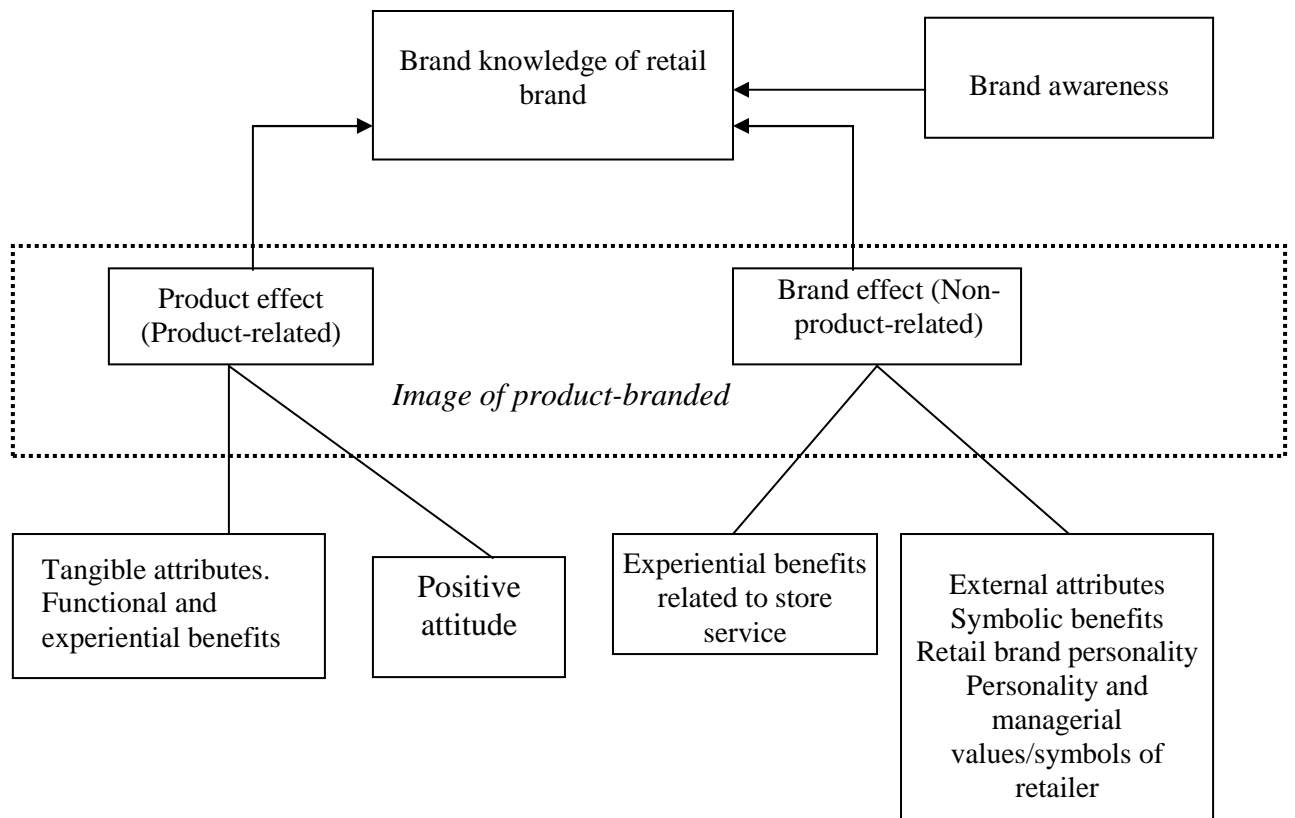


retail company (Dicke, 1992). As many research articles tend to show it, store image impacts retail brand image (Ailawadi and Keller, 2004; Burt and Sparks, 2002; Burt and Mavrommatis, 2006; Collins-Dodd and Lindley, 2003; Grewal *et al.*, 1998; Kozinets *et al.*, 2002; Richardson *et al.*, 1996; San Martin Gutierrez, 2006; Semeijn *et al.*, 2004). Unlike retail brands, the image of stores or the experience within the stores does not influence manufacturer brands (Richardson *et al.*, 1996). Four dimensions of store service (both physical and psychological dimensions) can influence the image of service brands (Eiglier and Langeard, 1987; Morrison and Crane, 2007):

1. The physical elements (e.g. modernity, cleanness);
2. The employees in touch with customers;
3. The other clients (they contribute to the atmosphere of the store);
4. The service itself stemming from interactions between the three previous dimensions.

The important role of the employees is the common dimension between research on service brands (Berry, 2000; Blankson and Kalafatis, 1999; Brodie, Whittome and Brush, 2008; De Chernatony, Drury and Segal-Horn, 2003; De Chernatony and Dall’Olmo Riley, 1999; Hardaker and Fill, 2005). Indeed, interactions between employees and consumers are determinant in the service brand’s success.

Based on these previous contributions, retail brand equity is composed of similar elements as any other brand (manufacturer brand) with an associated service component and a corporate dimension (Burt and Sparks, 2002). One can then propose an adapted model for retail brands. The figure 3 displays that model and shows that retail brand equity includes specifically experiential benefits related to store service, retailer personality and managerial values/symbols.



**Figure 3: Retail brand equity's framework**

The objective is at first to specify the components of this model and then to measure them. At the end, the final objective aims at validating the model.

