

# Key Factors in Children's Choice of Clothing – The Logit and Probit Binary Choice Models

**Antonio Cardoso, PH. D.<sup>(1)</sup>, Mario de Araujo, PH. D.<sup>(2)</sup> and Eduarda Coquet, PH. D.<sup>(3)</sup>**

(1) University Fernando Pessoa, Faculty of Human and Social Sciences,  
Praça 9 de Abril, 349 - 4249-004 Porto, Portugal; Tel: (351) 964508476  
email: [ajcaro@ufp.pt](mailto:ajcaro@ufp.pt)

(2) University of Minho, School of Engineering, 4800 Guimaraes, Portugal  
email: [mario.araujo@det.uminho.pt](mailto:mario.araujo@det.uminho.pt)

(3) University of Minho, Institute for Children Studies, 4700 Braga, Portugal  
email: [coquet@iec.uminho.pt](mailto:coquet@iec.uminho.pt)

**Abstract:** *this article aims to identify the key factors in the choice of children clothing. An exploratory study was developed through a questionnaire answered by 313 children, between the ages of 6 and 11, from 4 different schools in Porto (Portugal), covering the private / state and the rural / urban dimensions. The Logit and Probit binary choice models have been chosen to evaluate the factors that influence children's choice (proxy), based on a hamper constituted by "Brand Name, Functionality and Fashion". The conclusions show that these choices are positively related to Age, Sex, Environment, Parents' Income, Self-Esteem, Susceptibility to Interpersonal Influence and Utilitarian Value. On the contrary, Susceptibility to Reference Group Influence, Materialistic Attitudes, Ostentatious Value and Involvement are negatively related to choice.*

**Keywords:** *Children, Self-Esteem, Materialism, Consumer Susceptibility to Interpersonal Influence, Consumer Susceptibility to Reference Group Influence, Utilitarian Value, Ostentatious Value, Involvement, Logit and Probit Models*

# Key Factors in Children's Choice of Clothing - The Logit and Probit Binary Choice Models

## 1 - Introduction

The aim of this research is to propose an operational model that explains the clothing choice process made by children, based on variables that are supposed to be correlated to it. In this sense, we intend to estimate the repercussions of factors like Sex, Age, Family Income, Degree of Urbanism, Self-Esteem, Materialism, Susceptibility to Interpersonal or Group Influence, Ostentatious and Utilitarian Aspects of Clothing, and Involvement, in the final result of the choice.

It may be acknowledged that with a different questionnaire and, consequently, a more focused database relative to the objectives, the models available and the results obtained could have been more and better than the ones described here. Nevertheless, these may be considered quite satisfactory.

Belk et al. (1983) concluded that children reckon that the products they have and take to school perform a symbolic function, besides the practical and/or utilitarian dimension. The interactions between children and their schoolmates have an influence on the consumption habits, which leads the child to a phenomenon of identification through which one wants to be similar to others (Cardoso, 2004; Alves, 2002), particularly with regard to products with wide social visibility, as it happens with clothing (sometimes conflicts arise in which they are opposed to their own family).

The young people's fashion phenomena are examples in which it is easier to notice group pressure and social influence on children's behaviour (Maisonneuve, 1993). As Ifergan & Etienne (2002: 66-67) say:

«Even before the age of ten, clothing establishes a belonging to a clan; it allows one to show off, become known and appreciated by the group. The brand name clothing plays a determining role, because it allows one to immediately show which style one wants to adhere to, thus constituting itself as a kind of identification card. The presentation and the way one wears their clothes quickly becomes a "virtual prison", the child being convinced that they are going to be judged by their appearance»

Children reckon that appearance performs an important role in their lives (Hawkins et. al., 1998). They are affected by socialization and by self-perception relative to the group (Zollo, 1995, 1999). In turn, their style, fashion and culture expand to a wider population (Zollo, 1995), through the wish to have a young and "cool" style. In the

same way, Taylor & Cosenza (2002) noticed that the younger people are sensitive towards trademarks (Auty & Elliot, 1998; Hogg, Bruce & Hill, 1998), but also to the clothing design, appearance and style: girls worry more about making the right clothing choice for reasons of social affiliation.

Children like clothes and buying clothes (Sutherland & Thompson, 2003). Hawkins et al. (1998) confirm that young consumers have different attitudes, values and purchase behaviour. They choose different products, have different activities, and the media are different.

Concerning clothing specifically, Chowdhary (1988) noticed that young consumers look for the information about fashion and brand name clothing in their social relationships and among their friends.

In Stone's (1998) perspective, children from 6 to 9 years old prefer comfortable clothing and wish to have clothes similar to the ones their peers wear. The author refers that parents worry about finding attractive, comfortable and lasting clothing. When children assume an individual space (school), they worry about being similar to their schoolmates.

More recently, Ross & Harradine (2004) concluded that children prefer sport brand names because these make them feel "cool" and older, while acting as elements of conformity with their most popular peers. For older children, the brand names function as factors of acceptance by the group, granting a high degree of self-esteem (Cardoso, 2004).

More than any other previous generation, these "power kids" know what they like, know what they want and know how to get it (Sutherland & Thompson, 2003). Therefore, they are known as the KAGOY (*Kids are Getting Older Young*) generation because of their fast process of "*adultification*" (Sutherland & Thompson, 2003; Quart, 2003; Lindstrom & Seybold, 2003). Their involvement in sport, their access to the "*mass media*" (access to information), their handling of new technologies (Internet, DVD, videogames, etc...), their multicultural (different races and cultures) contacts, the trips they make (at school and with their parents) and their precocious puberty (faster physical and cognitive development) contribute to all this.

## 2 - The Conceptual Model

The conceptual model here presented contains several important propositions, which have been developed after a review of the literature on this specific subject.

Engel *et al.* (1995) refer that there are individual differences that influence the process of purchase decision. These differences include demographic data, involvement, knowledge, lifestyle, motivation, personality, resources and values.

Hawkins *et al.* (1998) state that consumers of different age groups have different attitudes, values and behaviours. In this study, age, sex and school level influence their attitudes towards their peers and assume different implications with regard to clothing.

Clothing has been chosen as the central product in this research, as the children's clothing preferences reflect the normative and informative influences from both their peer and reference groups (Rose, Boush & Friestad, 1998). Children worry about clothing (Harter, 1990) because it is a product of great visibility which serves self-presentation, these aspects being crucial in clothing choice (Back, 1985). According to age or sex, different age groups may have different perceptions relative to clothing. The type and style of clothing that children prefer to wear are similar to those of their colleagues, thus creating a positive attitude towards the group (Cardoso, 2004).

This research is supported by the following seven constructs which will constitute, together with age, gender, environment and parents' income, the variables that explain 'choice' (the variable to explain):

- 1) **Self-esteem** (SES – Self-Esteem Scale): associated with the reflection of assessment by others and may be seen as a prism through which a person views the world. It is a global construct whose influences spread to self-perception and social behaviour;
- 2) **Materialism**: assesses children's materialistic values and their concerns about possessions (assets) as instruments of power, revealing an important symbolic dimension in social interaction;
- 3) **CSII** (*Consumer Susceptibility to Interpersonal Influence*): ensures assessment of how a person is influenced by others in their purchase or consumption decisions;
- 4) **Reference Group Influence**: *Consumer Susceptibility to Preference Group Influence*;

- 5) **Involvement with clothing** (supported by five dimensions): a) Interest in clothing; b) Pleasure; c) Symbolic value; d) Perceived importance; e) Subjective probability;
- 6) **Utilitarian Value of Clothing** (measures the importance attributed to functional aspects of clothing: value, durability, etc.);
- 7) **Ostentatious Effect**: the intention was to analyse the importance of the external dimension and the status of clothing – the brand and what other people wear.

As there are no studies defining the choice of clothing by children, we have opted for a definition *a posteriori*, based on the analysis of the different instruments of research. Therefore, the choice will be defined by means of a "proxy", based on a *hamper* that will be constituted later on.

### **3 - The Hypotheses of the Research**

The hypotheses formulated with regard to children's clothing choice are as follows:

#### **H1. Children's clothing choice is positively associated with self-esteem.**

Children's self-esteem is associated with the sense of power (to make things), with the sense of belonging (to be part of), with the sense of the singular (to make a difference) and with the sense of role model (to follow people) (Burke, 1999).

When they go to school and increase their social interactions, children receive incentives and reprimands that affect their self-esteem.

The building of self-concept and self-esteem is a lifelong process, thus consolidating (or not) with the cognitive and social development of the children. However, self-confidence is still very fragile at these ages (Stone, 1998).

#### **H2. Children's clothing choice is positively associated with materialism.**

Nowadays, there is an augmentation of materialistic attitudes in our society (Belk, 1985; Richins, 1994; Dittmar, 1992). According to Moschis & Churchill (1978), the social learning and the cognitive development of children make possible an increase of the children's consumption experiences, which suggests a growth of their materialistic attitudes with age.

On the other hand, social interactions, exposure to the media and their increasing autonomy at home favour the materialistic attitudes of children (Moschis & Churchill, 1978; Richins, 1987; Belk, 1985; Ward & Wackman, 1971).

Easterlin & Crimmins (1991) confirm that children's materialistic attitudes have increased in recent years, particularly because of an increase in children's consumption responsibilities and the promotions directly addressed to them.

### **H3. Children's clothing choice is positively associated with interpersonal influence.**

The peer groups are considered factors of social influence, as they play a key role in children's behaviour (McNeal, 1992; Brée, 1995; Guber & Berry, 1993; Zollo, 1995; Gunter & Furnham, 2001; Lindstrom, 2003; Cardoso, 2004).

These influences are noticeable with school attendance, when children start relating to their peers without adult supervision (Brée, 1995; Guber & Berry, 1993; Garbarino, 1985; Coleman & Hendry, 1990).

In this sense, Brée (1995) refers that peers validate and approve of what one can and should wear.

Chowdhary (1988) believes that young people seek information about fashion and about clothing brands in their social relationships and friends.

### **H4. Children's clothing choice is positively associated with the influence of reference groups.**

Some authors confirm that the decisions concerning children's clothing choice are influenced by the media (Forney & Forney, 1995; Jacobson & Mazur, 1995). In turn, Johnson et al (1987) consider that the group is a factor of learning and comparison.

The study of Bearden & Etzel (1982) and Cardoso (2004) confirms that children are liable to being influenced by reference groups.

### **H5. Children's clothing choice is positively associated with involvement.**

The studies of Laurent & Kapferer (1985) consider clothing as a product with strong involvement.

In spite of the fact that this scale of involvement has not yet been applied to children, there will be an attempt at verifying whether they are involved in clothing.

Girls have a higher interest in clothing (Haines et al, 1993) and a higher awareness of brand names (Moschis & Moore, 1978).

Older children demonstrate a higher interest in clothing than the younger ones (Haines et al, 1993).

The involvement is an important variable in children's behaviour, even if they do not buy anything (Cardoso, 2004).

**H6. a) Children's clothing choice is positively associated with sought-after values: Ostentatious value.**

The values sought after in clothing may be symbolic and utilitarian (Tigert, Ring & Ring, 1976; Sproles & King, 1973; Johar & Sirgy, 1991; Grimm, Agrawal & Richardson, 1999).

Children recognize the symbolic value of the products, particularly of clothing (Prakash, 1984; Bearden & Etzel, 1982; Cardoso, 2004)).

**H6. b) Children's clothing choice is positively associated with sought-after values: Utilitarian value.**

Common sense claims that children care about practical and functional clothing.

Literature claims that, besides the symbolic value, consumers look for utilitarian value in clothing (Johar & Sirgy, 1991; Grimm, Agrawal & Richardson, 1999).

Belk et al (1983) acknowledge that school children care about the utilitarian value of clothing (functionality).

According to Stone (1998), children prefer comfortable clothes, similar to those worn by their peers. Chowdhary (1988) and Cardoso (2004) share this opinion when they state that children prefer practical and informal clothes.

**H7. Children's clothing choice is positively associated with age.**

As a result of socialization, children discover the symbolic function of products as well as their expression (Brée, 1995; Quart, 2003; Lindstrom, 2003).

Belk et al (1983) concluded that children acknowledge that the products they take to school have a symbolic function, besides their utilitarian dimension.

Some researchers have concluded that peer influence decreases throughout adolescence, while looking for higher autonomy (Erickson, 1974; Newman & Newman, 1976; Brown, Clasen & Eicher, 1986; Kimmel & Weiner, 1995).

The cognitive development and the social learning process widen children's consumption opportunities, thus the materialistic attitudes increase with age, resulting from more consumption opportunities (Moschis & Churchill, 1978).

Older children express a higher interest in clothing than younger ones, become more independent in their decisions and in the choice of products, and their choices reflect the influence of their friends and of television (Haines et al, 1993).

**H8. Children's clothing choice is positively associated with gender.**

Girls have a higher interest in clothing and they are more aware of brand names (Haines et al, 1993).

Kasser's (2002) studies mention that boys are more materialistic than girls.

Comparatively, girls are more interested in clothing (Haines et al, 1993), are more aware of brand names but less of price (Moschis & Moore, 1978), and look for more information from their parents about the products (Moschis, 1987).

**H9. Children's clothing choice is positively associated with environment.**

The urban environment offers more consumption opportunities, as people are closer to commercial networks (McNeal, 1992; Brée, 1995; Quart, 2003).

However, the populations who live in downcast areas tend to project themselves socially, promoting (given the present insufficiencies) materialistic attitudes (Lambrey, 1993).

In fact, deprivation of elementary products, a feeling of insecurity, maladjustment and low self-esteem may be mediating factors of materialistic attitudes (Fournier & Richins, 1991; Richins & Dawson, 1992; Belk, 1994).

**H10. Children's clothing choice is positively associated with parents' income.**

The growth of the family income is an incentive to an increase in consumption (McNeal, 1992), allowing parents to compensate children with material possessions (Brée, 1995).

**4 - Treatment and Transformation of Primary Data**

The primary data was collected by questioning 313 students from 4 schools located in the city of Porto and the surrounding area. Of these schools, 2 were situated in a predominantly rural area and the other 2 in an urban area, 2 were public and the other 2 were private.