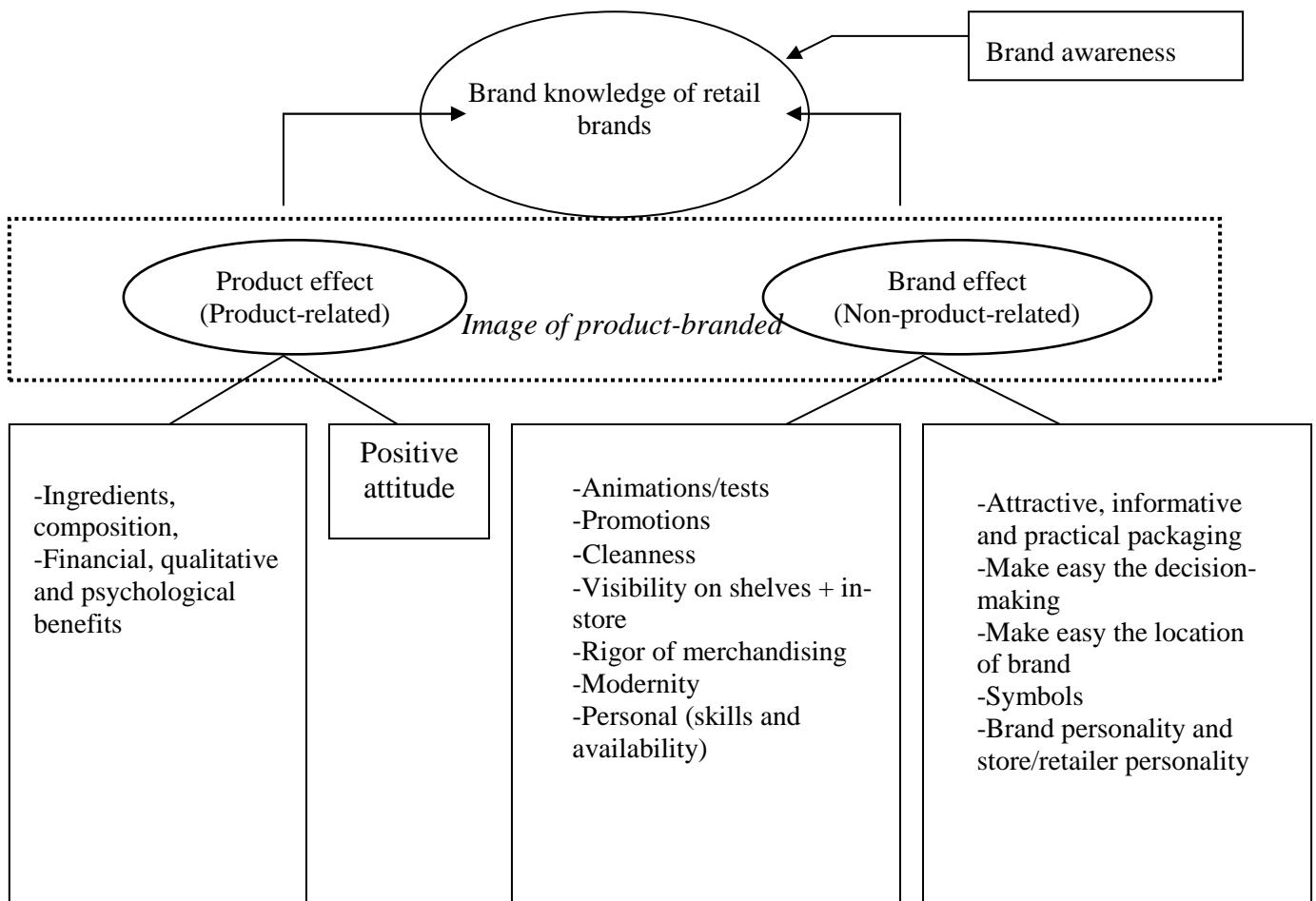
## 2. Methodology

Before testing the validity of the retail brand equity model, techniques used to specify the model should be detailed.

### 2.1. The methodology of the exploratory research

#### *In-depth consumers' interviews*

To identify specific items of each theoretical component, 54 in-depth interviews are conducted. Free association tasks and laddering techniques are used to collect retail brand image associations and to understand consumers' motivations to purchase retail brands (Reynolds and Gutman, 1988; Keller, 1993). Content analysis results from these interviews enable to complete and specify the first step of conceptualisation (suggested from Keller's work in 1993) of the retail brand equity (figure 4).



**Figure 4: Final conceptualization of the retail brand equity**

The figure 4 depicts all components of the retail brand equity model where the associations related to the product effect included ingredients, composition, financial benefits, qualitative and psychological benefits, and positive attitude (i.e. “I like this brand”). The associations related to the store service are: retail brand animations/tests, promotions on retail brands, cleanness and modernity of the store, retail brand visibility on shelves, retail brand in-store visibility, rigor of merchandising, personnel (skills and availability). The associations related to external attributes concern the recall of the brand name through a clear signature of the brand name on packaging. These associations can be summarized by this way: making easy the decision and making easy brand location (because consumers know that the retail brand represents the middle range positioning). Attractive, informative and practical packaging are also included in this category of associations. The last associations deal with retail brand personality and retailer personality (completed with its managerial values and symbols). These associations vary according to each retailer leading to specific and unique retail brand positioning; so they are not reported in this article.

Hence, latent variables can be measured through structured interviews.

*Pre-test*

A first questionnaire is built to select both personality items related to retail brand and personality items related to retailer and only associations which are cited more than twice are used (Dickson and Albaum, 1977). Besides, this pre-test enables to correct some questionnaire items to understand, and to test the strength of associations. Only associations which obtain more than 3 on average on the five points Likert's scale are retained. The association can be indeed considered as strong with a value of 3 and above. At this stage the variable "animations/tests" is removed because of an average of 2.58 (Table 1).

	Means	N
Attitude towards retail brands	3.48	126
Appealing packaging	3.25	126
Practical packaging	3.46	126
Informative packaging	3.14	126
Value for money	3.71	126
Adequate price	3.63	126
Low price	2.88	126
Taste	3.53	126
Psychological benefit 1	3.30	126
Psychological benefit 2	3.27	126
Financial benefit	3.24	126
Make easy the location of the brand	3.34	126
Make easy the decision-making	3.36	126
Visibility on shelves	3.47	126
Rigor of merchandising	3.63	126
Visibility in-store	3.34	126
Promotion	3.02	126
Animations/tests	2.58	126
Cleanness	3.76	126
Modernity	3.33	126
Personnel skill	3.40	126
Personnel available	3.10	126
Common brand personality	3.40	126
Unique brand personality	3.30	126
Common retailer personality	3.48	126
Unique retailer personality	3.35	126
Symbol	3.42	126

**Table 1: Average of variables**

Despite an average value under 3 (2.88) the variable “low price” is kept because of the importance of price in the retail brand choice. Then, the final questionnaire is ready.

*Structured consumers’ interviews and measures*

The final questionnaire is operationalized through Likert’s scales since attitudes and opinions towards brands are measured. The procedure to develop the Likert scale is “no different from that used in the method of equal-appearing intervals” and hence can be used as a metric scale (Churchill and Iacobucci, 2005).

A total of 504 consumers have been interviewed on three different areas each of them corresponding to one of the three studied retailers: *Carrefour*, *E. Leclerc* and *Intermarché* selected after a discussion with some of these retailers. Table 2 depicts the sample of this quantitative research.

		RETAILERS			Total	
		CARREFOUR	E.LECLERC	INTERMARCHE		
SEXE	MEN	Count	82	83	84	249
		% in SEXE	32.9%	33.3%	33.7%	100.0%
		% in RETAILERS	48.8%	49.4%	50.0%	49.4%
		% of total	16.3%	16.5%	16.7%	49.4%
	WOMEN	Count	86	85	84	255
		% in SEXE	33.7%	33.3%	32.9%	100.0%
		% in RETAILERS	51.2%	50.6%	50.0%	50.6%
		% of total	17.1%	16.9%	16.7%	50.6%
Total		Count	168	168	168	504
		% in SEXE	33.3%	33.3%	33.3%	100.0%
		% of total	33.3%	33.3%	33.3%	100.0%

**Table 2: Sample of the quantitative research (SPSS software)**

**2.2. Preliminary results**

A principal component is conducted to reveal only latent constructs of the retail brand image. Results provided by SPSS software show that data can be reduced to a few components since KMO and Bartlett’s test are acceptable (KMO = 0.858). Hence variables can be selected according to the following criteria:

- Communalities must be strictly higher than 0.5;
- Communalities between variables and components must be higher than 0.5 (after a Varimax rotation).

Thus, variables: “practical packaging” (communality = 0.482), “informative packaging” (communality = 0.352) and low price (average = 2.93) have been removed (Appendix I).

Then, another principal component analysis is used.

This second principal component analysis shows significant but different KMO and Bartlett tests (KMO = 0.843). After a Varimax rotation seven components are identified.

The total of variance explained was around 69% (Table 3).

<i>Components and variables</i>	<i>Loadings after Varimax rotation</i>	<i>Variance in %</i>	
		<i>Real</i>	<i>Internal</i>
<b>Component I: PERSONALITIES</b>			
-Unique retailer personality	0.768	29.663	42.92
-Symbols of retailer	0.726		
-Common retailer personality	0.689		
-Common brand personality	0.659		
-Unique brand personality	0.604		
<b>Component II: PRICE IMAGE</b>			
-Adequate price	0.802	11.253	16.28
-Financial benefit	0.758		
-Psychological benefit 2	0.672		
-Value for money	0.604		
-Psychological benefit 1	0.498		
<b>Component III: PHYSICAL APPEARANCE OF STORE</b>			
-Modernity	0.803	7.077	10.24
-Cleanness	0.786		
-Rigor of merchandising	0.710		
<b>Component IV: PERCEIVED QUALITY</b>			
-Attitude towards retail brands	0.756	6.176	8.94
-Taste	0.698		
-Appealing packaging	0.588		
<b>Component V: STORE POLICY</b>			
-Visibility in-store	0.856	5.535	8
-Visibility on shelves	0.761		
-Promotions of retail service brands	0.723		
<b>Component VI: BRAND SERVICE</b>			
-Make easy the decision-making	0.875	4.835	7
-Make easy the location of the brand	0.867		
<b>Component VII: STORE SERVICE</b>			
-Personnel skill	0.843	4.576	6.62
-Personnel available	0.811		
Total		<b>69.117</b>	100

**Table 3: Seven components of retail brand image**

The main component of the retail brand image is: “personalities” (42.92% of the variance) including personality of the retail brand, personality of the retailer and its symbols.