The questionnaire was the result of an adaptation of a set of constructs duly tested in similar studies for ages different from those aimed at in the present study. That transformed version contained the following variables:

- (i) socio-demographic variables: degree of urbanity; public vs. private sector; school level; age; sex; household dimension; father's job; mother's job; father's education; mother's education; number of older siblings; number of younger siblings; family annual net income;
- (ii) children's personality characterization variables: self-esteem (6)<sup>1</sup>; materialism (5); susceptibility to interpersonal influence (3); susceptibility to group influence (9); ostentatious aspects of clothing (5); utilitarian aspects of clothing (3); interest in clothing (2); pleasure (3); zodiac sign (2); perceived importance (4); subjective probability (4).

In order to assess self-esteem, scales developed by several researchers were used. Three variables were from Rosenberg (1965): self-concept, optimism and perceived skills. Other variables were drawn from SEI (Self-Esteem Inventory) of Coopersmith (1967). Six variables were taken from CSCS (Children's Self-Concept Scale) of Piers (1984). The items of BES (Body-Esteem Scale) were drawn from of Franzoi and Shields (1984).

Due to the pre-tests previously described, we had to reduce the scale to 6 items, which was carefully done so as to guarantee the aspects we wanted to measure. We used a scale similar to the one used by Richins (1987), but reduced to 5 items.

As far as the "Consumer Susceptibility to Interpersonal Influence" (CSII) is concerned, the 3 items of the scale developed by Bearden, Netemeyer and Teel (1989) were used.

As regards the influence of reference groups, "Reference Group Influence: Consumer Susceptibility to Reference Group Influence" by Park and Lessing (1977) will be used in its three components, later adapted by Bearden and Etzel (1982) – "Reference Group Influence on Product and Brand". We also took into account "Reference Group Influence on Innovation" by Fisher and Price (1992). The three dimensions are the following: informative; utilitarian; expressive value.

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<sup>1</sup> Ex: 'self-esteem (6)' determines the number of variables built to grasp the main characteristic; this is, 6 variables were created to grasp the characteristic 'self-esteem (6)'.

The items used concerning the values sought after in clothing are based on a list developed by Prakash (1984) and later adopted by Prakash & Munson (1985), including the external aspects of clothing (visibility effect), with 5 items, and the utilitarian aspects of clothing (practical and functional effect), with 3 items.

After careful consideration concerning the involvement, we have chosen the scale of Laurent & Kapferer (1985), to the detriment of Zaichkowsky's (1985) scale, because it is smaller and sensitive to the several dimensions of involvement. However, we have had to reduce the number of items (only 15 were used) in the original scale in order to make it applicable to children.

We should mention that, as far as design, language, size and scales are concerned, this questionnaire was created according to children's features (Cardoso, 2004; Todd, 2001; Borgers et al., 2000; Benson & Hocevar, 1985; De Leeuw & Otter, 1995).

The procedure used for the administration of the questionnaire was self-administration (the researcher himself reads the questions and the children write the answers). The characteristics of this research justify the choice of this procedure, as it was necessary to get around children's cognitive limitations. After receiving general instructions about the research, and specific instructions about the questions and scales (YES-yes-no-NO and the "Smile Faces"), children answered 5 questions (test) about the scales (Bachmann, John & Rao, 1993; Childers & Rao, 1992; Harrigan, 1991; Cardoso, 2004).

To get around children's cognitive boundaries, the questions were read slowly and aloud while children followed it through silently (Childers & Rao, 1992). The remaining questions were not read until all the children had concluded the previous ones (Bachmann, John & Rao, 1993). Visual stimuli and answer flashcards were also used (Macklin & Machleit, 1990: 253-265 – each face of the scale was set up on large cards of 14'' x 5.5'') to make it more interesting, more specific and more motivating for children to answer (Cardoso, 2004; Borgers et al., 2000).

Each group of variables of the child's personality characterization was submitted to alphas analysis (**table 1**). The objective was to evaluate the concurrence of its component variables to the *corpus* logic. In all of the groups we confirmed a high internal consistency. In spite of the fact that scales with acknowledged methodological qualities have been used, whose reliability has already been tested in adults and adolescents, the population under study (children) makes up an exploratory research. As

a matter of fact, the context and the combination of scales are not the same as other authors have used. In this perspective, we consider that this study is an exploratory research, which means that the Cronbach's alpha should be equal to 0.6 or higher (Nunnally: 1978).

**Table 1:** General view of the reliability of the measures of the seven concepts

Measured Variable	No. of Items	Cronbach's Alpha	Alpha improved
1-Self-esteem	6	0,628	0,63
2-Consumer Susceptibility to Interpersonal Influence	4	0,637	0,64
3-Materialism	5	0,701	0,75
4-Reference Group Influence	9	0,814	0,83
5-Ostentatious Effect	5	0,776	0,83
6-Utilitarian clothes	3	0,601	0,60
7-Involvement in Clothing	a) Interest in clothing	2	0,842
	b) Pleasure	3	0,706
	c) Sign	2	0,767
	d) Acknowledged Importance	4	0,797
	e) Subjective Probability	4	0,644

Afterwards, a factorial analysis of the main components was carried out, allowing for the reduction of the number of variables inside each group (**table 2**). In fact, within the groups of Materialism, Susceptibility to Interpersonal Influence, Clothing Ostentatious Aspects, Clothing Utilitarian Aspects, Interest in Clothing, Pleasure, Sign, Acknowledged Importance and Subjective Probability, the first variable in the scale used in the questionnaire was identified as its main component. Only in the groups Self-Esteem and Susceptibility to the Reference Group Influence was its second variable included alongside with the first.

**Table 2: Unidimensionality / multidimensionality of the scale**

Measured Variable	No. of items	% of variance explained by the first factor	
Self-esteem	6	35,4 %	
Consumer Susceptibility to Interpersonal Influence	4	57,9 %	
Materialism	5	47,9 %	
Reference Group Influence	9	40,8 %	
Ostentatious Effect	5	53,7 %	
Utilitarian clothes	3	86,7 %	
Involvement in clothing	Interest in clothing	2	55,4 %
	Pleasure	3	63,4 %
	Sign	2	81,6 %
	Acknowledged importance	4	75,1 %
	Subjective probability	4	48,4 %

Among the socio-demographic variables, at a first stage, we kept the Level of Urbanity, the State or Private sector, the Year, the Age, Sex, Father's Education; Mother's Education and Family Annual Net Income.

The first tests of the models which, in their more definitive way are presented in this document, were not satisfactory when taking into account the range of variables described above. On the one hand, the possible redundancy of some variables, degenerated by the coexistence of many “*dummy*” variables, did not guarantee acceptable precision to the estimated coefficients. Nevertheless, this is not extendable to the quality of the forecasts. However, the purposes of the present research were not only to forecast the choice, but also to determine the sense and the magnitude of effects of the variables stated in the first section, concerning the choice of clothing by children.

From this interactive process, we excluded the variables Year, State or Private Sector and Family Annual Net Income, firstly because of the strong correlation that could be noticed with the variable Age, and secondly because they do not represent reliable values when cross-checked with the education and jobs of parents. The strong correlation both with Family Annual Net Income and Urbanity Degree was another reason for excluding the mentioned variables.

Given the importance of the family income variable as a modelling factor in children's choices, we chose to build a “proxy” which consisted in the addition of parents' education. This variable has the advantage of being an acceptable indicator of family income and of representing some aspects of informal culture (important to the choice) highly correlated with formal education.

Concerning children's personality characterization variables, as we had not excluded any variable after the described treatment, we gathered them into 7 large groups, according to what we intended to study. We created an only variable Self-Esteem, resulting from the product of the observed values of the two surviving group variables. According to the same methodology, we created a single variable Susceptibility to Group Influence and Involvement. This included the main components of the variables Interest in Clothing, Pleasure, Sign, Perceived Importance and Subjective Probability.

The methodology of the aggregation of variables which belonged to the same group improved the results substantially, since it introduced less vertical and horizontal monotony in the observed values in the sample and because it eliminated the effect

“redundancy” in favour of the “potentiation” and “interactivity” effects, incorporating a higher impact density in the choice.

#### 4.1. The explanatory variables

The models presented next are supported by the following explanatory variables: Age (A), Sex (S), Family Potential Income (FPI), Urbanity Degree (UD), Self-Esteem (SE) Materialism (M), Susceptibility to Interpersonal Influence (SII), Susceptibility to Group Influence (SGI), Clothing Ostentatious Aspects (O), Clothing Utilitarian Aspects (U) and Involvement (I).

The way in which we defined these variables was described in the previous section. Their characterization and contents are synthesized in the table below (table 3).

**Table 3: Characterization of the contents of the explanatory variables used**

Variable	Code	Primary data	Calculation
Age	A	Age	Age-6
Sex	S	Sex	Sex
Family potential income	FPI	Father's Education (FE) Mother's Education (ME)	FE+ME
Urbanity degree	UD	Urbanity degree	Urbanity Degree
Self-Esteem	SE	Self-Esteem 1 (S1) and Self-Esteem 2 (S2)	S1*S2
Materialism	M	Materialism 1	Materialism
Ostentatious Effect	O	Ostentatious Effect 1	Ostentatious Effect
Utilitarianism	U	Utilitarianism 1	Utilitarianism
Susceptibility to Interpersonal Influence	SII	Susceptibility to Interpersonal Influence 1	Susceptibility to interpersonal Influence
Susceptibility to Group Influence	SGI	Susceptibility to Group Influence 1	Susceptibility to Group Influence
Involvement	I	Interest 1 (I1), Pleasure 1 (P1), Sign 1 (S1), Perceived Importance 1 (RI1) and Subjective Probability 1 (SP1)	I1*P1*S1*RI1*SP1

#### 4.2. The explained variable

When the process was initiated, since a variable directly identified as choice had not been defined, we chose to define hampers with features whose combination, related to a certain person, could identify his/her preferential clothing choice. Thus, we assume that

if the aggregation of those features is registered in a certain questionnaire, the person will choose that option instead of any other.

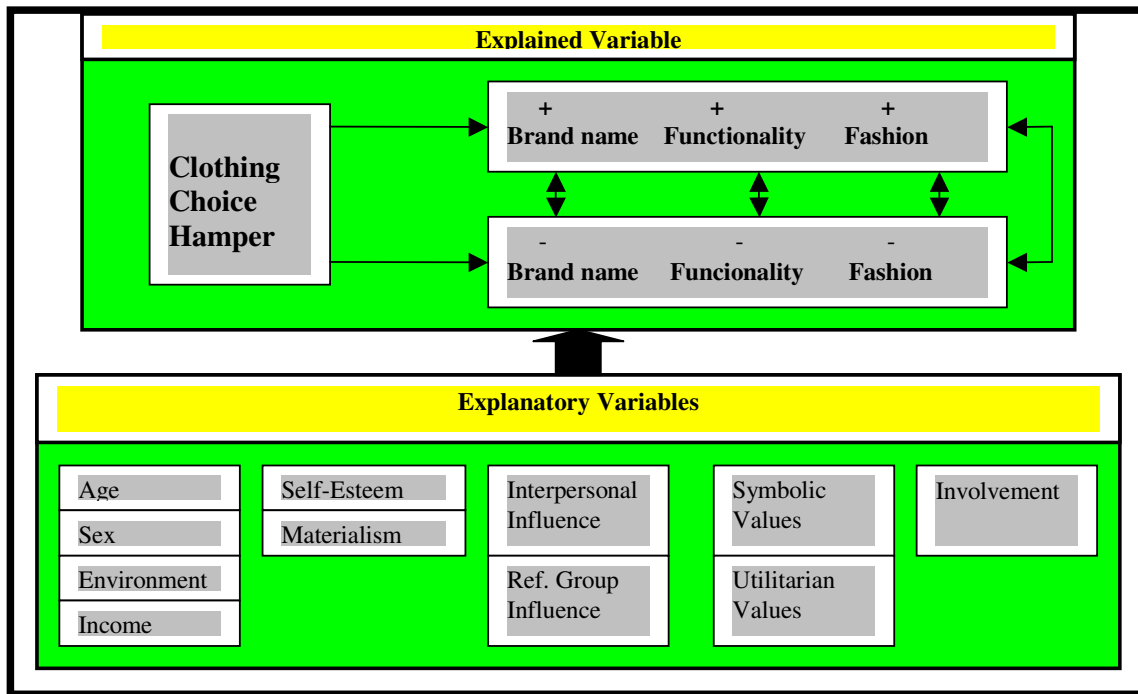
From among the group of factors likely to be chosen by children, we identified the brand name, its functionality, fashion, price, durability and style (Figure 1). As a result of the cross-checked analysis between the several instruments of this research, and also as a result of the review of literature, we decided to reject price, durability and style for the following reasons:

- Concern with clothing price and durability is more of a reflexion of the parents' worries about the purchase of children's clothes (Cardoso, 1998; Lambrey, 1993; Haynes, Burts & Dukes, 1993). In this age group clothing durability is ephemeral because of children's fast physical transformations;
- During the interviews, in spite of recognizing the importance of these elements, children found the other factors fundamental to their choices. ("If I could choose...");
- Style is a subjective perception (it produces much variability), which would only make sense when used in experimental situations when facing specific items of clothing.

Figure 1 presents the choice hamper (explained variable) and the explanatory variables (age, sex, environment, parents' income, self-esteem, materialistic attitudes, interpersonal influence, reference group influence, symbolic and utilitarian values sought in clothing and involvement with clothing), which are believed to have an influence in children's choice.

In this sense, the clothing product (choice) is defined by BRAND NAME, FUNCTIONALITY and FASHION. Given the structure established by the answers, in 4 levels ordered in a decreasing scale from 1 to 4 (1 is the higher level), the group of choices resulting from it was a sum of 64. However, since this is an exploratory study based on a large sample, we decided to consider the 52 observations registered as being the full amount of credible options.