Some components might have been altered because they conceptually belong to the same dimension. Indeed, “physical appearance of store”, “store policy”, and “store service” form a common dimension, belonging to the same nomological network, which can be named: “store service”. At the end of this step, these five components represent the five latent variables of the retail brand image: personalities, price image, perceived quality, store service and brand service.

### **2.3. The domain of content and validity procedures**

*Outer relations: reflective or formative constructs?*

The nature of latent variables is a key issue in testing convergent validity: Are they reflective or formative constructs? Based on several papers certain latent variables can be identified as formative constructs leading to different measures of reliability (Diamantopoulos and Winklhofer, 2001; Jarvis *et al.*, 2003; Coltman *et al.*, 2008). Three criteria have been identified to determine a formative latent variable:

- The nature of construct: the construct is a composite measure of indicators, “it is a function of its measurements” (Bagozzi and Fornell, 1982). Any change in indicators causes a change in the construct;
- The direction of causality runs from the indicators to the construct. It is the indicators “that are assumed to cause a latent variable” (Bollen, 1989);
- The characteristics of indicators: Indicators can be independent leading to no covariance between them and they are not interchangeable because they do not share a common theme and adding or removing an item entails changes in construct (Bollen and Lennox, 1991).

Hence seven latent components emerge and three of them are formative:

- “Perceived quality” (is assumed to be determined by its indicators that are “attitude towards retail brand”; “taste” and “appealing packaging”): its manifest variables are heterogeneous and seem to be causes rather than reflections of the construct. The correlation matrix depicts the lack of correlation between manifest variables (Table 4 “perceived quality”);

		Attitude towards retail brands	APP	TASTE
Correlation	Attitude towards retail brands	1.000	.291	.592
	APP	.291	1.000	.337
	TASTE	.592	.337	1.000

**Table 4: Correlation matrix perceived quality (SPSS Software)**

- “Store service” (formed by “rigor of merchandising”; “visibility on shelves”; “visibility in-store”; “personnel skills” and “personnel availability”; “promotion”; “modernity” and “cleanness”): its manifest variables seem to form this construct and they are independent of each other. The previous exploratory analysis (Analysis in Principal Components) has shown that this construct was multidimensional. Table 4 entitled “store service” shows also the lack of correlation between manifest variables;

		VSHV	RM	VST	PROM	CLEA	MOD	SKIL	AVAIL
Correlation	VSHV	1.000	.434	.671	.362	.339	.235	.222	.210
	RM	.434	1.000	.341	.157	.606	.506	.274	.348
	VST	.671	.341	1.000	.481	.346	.168	.181	.156
	PROM	.362	.157	.481	1.000	.262	.227	.068	.161
	CLEA	.339	.606	.346	.262	1.000	.589	.313	.354
	MOD	.235	.506	.168	.227	.589	1.000	.311	.316
	SKIL	.222	.274	.181	.068	.313	.311	1.000	.660
	AVAIL	.210	.348	.156	.161	.354	.316	.660	1.000

**Table 4: Correlation matrix of store service (SPSS Software)**

- “Awareness” [is assumed to be determined by its indicators that are “brand recognition” and “brand recall” given by Keller (1993)]: it seems that “brand recognition” and “brand recall” are heterogeneous and the absence of one of these indicators could imply changes in the component. The lack of correlation between these two variables confirms that awareness is a formative construct (Table 4 “awareness”).

		RG	RC
Correlation	RG	1.000	.282
	RC	.282	1.000

**Table 4: Correlation matrix of awareness (SPSS Software)**



Four other variables are reflective because of the high correlations between each item of constructs (Tables 5):

- “Personalities” (is reflected by “common brand personality”; “unique brand personality”; common retailer personality”; “unique retailer personality” and “symbols”);

		CPB	UBP	CRP	URP	SYMB
Correlation	CBP	1.000	.463	.586	.398	.552
	UBP	.463	1.000	.495	.332	.374
	CRP	.586	.495	1.000	.521	.590
	URP	.398	.332	.521	1.000	.503
	SYMB	.552	.374	.590	.503	1.000

**Table 5: Correlation matrix of brand personalities (SPSS Software)**

- “Price image” (is reflected by “value for money”; “adequate price”; “psychological benefits” and “financial benefit”);

		VM	AP	PB1	PB2	FB
Correlation	VM	1.000	.592	.456	.401	.332
	AP	.592	1.000	.362	.421	.484
	PB1	.456	.362	1.000	.652	.282
	PB2	.401	.421	.652	1.000	.507
	FB	.332	.484	.282	.507	1.000

**Table 5: Correlation matrix of price image (SPSS Software)**

- “Brand service” (causes the observed variables “make easy the decision-making” and “make easy the location of brand”).

		ELB	EDM
Correlation	ELB	1.000	.803
	EDM	.803	1.000

**Table 5: Correlation matrix of brand service (SPSS Software)**

- Consumer’s response (is reflected by “intent to buy the retail brand” and “retail brand choice”).

		INTENT	RB CHOICE
Correlation	INTENT	1.000	.639
	RB CHOICE	.639	1.000

Reliability and convergent validity can now be tested.

*Reliability and convergent validity of constructs*

All confirmatory tests were conducted through a PLS (Partial Least-Squares) modelisation because constructs are both formative<sup>8</sup> and reflective (Chin, 1998; Diamantopoulos and Winklhofer, 2001; Grace *et al.*, 2005; Gudergan *et al.*, 2008; Haenlein and Kaplan, 2004; Temme and Hildebrandt, 2007). PLS is a variance-based multivariate technique used in structural equation modelling, which estimates both the structural relationships as well as the measurement relations. At this stage of the research, PLS is only used to validate measurements.

To test the reliability of reflective variables, the statistical process followed the Churchill's paradigm (1979). Thus, Cronbach Alpha ( $\alpha$ ) and Jöreskog Rhô ( $\rho$ ) were used as indicators of reliability. At the confirmatory step, each reflective construct was correctly measured [ $(\alpha$  and  $\rho > 0.75)$ , Nunnally and Bernstein (1994)]. Table 6 depicts these indicators for each reflective latent variable.

<i>Components and variables</i>	<i>Cronbach Alpha</i>	<i>Jöreskog Rhô</i>
<b>Component I: PERSONALITIES</b> -Common brand personality -Unique brand personality -Symbols of retailer -Unique retailer personality -Common retailer personality	0.811	0.871
<b>Component II: PRICE IMAGE</b> -Psychological benefit 2 -Value for money -Common retailer personality 1 -Financial benefit -Adequate price	0.800	0.863
<b>Component III: BRAND SERVICE</b> -Make easy the decision-making -Make easy the location of the brand	0.890	0.948
<b>Component IV: CONSUMER'S RESPONSE</b> -Intent to buy the retail brand -Retail brand choice	0.722	0.946

**Table 6: Reliability indicators for reflective latent variables (Xlstat PLSPM software)**

The test of the convergent validity requires two additional criteria:

- Communalities between observed variables (= manifest variable) and its latent construct (= non observed);

- Average of Variance Explained (AVE).

Since communalities were under the threshold of 0.5 (Table 7) a bootstrap method has been used to check the validity of each value (Bastien *et al.*, 2005). Indeed, communality can be accepted if the value given by the bootstrap method is different from 0. In this case, the link between observed variable and latent construct can be considered valid. After this procedure, all communalities reached the recommended level. As the average of variance explained was correct (0.621).

Latent variable	Observed variables	Correlations	Communalities	Bootstrap correlations	Lower threshold (95%)	Higher threshold (95%)
PRICE IMAGE	VM	0.704	0.496	0.702	0.615	0.779
	AP	0.741	0.550	0.740	0.663	0.799
	PB1	0.723	0.523	0.724	0.649	0.783
	PB2	0.816	0.666	0.817	0.769	0.852
	FB	0.743	0.551	0.740	0.673	0.799
PERSO*	CBP	0.728	0.529	0.724	0.651	0.789
	UBP	0.641	0.411	0.636	0.530	0.714
	CRP	0.824	0.679	0.822	0.778	0.858
	URP	0.809	0.654	0.808	0.754	0.846
	SYMB	0.772	0.595	0.769	0.703	0.826
BRAND SERVICE	ELB	0.951	0.905	0.952	0.936	0.963
	EDM	0.948	0.898	0.948	0.930	0.962
CONSUMER'S RESPONSE	INTENT	0.997	0.992		0.995	0.997
	RB CHOICE	0.704	0.495		0.656	0.748

**Table 7: Communalities of reflective variables (Xlstat PLS-PM software)**

PERSO: retail brand's and retailer's personalities.

The reliability of formative variables is tested by following the procedure suggested by Diamantopoulos and Winklhofer (2001)<sup>9</sup>.

The first step leads to delete problematic indicators. To do that, the first analysis consists in examining indicator weights. In other words, the contribution of each indicator in the construction of its latent variable is analysed. The following analysis consists in taking into account the correlations of each indicator with its latent variable. Finally the sign of indicator weights is compared to the sign of their correlation with their latent variables. Weights and correlations must vary in the same way in order to validate the formative constructs. So, manifest variables are removed until the stability of signs of weights and correlations. A step by step procedure is used in order to appreciate better the consequence of the removing of each indicator. At the end of this work, three variables are removed: "modernity", "promotion" and "cleanness". Table 8 depicts for each variable its external weight which indicates that all formative latent variables are stable.

Latent variable	Observed variables	Correlations	External weight (normalized)
PERCEIVED QUALITY	ATRB	0.938	0.545
	APP	0.394	0.026
	TASTE	0.767	0.196
STORE SERVICE	VSHV	0.740	0.195
	RM	0.777	0.340
	VST	0.655	0.144
	SKIL	0.657	0.315
	AVAIL	0.541	0.006
AWARENESS	RG	0.657	0.338
	RC	0.909	0.662

**Table 8: Final validation of formative variables (Xlstat PLS-PM software)**

The second step suggested by Diamantopoulos and Winklhofer (2001) deals with the external validity. Indeed, the correlations of each indicator are compared to other latent variables and only those indicators that are significantly correlated with the variable of interest should be retained (Table 9). Table 9 depicts that all indicators show acceptable correlations with their latent variable.

All measures of the retail brand equity concept are thus empirically validated.

Latent variable	Observed variable	PERCEIVED QUALITY	PRICE IMAGE	PERSO	STORE SERVICE	BRAND SERVICE	AWARENESS
PERCEIVED QUALITY	ATSB	<b>0.938</b>	0.468	0.324	0.357	0.391	0.558
	APP	<b>0.394</b>	0.227	0.375	0.248	0.230	0.223
	TASTE	<b>0.767</b>	0.543	0.338	0.276	0.414	0.382
	GQ	<b>0.698</b>	0.439	0.396	0.230	0.305	0.324
STORE SERVICE	VSHV	0.259	0.208	0.352	<b>0.740</b>	0.265	0.137
	RM	0.305	0.280	0.449	<b>0.777</b>	0.157	0.093
	VST	0.234	0.194	0.256	<b>0.655</b>	0.254	0.188
	SKIL	0.242	0.140	0.333	<b>0.657</b>	0.176	0.042
	AVAIL	0.225	0.142	0.415	<b>0.541</b>	0.125	0.034
AWARENESS	RG	0.373	0.229	0.092	0.083	0.275	<b>0.657</b>
	RC	0.499	0.275	0.166	0.136	0.233	<b>0.909</b>

**Table 9: Cross loadings of indicators (Xlstat PLS-PM software)**

#### *Discriminant validity of reflective constructs*

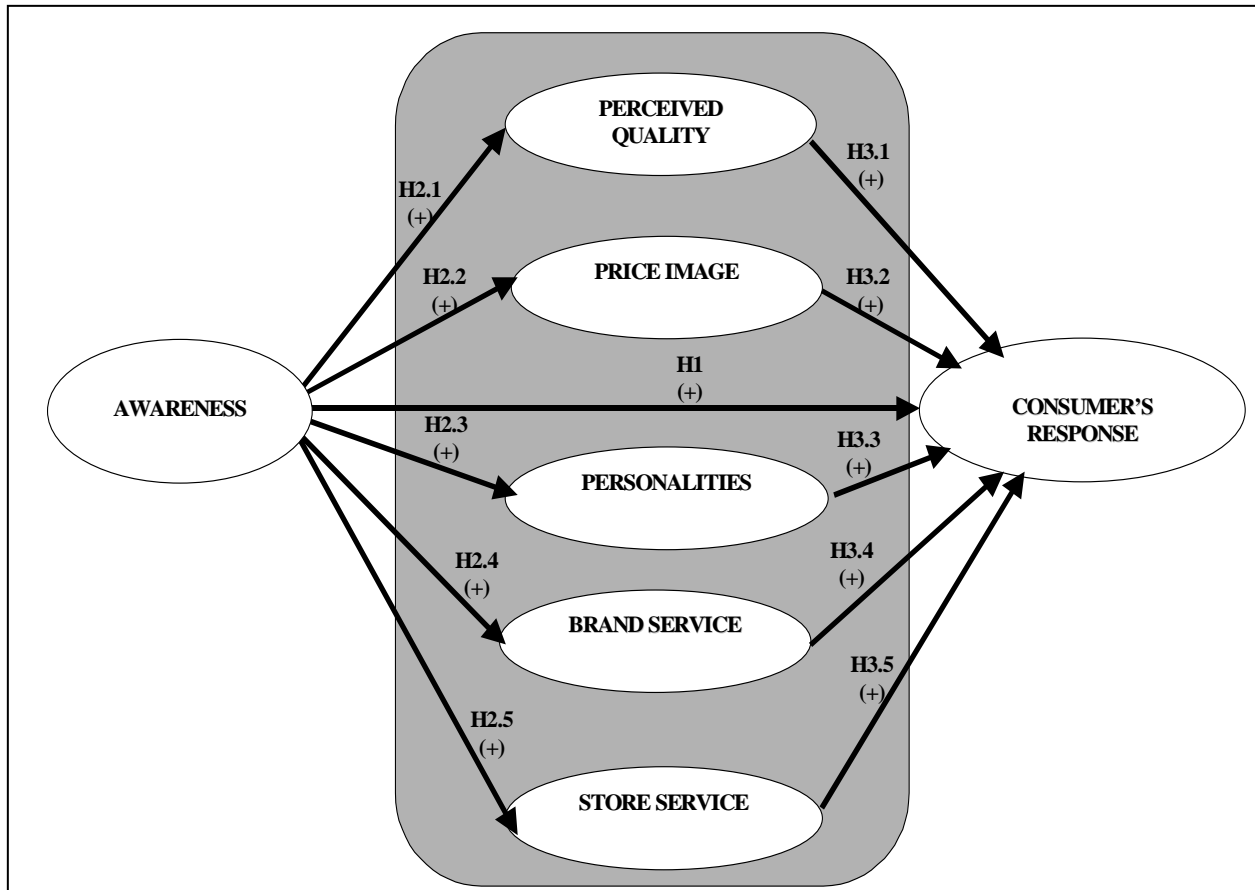
Discriminant validity assessment is only meaningful when latent variables are reflective (Bagozzi, 1994; Diamantopoulos, 1999). Indeed, “the variance in each indicator is shown as a linear function of the underlying latent variable plus error” (Diamantopoulos, 1999). So correlations among indicators must be high and positive (that is not the case for formative variables). Hence, it is meaningful to measure the discriminant validity in comparing the correlations among indicators of each reflective variable with the correlations between reflective variables themselves. Indeed, discriminant validity is

assumed when the extracted variance is greater than the squared correlation (Fornell et Larcker, 1981). In order to test the discriminant validity for all latent variables of this research, discriminant validity is only shown when there is no correlation between all latent variables ( $< 0.5$ ) in order to demonstrate that latent variables measure different constructs. Based on the table 10 indicating correlations between all latent variables of the retail brand equity could be considered separate dimensions.