**Figure 1: Constitution of the clothing choice hamper**



The following problem was the “dummyzation” of the 52 choices. In order to do it, there should be a criterion for ordering the choices which could allow for us to separate them into two groups assigning the value 0 to the first choice and the value 1 to the second<sup>(2)</sup> one. This was possible adopting a horizontal ordering of relative importance in designing the product according to the BRAND NAME, first, the FUNCTIONALITY, second and FASHION, third.

Other criteria were tried, such as adding or multiplying the values, which would later on be ordered and divided them into two groups, one 0 and another 1. The results of these orderings, used for the binary “dummies”, did not differ much from the adopted method. On the other hand, it makes every sense to give different weight to the various attributes of a certain product in its “dummy” appreciation. The result of that operation is synthesized in the following table.

<sup>2</sup> It must be noted see that the reduction of choices through “dummyzation” was inevitable not only for the execution of the binary choice models but also to the development of multiple choice models, which might be explored later on due to the limitations in terms of sample (sample size), infrastructure (a program which runs a multinomial logit with 52 choices!) and good sense as far as the handling and analysis are concerned (would it be possible to go from here to Spain with a map on a scale of 1:1?).

**Table 4:** The order of choices obtained from the sample

Criterion 1: The brand name is more than <i>functionality</i> , which is more than <i>fashion</i>			Criterion 2: The different attributes are added and the order is determined			Criterion 3: The different attributes are multiplied and the ordering is determined		
Choice	Multinomial	Dummy	Choice	Multinomial	Dummy	Choice	Multinomial	Dummy
111	0	1	3	0	1	1	0	1
112	1	1	4	1	1	2	1	1
113	2	1	5	2	1	3	2	1
114	3	1	6	3	1	4	3	1
121	4	1	4	1	1	2	1	1
122	5	1	5	2	1	4	3	1
123	6	1	6	3	1	6	4	1
124	7	1	7	4	1	8	5	1
131	8	1	5	2	1	3	2	1
132	9	1	6	3	1	6	4	1
133	10	1	7	4	1	9	6	1
134	11	1	8	5	0	12	7	1
141	12	1	6	3	1	4	3	1
143	13	1	8	5	0	12	7	1
144	14	1	9	6	0	16	8	0
211	15	1	4	1	1	2	1	1
212	16	1	5	2	1	4	3	1
213	17	1	6	3	1	6	4	1
214	18	1	7	4	1	8	5	1
221	19	1	5	2	1	4	3	1
222	20	1	6	3	1	8	5	1
223	21	1	7	4	1	12	7	1
224	22	1	8	5	0	16	8	0
231	23	1	6	3	1	6	4	1
232	24	1	7	4	1	12	7	1
233	25	1	8	5	0	18	9	0
234	26	0	9	6	0	24	10	0
241	27	0	7	4	1	8	5	1
242	28	0	8	5	0	16	8	0
243	29	0	9	6	0	24	10	0
244	30	0	10	7	0	32	12	0
311	31	0	5	2	1	3	2	1
312	32	0	6	3	1	6	4	1
313	33	0	7	4	1	9	6	1
314	34	0	8	5	0	12	7	1
331	35	0	7	4	1	9	6	1
332	36	0	8	5	0	18	9	0
333	37	0	9	6	0	27	11	0
334	38	0	10	7	0	36	13	0
341	39	0	8	5	0	12	7	1
343	40	0	10	7	0	36	13	0
344	41	0	11	8	0	48	14	0
411	42	0	6	3	1	4	3	1
413	43	0	8	5	0	12	7	1
414	44	0	9	6	0	16	8	0
423	45	0	9	6	0	24	10	0
424	46	0	10	7	0	32	12	0
432	47	0	9	6	0	24	10	0
434	48	0	11	8	0	48	14	0
441	49	0	9	6	0	16	8	0
442	50	0	10	7	0	32	12	0
444	51	0	12	9	0	64	15	0

The observed differences concerning the 3 criteria of ordering of choices are synthesized in table 5. We have to notice that, despite the clear and well-argued option for the first criterion, the models developed later on were run also applying the other criteria. The results obtained, though satisfactory, were not as positive.

**Table 5:** Divergences caused by the different orderings of the 52 choices

	Criterion 1	Criterion 2	Criterion 3	Total
Coincidence	1	1	1	21
	0	0	0	17
				<b>38</b>
Divergence	1	0	1	2
	1	0	0	3
	0	1	1	6
	0	0	1	3
				<b>14</b>

As it can be observed, among the 52 choices, 38 are coincident. However, Criterion 1 and Criterion 2 coincide with 41 choices while Criterion 1 and Criterion 3 coincide with 40 choices.

#### 4.3. Presentation of the rationale underlying the base statistical model

Assuming that the clothing consumption by people has a positive impact on their satisfaction level, when the person chooses one from two articles of clothing, we presume that this option is due to being the one which contributes more to his/her satisfaction.

Let's suppose that the person goes shopping to buy the article 111 or 444. For every person, the result of that choice is a “*dummy*” variable,  $y$ , so that

$$y_i = \begin{cases} 1 & \text{if the individual chooses 111} \\ 0 & \text{if the individual chooses 444} \end{cases}$$

How to understand, explain and predict those choices? It is possible to do it if we can think about the satisfaction of buying 111 or 444 as a function of the attributes of the products (i) we are talking about (price, quality, durability, functionality, etc.) and (ii) of the person in question (income, education, sex, age, etc.).

From the example exposed above, we should retain the discreet, binary and random nature of the variable (Wooldridge, 2001). It is discreet and binary because it only assumes values of 0 and 1. It is random because the result of the individual choices is uncertain and it depends, on the one hand, on tangible and intangible variables and, on the other hand, on the type of alternatives at the person's disposal.

When people only have two choices, the density of the function probability (f.p.d.) is perfectly identified<sup>3</sup> and assumes the algebraic figure of

$$f(y_i) = P_i^{y_i} (1 - P_i)^{1-y_i}$$

in which  $P_i$  corresponds to the probability of the individual  $i$  choosing to buy 444 (result 1) and  $(1 - P_i)$  the probability of him buying 111 (result 0).

In order to explain what above is stated by means of words, we should say that  $f(1) = P[y_i = 1] = P_i$  and  $f(0) = P[y_i = 0] = 1 - P_i$ , respectively.

The average and variance of this distribution are  $E[y_i] = P_i$  e  $V[y_i] = P_i(1 - P_i)$ .

Therefore we easily understand that obtaining the  $P_i$  value, we can thoroughly characterize the individual  $i$ 's consumption behaviour, concerning the articles of clothing characterized by hampers 111 and 444<sup>4</sup>.

How to estimate  $P_i$ ? As we said before, we could identify the  $P_i$  value, equating it with, on the one hand, the features of the alternative products at the individual's disposal and, on the other hand, their potential buyers.

Theoretically, the choice methods, as having been correctly tested and consolidated in the literature of statistics (Swait & Louviere, 1993; McFadden, 1973; Wooldridge, 2001; Greene, 1997; Artis & Suriñach et al. 2002), are the PROBIT and LOGIT models. Alternatively, having simplicity as its only advantage, the LPM is usually used. However, this model suffers from serious problems, such as the attainment of negative probability values. Because of that, only the two mentioned models, namely the PROBIT and the LOGIT, are tested afterwards.