	AWARENESS	PRICE IMAGE	STORE SERVICE	BRAND SERVICE	PERCEIVED QUALITY	PERSO	C.RESPONSE	AVE
AWARENESS	<b>1</b>	0.100	0.027	0.094	0.299	0.029	0.345	0.633
PRICE IMAGE	0.100	<b>1</b>	0.086	0.215	0.306	0.156	0.196	0.554
STORE SERVICE	0.027	0.086	<b>1</b>	0.084	0.140	0.231	0.043	0.461
BRAND SERVICE	0.094	0.215	0.084	<b>1</b>	0.204	0.095	0.149	0.901
PERCEIVED QUALITY	0.299	0.306	0.140	0.204	<b>1</b>	0.157	0.413	0.588
PERSO	0.029	0.156	0.231	0.095	0.157	<b>1</b>	0.110	0.577
C.RESPONSE	0.345	0.196	0.043	0.149	0.413	0.110	<b>1</b>	0.749
AVE	0.633	0.554	0.461	0.901	0.588	0.577	0.749	<b>0</b>

**Table 10: Discriminant validity of reflective variables (Xlstat PLSPM software)**

The validation of all measures leads to the proposition of a final model of the retail brand equity (figure 5).



**Figure 5: The retail brand equity model and its hypotheses**

### 3. Main results

Based on this quantitative research, one can say that it is relevant to propose a brand equity model adapted to retail brands. In other words, retail brands seem to own several sources to create and maximise their value. Findings of this research show that two main components could explain the value created by retail brands that are: retail brand awareness and retail brand image which is composed by five sub-components (perceived quality, price image, personalities of the brand and retailer, brand service and store service). Hence, the objective is to identify what are relevant components which maximise the value of the retail brand.

#### 3.1. Hypotheses of the model: tests and results

Several hypotheses must be formulated in order to define relationships between components. Based on the Keller's approach (1993), one can formulate four hypotheses reported on the figure 5 and detailed by this way:

**H1:** Retail brand awareness influences positively and directly the consumer's response towards the retail brand.

**H2:** Retail brand awareness influences positively and directly the retail brand image, more precisely:

**H2.1** – Retail brand awareness influences positively and directly the perceived quality of the retail brand;

**H2.2** – Retail brand awareness influences positively and directly the price image of the retail brand;

**H2.3** – Retail brand awareness influences positively and directly the personalities of the retail brand and its retailer;

**H2.4** – Retail brand awareness influences positively and directly the service given by the retail brand;

**H2.5** – Retail brand awareness influences positively and directly the store service image.

**H3:** Retail brand image influences positively and directly the consumer's response towards the retail brand, more precisely:

**H3.1** – perceived quality of the retail brand influences positively and directly the consumer's response;

**H3.2** – price image of the retail brand influences positively and directly the consumer's response;

**H3.3** – personalities of the retail brand and its retailer influence positively and directly the consumer's response;

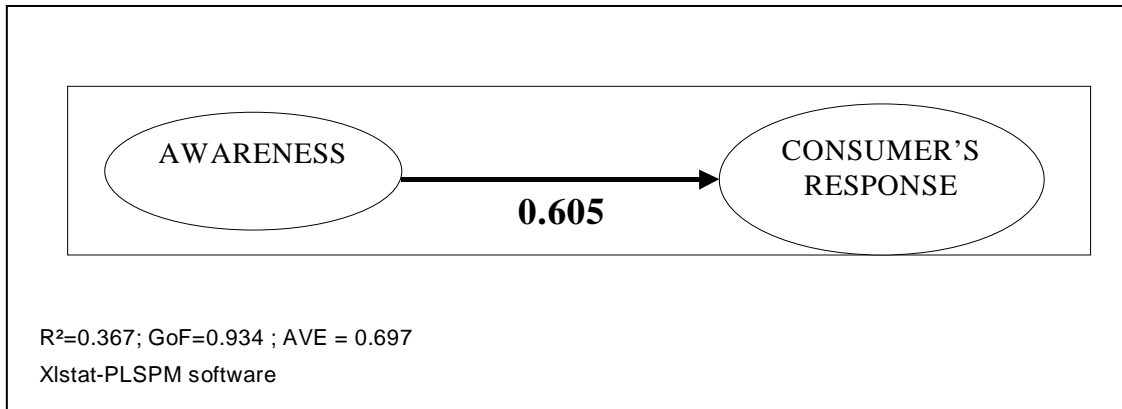
**H3.4** – service given by the retail brand influences positively and directly the consumer's response;

**H3.5** – store service influences positively and directly the consumer's response.

**H4:** Retail brand image is a mediator variable of the relationship between retail brand awareness and the consumer's response.

These four hypotheses were now tested one by one.

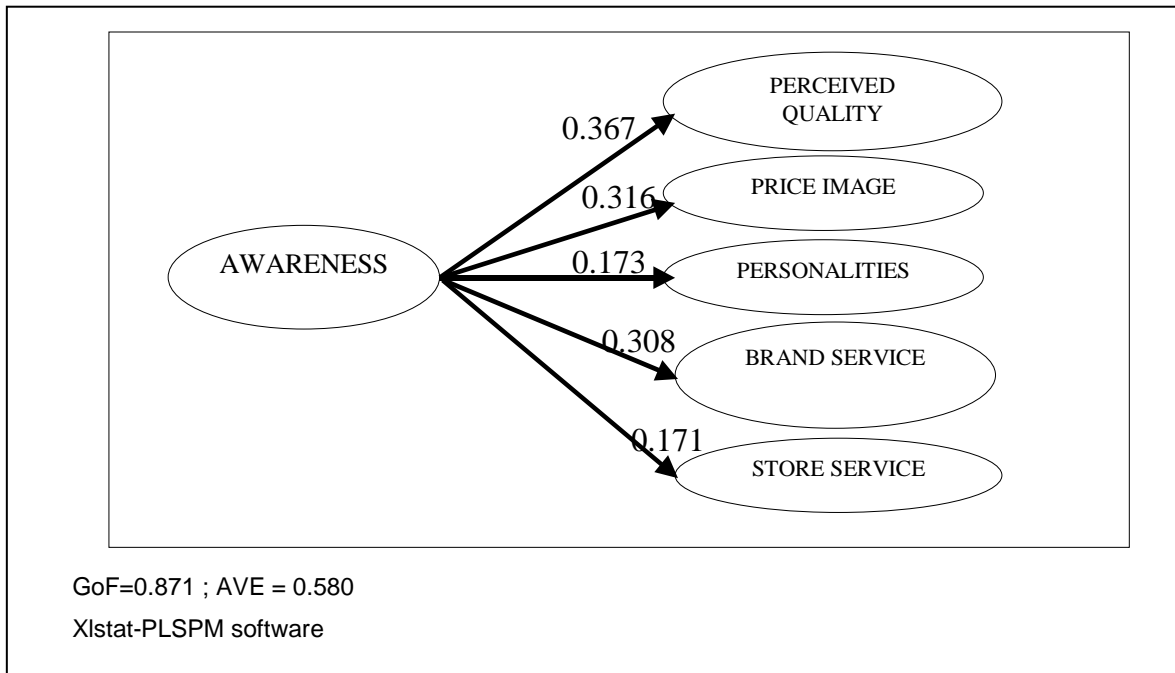
**H1:** Retail brand awareness influences positively and directly the consumer's response towards the retail brand is validated (figure 6). All statistical indicators ( $R^2$ , Goodness-Of-Fit and Average of Variance Extracted) show that this relation is significant.



**Figure 6: Validation H1**

**H2:** Retail brand awareness influences positively and directly the retail brand image is validated because for each component of the retail brand image, one can observe this influence. Moreover, all statistical indicators are significant (figure 7). So H2.1, H2.2, H2.3, H2.4 and H2.5 are validated.





**Figure 7: Validation H2**

**H3:** Retail brand image influences positively and directly the consumer's response towards the retail brand, more precisely (figure 8):

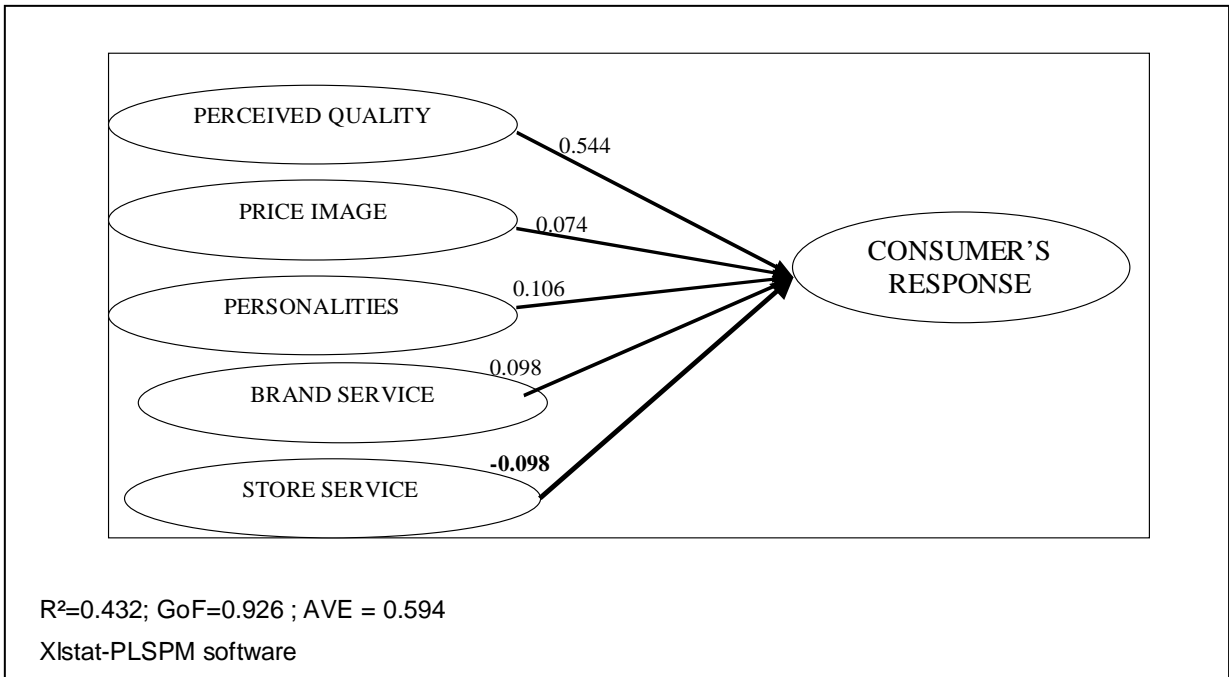
**H3.1** – perceived quality of the retail brand influences positively and directly the consumer's response: validated;

**H3.2** – price image of the retail brand influences positively and directly the consumer's response: validated;

**H3.3** – personalities of the retail brand and its retailer influence positively and directly the consumer's response: validated;

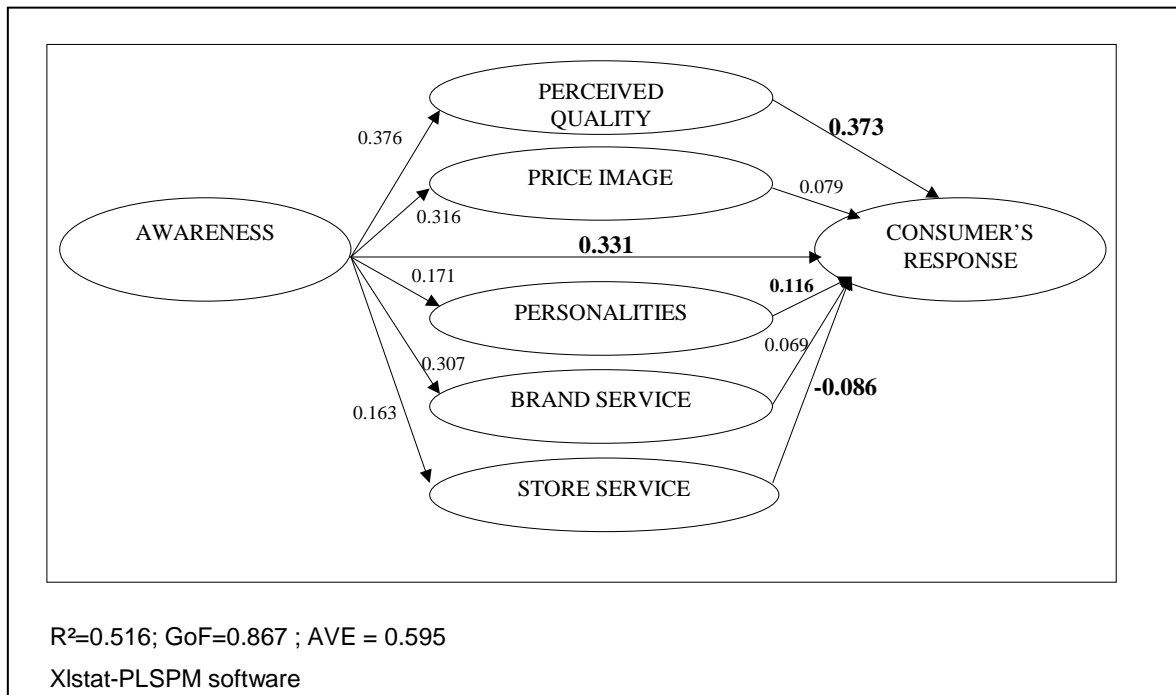
**H3.4** – service of the retail brand influences positively and directly the consumer's response: validated;

**H3.5** – store service influences positively and directly the consumer's response: no validated. Indeed, as we can see that the relationship between store service and consumer's response is negative (figure 8).



**Figure 8: Validation H3**

**H4:** Retail brand image is a mediator of the relationship between retail brand awareness and the consumer's response. This hypothesis is validated but the mediation caused by the retail brand image is partial because the relationship between awareness and consumer's response is different from zero (Baron and Kenny, 1986; see figure 9).