The probabilistic regression models are the ones in which the dependant variable is of qualitative and discreet type (Swait & Louviere, 1993). These models express the probability of each answer (dependant variable kind) depending on a group of explanatory or regressive variables (Wooldridge, 2001).

In this sense, the use of the usual techniques (linear regression model – minimum quadratic method) is, in this context, inadequate (McFadden, 1973; Artis & Suriñach, 2002).

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<sup>3</sup> Binomial distribution.

<sup>4</sup> For this case “0” and “1” correspond to the choices displayed in Table 5.

## 5. The Statistical Binary Choice Models PROBIT and LOGIT

Supposing that the individual above has the following range of 52 CHOICES grouped in two levels of satisfaction y.

Y	CHOICES																									
	1	111	112	113	114	121	122	123	124	131	132	133	134	141	143	144	211	212	213	214	221	222	223	224	231	232
0	234	241	242	243	244	311	312	313	314	331	332	333	334	341	343	344	411	413	414	423	424	432	434	441	442	444

His/her satisfaction is not observable, so it cannot be directly measured. However, we can say that this is indexed to the quality of his/her choices that are, in turn, consequence of the (explanatory) variables identified above.

For simplicity, we can assume the relation between his/her satisfaction and the factors which influence them as being linear, such as:

$$SAT = \beta_1 S + \beta_2 A + \beta_3 FPI + \beta_4 UD + \beta_5 SE + \beta_6 SII + \beta_7 SIG + \beta_8 M + \beta_9 O + \beta_{10} U + \beta_{11} I$$

The reading of this relation is easy. If  $\beta_i > 0$ , this means that the individual's satisfaction rises when the variable associated with that parameter increases.

The satisfaction index developed above may be considered as the individual's tendency to choose the hampers related to choice 1. However, this value may vary from and till the infinite, and what we want is to establish a relation which is situated between the values 0 and 1.

Any cumulative function of probability fulfils that objective. In fact, we may specify  $P_i$  the following way:

$$P_i = F(SAT_i) = F(\beta_1 S + \beta_2 A + \beta_3 FPI + \beta_4 UD + \beta_5 SE + \beta_6 SII + \beta_7 SIG + \beta_8 M + \beta_9 O + \beta_{10} U + \beta_{11} I)$$

and the model will be the PROBIT or the LOGIT, according to the cumulative function of probability  $F(.)$  being either the Normal or the Logistic.

Thus, it is guaranteed that the individual's probability to choose the hampers related to 1 rises with the increase of satisfaction and is never below 0 or above 1. On the other hand, the marginal increases in that probability of choice are not independent from the satisfaction levels at which the individual stands; that is, the same increases in

satisfaction induce different increases in the probability of choice of hampers 1, which is perfectly rational. The contrary, indeed, would not be so.

The marginal effect of the explanatory variable  $j$ , based on the probability of the individual  $i$  choosing the hamper(s) 1, is given by the following equation:

$$\frac{\partial P_i}{\partial X_j} = \beta_j \cdot f(\text{SAT}_i^*)$$

in which the  $\text{SAT}_i^*$  corresponds to the individual  $i$ 's level of satisfaction before the impulse  $j$ .

The marginal increases in probability will, therefore, be evaluated up to a certain level in the explanatory variables. The results below refer to the average levels of the sample displayed by the explanatory variables.

## 5.1. Results

First of all, a preliminary remark: saying that CHOICE 1 is better than CHOICE 0 is a mistake (because “a person’s tastes are not to be argued”) However, this method was, although implicitly, the one we followed. Meanwhile, we have to notice that this is the process in which we least gave up the existence of the attributes included in the hamper. In this sense, the “best option” is nothing but a figure of speech.

### a) The PROBIT model.

In the table below we present the results of the estimated coefficients for the satisfaction index developed above.

**Table 6:** Coefficients estimated by PROBIT

	<b>Coefficient</b>	<b>Standard Deviation</b>	<b>t</b>	<b>P rejection</b>	<b>IC 95%</b>	
<b>S</b>	0.37099	0.15988	2.32	0.02	0.05762	0.68435
<b>A</b>	0.07575	0.06859	1.10	0.27	-0.05868	0.21017
<b>FPI</b>	0.03912	0.02443	1.60	0.11	-0.00877	0.08700
<b>G</b>	0.43236	0.19349	2.23	0.03	0.05314	0.81159
<b>SE</b>	0.13481	0.05736	2.35	0.02	0.02239	0.24723
<b>SII</b>	0.03418	0.08179	0.42	0.68	-0.12612	0.19448
<b>SGI</b>	-0.08078	0.02980	-2.71	0.01	-0.13920	-0.02237
<b>M</b>	-0.30037	0.10118	-2.97	0.00	-0.49867	-0.10206
<b>O</b>	-0.20030	0.08791	-2.28	0.02	-0.37260	-0.02801
<b>U</b>	0.10218	0.09130	1.12	0.26	-0.07675	0.28112
<b>I</b>	-0.00740	0.00226	-3.28	0.00	-0.01182	-0.00297

The probability of the individual's choice being "better" increases when we pass from boys to girls, with an increase in age and in income, when we pass from rural to urban, with self-esteem, with a higher susceptibility to interpersonal influence and with the utilitarian sense of clothing. In contrast, it "deteriorates" with the susceptibility to the influence of groups, with materialism, ostentatious effect and involvement.

As far as the individual significance is concerned, only the variable Individual Susceptibility shows that this indicator is poor, with an observed t of 0.42. However, it was our option to keep it.

Once the sense of variation is identified, we merely have to proceed to an assessment of its magnitude. We have to notice that these values change when this evaluation is made on another level of the individual's satisfaction (choice) index. The results that are presented in table 7 refer to the calculation in the sample average values. Their interpretation is immediate.

**Table 7: Marginal effects in the sample average of the explanatory variables**

	<b>Coefficient</b>	<b>Standard deviation</b>	<b>t</b>	<b>P rejection</b>	<b>IC 95%</b>		<b>X</b>
<b>S</b>	10.10%	0.04249	2.38	0.02	1.77%	18.43%	1.52597
<b>A</b>	2.06	0.01863	1.11	0.27	-1.59%	5.71%	3.07143
<b>FPI</b>	1.06%	0.00665	1.60	0.11	-0.24%	2.37%	8.89286
<b>G</b>	11.77%	0.05220	2.25	0.02	0.54%	22.00%	1.48701
<b>SE</b>	3.67%	0.01542	2.38	0.02	0.65%	6.69%	2.23377
<b>SII</b>	0.93%	0.02227	0.42	0.68	-3.43%	5.29%	2.11364
<b>SGI</b>	-2.20%	0.00811	-2.71	0.01	-3.79%	-0.61%	3.59416
<b>M</b>	-8.18%	0.02773	-2.95	0.00	-13.61%	-2.74%	1.42532
<b>O</b>	-5.45%	0.02352	-2.32	0.02	-10.06%	-0.84%	2.66234
<b>U</b>	2.78%	0.02483	1.12	0.26	-2.08%	7.65%	1.83117
<b>I</b>	-0.20%	0.00065	-3.11	0.00	-0.33%	-0.07%	30.27920

In this table we can observe the marginal impact of each explanatory variable.