**Figure 9: Validation H4**

To summarize:

- 1) The two main components that explain the value created by retail brands are retail brand awareness and its perceived quality;
- 2) Store service is the only component that influences negatively the consumer's response. But this result must be moderated at the product category and at the store levels because several research have shown that this negative relationship could be explained by the nature of the product (Semeijn *et al.*, 2004) or by the nature of store (Baker *et al.*, 2002; Ailawadi and Keller, 2004);
- 3) Personalities of retail brand and retailer with his managerial values is the only construct which differentiates retail brand positioning. Indeed, this construct is in part based on specific associations linked to it leading to unique position of the brand and retailer. The interest of the personality construct in the creation of brand value is assumed again in the case of retail brand (Biel, 1992; Keller, 1993).
- 4) Retail brand image is a mediator variable on the relationship between retail brand awareness and consumer's response. So direct and indirect relationships coexist in the retail brand equity model.

### **3.2. Moderators of retail brand equity**

The retail brand equity model could be appreciate at two different levels in order to analyse more precisely the creation of retail brand value. At first, the product category level is analyzed, then, the store level.

#### *Product level analysis*

Three products were chosen in this research corresponding to three different involvement:

- 1) grated cheese (functional product) corresponding to low involvement;
- 2) shower gel (experiential product) corresponding to medium involvement;
- 3) foie gras (symbolic product) corresponding to high involvement.

Table 11 describes the sample characteristics:

AGE	GENDER		PRODUCTS			Total
			GRATED CHEESE	SHOWER GEL	FOIE GRAS	
<30 years old	MALE	Number	26	31	31	88
		% of total	15.6%	18.6%	18.6%	52.7%
	FEMALE	Number	28	29	22	79
		% of total	16.8%	17.4%	13.2%	47.3%
	Total	Number	54	60	53	167
		% of total	32.3%	35.9%	31.7%	100.0%
30 - 50 years old	MALE	Number	31	26	29	86
		% of total	17.5%	14.7%	16.4%	48.6%
	FEMALE	Number	30	30	31	91
		% of total	16.9%	16.9%	17.5%	51.4%
	Total	Number	61	56	60	177
		% of total	34.5%	31.6%	33.9%	100.0%
> 50 years old	MALE	Number	22	23	30	75
		% of total	13.8%	14.4%	18.8%	46.9%
	FEMALE	Number	31	29	25	85
		% of total	19.4%	18.1%	15.6%	53.1%
	Total	Number	53	52	55	160
		% of total	33.1%	32.5%	34.4%	100.0%

**Table 11: Product analysis – sample characteristics**

Table 12 shows that two components explain systematically the consumer's response towards retail brands, that are awareness and perceived quality of the brand. Other components could explain the retail brand performance depending on the product.

	<b>Common components for all products</b>	<b>Specific components to the product</b>
<b>Grated cheese</b>	0.288 perceived quality + 0.171 awareness	+ 0.214 price image + 0.133 personalities
<b>Shower gel</b>	0.412 perceived quality + 0.324 awareness	
<b>Foie gras</b>	0.418 perceived quality + 0.400 awareness	+ 0.137 brand service – 0.116 store service

**Table 12: Components of retail brand equity depending on the product**

Comments on specific components:

Concerning grated cheese product, price image and personalities of retail brand and retailer (with his managerial values) determine the retail brand performance. Price

positioning represents in this case the second key factor of the retail brand performance. This result confirms previous research on functional product (Bellizzi *et al.*, 1991; Burton *et al.*, 1998; Collins-Dodd and Lindley, 2003). Retailer personality and his managerial values impact positively retail brand performance in the case of functional product because retailers chosen in this research (*Carrefour*, *E.Leclerc* and *Intermarché*) are food retailers. So this “fit” between retailer’s image and the nature of product explains that the retailer’s image influences the retail brand performance on functional products.

One can observe that concerning shower gel product there is no specific component. This result is not surprising because of the nature of this market. Indeed, cosmetics and beauty products are widely dominated by manufacturers’ marketing. For example, L’Oréal and its numerous brands and others firms (Henkel, Unilever etc...) invest highly in marketing and communication in order to maintain a unique position of their brands in the consumer’s mind. So perceived quality and brand awareness are main key factors of the brand success on this market.

Concerning foie gras product, brand service and store service are the two specific components. Because of the lack of consumer’s familiarity towards this kind of product, brand service enables consumer to decide more easily in indicating rapidly the middle range. Hence, brand service is an important key factor to decide. Contrary to brand service, store service influences negatively the retail brand performance. This result confirms those of Semeijn *et al.* (2004). In fact, in the case of high involvement product, self service model is not adapted. Another contribution could explain this negative relation. In fact, Ailawadi and Keller (2004) have written that more a store is comfortable more the consumer stays longer and explore it. Hence, we can suppose that the consumer considers more brands before his purchase and decides finally to purchase a manufacturer brand.

As depicted in table 13, one can observe that the retail brand performance is the highest concerning functional product and systematically the lowest concerning symbolic product. This result shows that retail brand equity varies inversely to consumer’s involvement.

	<b>Retail brand performance</b>
<b>Store brand Carrefour</b>	
Grated cheese	3.03
Shower gel	2.51
Foie gras	2.49
<b>Composite private label from E.Leclerc</b>	
Grated cheese	3.43
Shower gel	2.55
Foie gras	2.55
<b>Composite private label from Intermarché</b>	
Grated cheese	3.16
Shower gel	2.48
Foie gras	2.34

**Table 13: Retail brand performance according to product category**

*Store level analysis*

The retail brand equity could be appreciate then at the store level. Three stores are considered:

- 1) Carrefour
- 2) E. Leclerc
- 3) Intermarché

The same procedure as the previous analysis is followed. Table 14 depicts the sample characteristics and then results are analysed.

AGE	GENDER	RETAIL BRAND STRATEGY				
			CARREFOUR	LECLERC	INTERMARCHE	Total
< 30 years old	MALE	Number	28	27	33	88
		% of total	16.8%	16.2%	19.8%	52,7%
	FEMALE	Number	25	23	31	79
		% of total	15.0%	13.8%	18.6%	47,3%
	Total	Number	53	50	64	167
		% of total	31,7%	29.9%	38.3%	100.0%
30 - 50 years old	MALE	Number	29	30	27	86
		% of total	16.4%	16.9%	15.3%	48,6%
	FEMALE	Number	31	34	26	91
		% of total	17.5%	19.2%	14.7%	51,4%
	Total	Number	60	64	53	177
		% of total	33,9%	36.2%	29.9%	100.0%
> 50 years old	MALE	Number	25	26	24	75
		% of total	15.6%	16.3%	15.0%	46,9%
	FEMALE	Number	30	28	27	85
		% of total	18.8%	17.5%	16.9%	53,1%
	Total	Number	55	54	51	160
		% of total	34,4%	33.8%	31.9%	100.0%

**Table 14: Retail brand strategy- sample characteristics**

So table 15 shows that awareness and perceived quality of the brand influence systematically retail brand performance. Other components could explain the retail brand performance depending on the kind of store.

	Common components for all products	Specific components to the product
<b>Carrefour</b>	0.329 perceived quality + 0.251 awareness	+ 0.166 price image + 0.140 personalities – 0.128 store service + 0.096 brand service
<b>E.Leclerc</b>	0.363 perceived quality + 0.403 awareness	+ 0.110 brand service
<b>Intermarché</b>	0.465 perceived quality + 0.280 awareness	+ 0.176 personalities – 0.117 store service

**Table 15: Components of retail brand equity depending on the store**

Two main results could be described from the table 15:

1) It seems that Carrefour brand owns the highest number of different sources to develop its brand equity. Its numerous specific components show the high potential of the brand to differentiate itself in the consumer's mind;

2) The relationship between store service and retail brand performance is negative in the case of Carrefour and Intermarché stores. Two reasons explain this result. Concerning Carrefour store, one can say that this store is the most comfortable store in comparison with the other stores in this research. Indeed, merchandising of products, high size of store, colors, lights, music and animation of shelves lead to consider this store as an experiential store. Baker *et al.* (2002) have shown that more the store is experiential more its price positioning increases. In the case of retail brands, a comfortable store could impact negatively their price image leading finally to consider them too expensive which is at the opposite of the expected retail brand positioning. In the case of Intermarché, the small size of the store (5800m<sup>2</sup> against 10000m<sup>2</sup> for the two others) could explain that the store is perceived as expensive and its assortment also. So the retail brand seems to be less attractive compared with manufacturer brands.

As depicted in the table 16, composite private label from E.Leclerc obtain the best performance (except on the experiential product referring to cosmetics and beauty products). This result is not surprising because E.Leclerc invests more than others retailers in marketing and communication of its brand (217 euro millions against 206 euro millions for Carrefour and 137 euro millions for Intermarché in 2007).

	<b>Retail brand performance</b>
<b>Grated cheese</b>	
Carrefour	2.91
Les Croisés Marque Repère (from E.Leclerc)	2.96
Pâturages de France (from Intermarché)	2.89
<b>Shower gel</b>	
Carrefour	2.11
Manava Marque Repère (from E.Leclerc)	2.14
May (from Intermarché)	2.21
<b>Foie gras</b>	
Carrefour	2.32
Pierre de Chaumeyrac Marque Repère (from E.Leclerc)	2.44
Comte de Queriac (from Intermarché)	2.32



**Table 16: Retail brand performance according to store**

### **3. Contributions, limitations and research perspectives**

Because of a dearth of literature on retail brand equity, this research tends at first to provide theoretical contributions on how to conceptualise and then to measure this concept. Because retail brands can be considered service brands, a model of retail brand equity based on the Keller's model (1993) is proposed with corporate dimensions added to the original Keller's model.

The exploratory research described in this paper aims at specifying components and their associations of retail brand image. A survey on fifty-four customers enables specifically a better understanding of two different policies of retail branding: the store brand policy and the "composite" private label policy. From these interviews and the Keller's model, a retail brand equity model is built describing customers' perceptions of the retail brand. This model reveals that retail brand equity is a multidimensional concept composed of two main components that are awareness and positive retail brand image. Positive retail brand image includes five sub-components: perceived quality, price image, retail brand personality and retailer personality, brand service and store service. In other words retail brand image is composed of different components: some are directly related to product-branded (creating no particular value to the brand) and others are non-related to the product-branded but concern store dimension, retail brand personality, retailer personality and managerial values/symbols.

Quantitative research reveals then that among these components two are particularly determinant of the success of retail brands. Indeed, retail brand awareness and its perceived quality explain systematically the performance of the brand whatever the kind of product and the retail brand strategy.

Moreover, this research show that the retail brand equity could vary inversely to the product involvement. One can summarize that more the product is symbolic more the retail brand equity is low.

Besides, retail brand equity could be appreciated at a store level. Specific components of retail brand equity for each store confirm empirically that food retailers could be differentiated at an operational level also. In other words this research could help managers in supporting their tactical and operational decisions.

Finally, results show that only associations related to the personality of the retail brand and of the retailer could offer a unique axis of positioning to the retail brand. Adapting

brand equity to retail marketing is a real managerial and strategic stake. This could be used by marketers to maximize the potential value of their brands and to position them on a larger set of associations (because of the synergies of image). Indeed, building service brands on an extended set of associations can help to better differentiate and define a unique position in consumers' mind.

However, this work presents some limitations. Primarily, external validity of results is criticisable. Indeed, only three retailers corresponding to three different hypermarkets were selected in this research. Thus, they do not represent all strategies in food retailing. Products chosen here were then limited to only three. Even if they reveal variations and precisions in the building of retail brand equity they are sufficient.

Secondly, it will be interested to make international comparisons in order to define at first more precisely different retail brand equity models and then identify common and specific key factors of the success of retail brands for each country.

At the end of this extended research one can propose a benchmarking tool which enables to compare the efficiency of each branding strategy at national and international levels.

## FOOTNOTES

1. In 2005, retail brands in Europe had a 23% share across 17 markets (Lybeck *et al.*, 2006) and it is about the same rate in France whereas this rate is much higher in the UK: For example 54% of Sainsbury's and 41% of Tesco sales come from their retail brands (Quelch and Harding, 1996). The growth rate of retail brands (+5%) is twice the growth rate of manufacturer brands which is about 2% (Lybeck *et al.*, 2006). So retail brands continue their penetration and represent a dynamic perspective of development for retailers (Corstjens and Lal, 2000).
2. Many retailers' innovations indicate the need to build strong positioning for their brands. For examples Sainsbury's proposes pizza pie with the curry; Carrefour offers the wash liquid in doses; Boot's (health and beauty products) launches giant effervescent pastilles for the bath...
3. Lybeck and Holmlund-Rytkönen and Sääksjarvi (2006) showed that retail brands' quality does not enable to consider retail brands as cheap alternatives to national brands any longer.
4. Brand personality is an important factor to differentiate product-branded because "metaphorical and symbolic vocabularies available are much richer" (Biel, 1992). And brand personality enables to capture levels of abstraction of a brand.
5. Dacin and Smith (1994) argued that "the favourability of consumers' predispositions toward a brand is perhaps the most basic of all brand associations and is the core of many conceptualizations of brand strength/equity".
6. The strength of brand associations depends on the quantity of associations evoked by consumer.
7. *Nouvelles Régulations Economiques*, article 62: « *Est considéré comme produit vendu sous marque de distributeur le produit dont les caractéristiques ont été définies par l'entreprise ou le groupe d'entreprises qui en assure la vente au détail et qui est le propriétaire de la marque sous laquelle il est vendu.* » 15 mai 2001.
8. Chin (1998) suggested that it is theoretically possible to use formative variables in LISREL (covariance-based SEM technique) but it may have a variety of problems.
9. Formative measures are difficult to validate because of a dearth of literature.

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## Appendix I: Average and communalities of variables

	Means	Communality	N
Attitude towards retail service brands	3.42	.642	504
Appealing packaging	3.17	.512	504
Practical packaging	3.50	.482	504
Informative packaging	3.16	.352	504
Value for money	3.71	.636	504
Adequate price	3.66	.667	504
Low price	2.93	.521	504
Taste	3.49	.570	504
Psychological benefit 1	3.28	.585	504
Psychological benefit 2	3.19	.654	504
Financial benefit	3.22	.598	504
Make easy the location of the brand	3.17	.820	504
Make easy the decision-making	3.20	.789	504
Visibility on shelves	3.45	.697	504
Rigor of merchandising	3.53	.666	504
Visibility in-store	3.40	.794	504
Promotion	3.06	.554	504
Cleanness	3.71	.752	504
Modernity	3.27	.758	504
Personnel skill	3.45	.790	504
Personnel available	3.25	.782	504
Common brand personality	3.39	.635	504
Unique brand personality	3.30	.504	504
Common retailer personality	3.49	.729	504
Unique retailer personality	3.39	.612	504
Symbol	3.41	.666	504

*SPSS software*

*Key of observed variables:*

AP: Adequate price	APP: Appealing packaging	ATRB: Attitude towards retail service brand	AVAIL: Personnel available	CBP: Common brand personality
CRP: Common retailer personality	EDM: Make easy the decision-making	ELB: Make easy the location of the brand	FB: Financial Benefit	PB1: Psychological Benefit 1
PB2: Psychological Benefit 2	RC: Recall	RG: Recognition	RM: Rigor of merchandising	SKIL: Personnel skill
SYM : Symbols of retailer	TASTE: Taste	UBP: Unique brand personality	URP : Unique retailer personality	VM: Value for money
VSHV: Visibility on shelves	VST: Visibility in-store	INTENT : intent to buy the retail brand	RB CHOICE: retail brand is a regular choice	