Thus, we notice an improvement in the choice in the following situations: when we change from boy to girl (S), the possibility of making a better choice is 10%; when the Age (A) increases, the possibility of making a better choice is 2.06% (as it is a single marginal variable, this probability of 2.06% represents the evolution for each year – and here there are 6 years, from 6 to 12 years of age); when the Income (FPI) increases, the probability of making a better choice increases by 1.06% (for each income level); when we move from a rural environment to an urban one (G), the possibility of making a better choice increases by 11.77%; when the Self-Esteem (SE) is higher, the probability of making a better choice is 3.67%; with the Susceptibility to Interpersonal Influence

(SII), the possibility of making a better choice is 0.93%; with the Utilitarianism (U), the possibility of making a better choice is 2.78%.

On the other hand, the possibility of making a worse choice may occur in the following situations: when the Susceptibility to the Influence of Groups (SGI) lowers, the possibility of making a better choice decreases -2.20%; when the Materialistic Attitudes (M) are low, the possibility of making a better choice is -8.18%; when the Ostentatious Value sought-after decreases, the probability of making a better choice is -5.45%; when the Involvement Level (I) is low, the possibility of making a better choice is -0.20%.

**b) The LOGIT model**

In the table below we present the results with the estimated coefficients for the satisfaction index developed above.

**Table 8: Estimated Coefficients by LOGIT**

	<b>Coefficient</b>	<b>Standard deviation</b>	<b>t</b>	<b>P rejection</b>	<b>IC 95%</b>	
<b>S</b>	0.60422	0.28498	2.12	0.03	0.04567	1.16276
<b>A</b>	0.11997	0.12296	0.98	0.33	-0.12102	0.36097
<b>FPI</b>	0.06999	0.04617	1.52	0.13	-0.02051	0.16049
<b>G</b>	0.74534	0.36558	2.04	0.04	0.02881	1.46187
<b>SE</b>	0.27403	0.11896	2.30	0.02	0.04086	0.50719
<b>SII</b>	0.05205	0.14444	0.36	0.72	-0.23105	0.33516
<b>SGI</b>	-0.14416	0.05224	-2.76	0.01	-0.24654	-0.04177
<b>M</b>	-0.53840	0.17783	-3.03	0.00	-0.88695	-0.18985
<b>O</b>	-0.32342	0.15822	-2.04	0.04	-0.63353	-0.01331
<b>U</b>	0.17811	0.16564	1.08	0.28	-0.14654	0.50276
<b>I</b>	-0.01307	0.00412	-3.17	0.00	-0.02116	0.00499

The probability of the individual’s choice being “better” increases when we change from boys to girls, with the increase of Age and Income, when we move from a rural area to an urban one, with Self-esteem, with a higher Susceptibility to Interpersonal Influence and with the Utilitarian Sense of Clothing. In contrast, it “deteriorates” with the susceptibility to Group Influence, Materialism, Ostentation and Involvement.

As far as the individual significance is concerned, only the variable Individual Susceptibility is weak with an observed t of 0.36. However, it was our option to keep it. Once the sense of variation is identified, we just have to proceed to an evaluation of its magnitude. We have to remark that these values change when this evaluation is made on another level of the individual’s satisfaction (choice) index. The results that are presented in table 9 refer to the calculation in the sample average values. Their interpretation is immediate.

**Table 9: Marginal effects on the sample average of the explanatory variables**

	Coefficient	Standard deviation	t	P rejection	IC 95%		X
<b>S</b>	8.86%	4.07%	2.18	0.03	088%	16.84%	1.52597
<b>A</b>	1.76%	1.80%	0.98	0.33	- 1.77%	5.29%	3.07143
<b>FPI</b>	1.03%	0.68%	1.51	0.13	- 0.30%	2.35%	8.89286
<b>G</b>	10.93%	5.31%	2.06	0.04	0.51%	21.34%	1.48701
<b>SE</b>	4.02%	1.68%	2.39	0.02	0.72%	7.31%	2.23377
<b>SII</b>	0.76%	2.12%	0.36	0.72	- 3.39%	4.92%	2.11364
<b>SGI</b>	- 2.11 %	0.77%	-2.76	0.01	- 3.61%	-0.61%	3.59416
<b>M</b>	- 7.89 %	2.63%	-3.00	0.00	-13.05%	-2.73%	1.42532
<b>O</b>	- 4.74%	2.27%	-2.09	0.04	- 9.19%	-0.29%	2.66234
<b>U</b>	2.61%	2.42%	1.08	0.28	- 2.14%	7.36%	1.83117
<b>I</b>	- 0.19%	0.07%	-2.96	0.00	- 0.32%	-0.06%	30.27920

The magnitudes observed in the probit model may also be seen here.

Thus, we notice a choice improvement in the following situations: when we change from boy to girl (S) the possibility of making a better choice is 8.86%; when the Age (A) increases, the possibility of making a better choice is 1.76% (per year); when the Income (FPI) increases, the probability of making a better choice increases by 1.03% (for each income level); when we pass from a rural environment to an urban one (G), the possibility of making a better choice increases by 10.93%; when the Self-esteem (SE) is higher, the probability of making a better choice is 4.02%; with the Susceptibility to Interpersonal Influence (SII), the possibility of making a better choice is 0,76%; with the Utilitarianism (U), the possibility of making a better choice is 2.42%. On the other hand, the possibility of making a worse choice can be observed in some cases: when the Susceptibility to the Influence of Reference Groups (SGI) decreases, the possibility of making a better choice decreases -2.11%; when the Materialistic Attitudes (M) are low, the possibility of making a better choice is -7.89%; when the Ostentatious Value sought-after decreases, the probability of making a better choice is -4.74%; when the Involvement level (I) is low, the possibility of making a better choice is -0.19%.

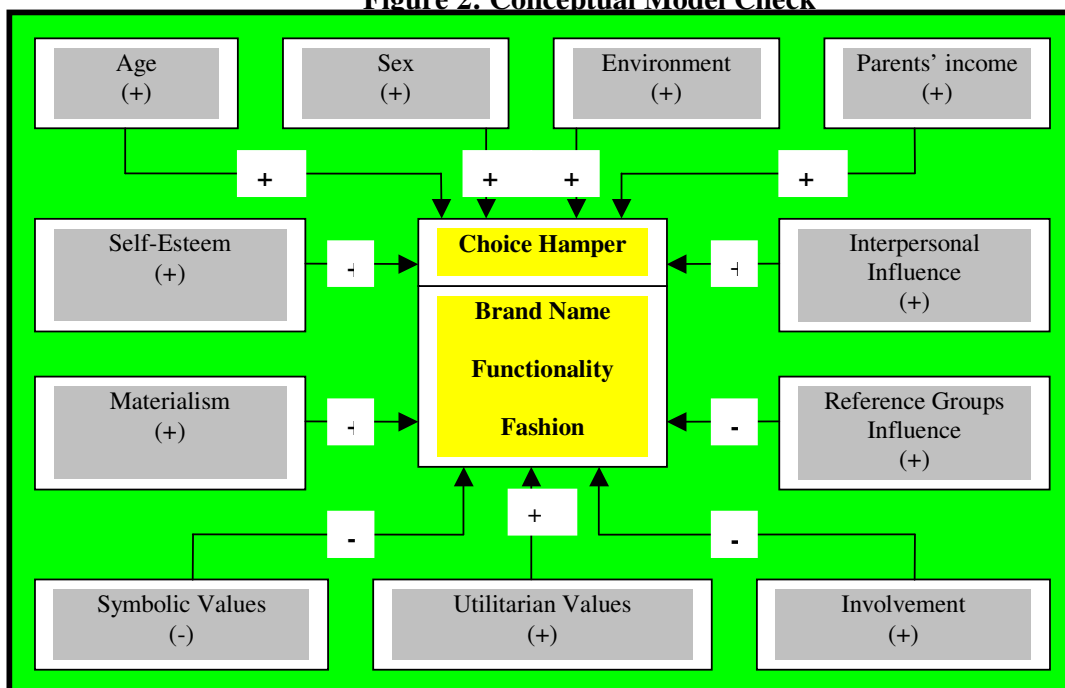
Concerning the formulated hypotheses about children's clothing choices, we confirm H1, (the children's clothing choice is positively associated with Self-Esteem), H3 (the children's clothing choice is positively associated with Interpersonal Influence), H6.b (the children's clothing choice is positively associated with the sought-after values: Utilitarian value), H7 (the children's clothing choice is positively associated with Age), H8 (the children's clothing choice is positively associated with Sex), H9 (the children's

clothing choice is positively associated with Environment) and H10 (the children's clothing choice is positively associated with the Income of children's parents).

The hypotheses H2 (the children's clothing choice is positively associated with Materialism), H4 (The children's clothing choice is positively associated with Reference Groups influence), H5 (The children's clothing choice is positively associated with Involvement) and H6.a (The children's clothing choice is positively associated with the sought-after values: Ostentatious value) were not accepted. (Figure 2 shows the check on the conceptual model).

The lack of a positive impact of Involvement in children's choices (predefined hamper) may be due to the mediator effect of certain factors linked to the individual or to the situation. It is possible that the implication impact is not direct and that it is moderated by the effect of these factors. In fact, it is possible that Involvement (in clothing choice or in a particular item) may have a significant influence in the choice process and that its influence becomes null when people have a poor knowledge of the product. In the same way, it is possible that the risk associated with the choice may have an influence as a mediator in the involvement impact. Therefore, involvement influences the choice process when the level of these risk forms is high, but its impact fails to happen when the level of these risk forms is low (remember that in this age group it is the parents that are most of the times the buyers, thus, the most vulnerable to these factors).

**Figure 2: Conceptual Model Check**



On the other hand, the Involvement impact may be moderated (or not) by children's emotional states (subjected to different stimuli, in the search of pleasure, etc.), by purchase values (hedonistic or utilitarian) and by situational factors. These variables may have a moderator or mediator impact on the involvement, which is defined as an individual's latent and continuous character.

It is also possible that the other explanatory variables of choice diminish the weight of involvement. In the same way, and since we work with the five parameters (interest, pleasure, sign, subjective importance and probability), it is possible that there could have been some "cannibalisation" between these variables.

Notice that these considerations are mere proposals that need to be empirically explained.

## **6. Conclusions and Limitations**

The data which refers to the questionnaire demonstrates that children, besides presenting satisfactory self-esteem levels and high materialistic attitudes, are susceptible to interpersonal influence and to the influence of reference groups. They also seek utilitarian (functional) values in clothing and are involved in it. Only the symbolic (ostentatious) values present low indicators.

The binomial test of proportions shows that:

- the self-esteem of the enquired children has positive values in the different items evaluated, being particularly high in the item "I'm happy" (88.2%) and in the item "I have many friends at school" (81.8%).
- Peer pressure (susceptibility to interpersonal influence) also has a very strong influence, since children say that generally they choose things with the brand names that their schoolmates like (65.8%), that "If I don't know what I want very well, I ask for my schoolmates' opinion" (71.1%) and that they usually pay attention to the things their peers wear before choosing (52.7%).
- Concerning the influence of reference groups over the choice of brand names, we notice that the informative dimension (Bearden et al, 1989) lies mainly with their friends and family (90.4%) and their idols (67.4%). Parents continue to be important references at this age (87.5%), despite the influence of children's friends (52.4%) and schoolmates (46%) in their choices.

- The choices of brand names show a positive “*score*” in the “expressive value” dimension (Bearden et al, 1989), because the brand names are evaluated by the peers as recognition (53.7%), affirmation (57.1%) and admiration (48.9%) factors.
- The symbolic values sought-after in clothing (Ostentatious effect) don’t seem to be very appreciated by children. However, children recognize style (96.8%) and fashion (61.3%) as important factors in their clothing.
- Functionality (utilitarian value) of clothing is highly recognized by children. In spite of children agreeing that they choose their clothes because they are cheap (72.5%) and because of their durability (85.4%), these are more the parents’ worries and pressures at the moment of purchasing reflected on children’s economic values. The functionality value (73.2%) seems to be more reliable, because it directly concerns them as clothes users.
- Children have demonstrated a great interest in clothing (81.1%) and a great satisfaction related to wearing brand name clothes (78.6%). In this aspect, the sign value (communicative capability) reaches positive values (69.3%).
- The perceived importance (risk assessment) is also felt by children (68.4%), and it shows the importance of making a good choice.
- The subjective probability (probability of choosing the wrong brand name or item of clothing) indicates that children have difficulty in choosing their clothes.

When we tried to explain children’s choices, based on a hamper constituted by “Brand Name”, “Functionality” and “Fashion”, it was confirmed that these choices are positively related to Age, Children’s Sex, Environment, Parents’ Income, Self-Esteem, Susceptibility to Interpersonal Influence and Utilitarian Values. Conversely, Susceptibility to the Influence of Reference Groups, Materialistic Attitudes, Ostentatious Values and Involvement are negatively related to the choice.

Facing these results (binary choice model), we offer some clues to future researches: a change in the typification of clothing hampers at the individual’s disposal, as well as a characterization of choice types through free, conditional and ordered multinomial models, PROBIT and LOGIT.

The model developed here, and applied to clothing choices, may be tested in a larger universe and applied to other product categories (for example food – *fast food*). Given the ephemeral character of clothing and the fast social evolution, which are reflected in children’s life, it would be important to re-apply this study to future researches. In this perspective, the contribution of Marketing in this sector must be focused on the

structuration and the supply of an effective system of information, rather than on the search for the unsatisfied needs of the consumer. Its purpose consists in the implementation of an active and dynamic attitude by the company, able to motivate itself and turn to the outside market (children), in order to attract the potential extrinsic influences, arising from its surrounding environment and from the new social contexts. This attitude will still allow for the adoption of an attitude of empathy towards children, creating a closer proximity to them, while encouraging their “*empowerment*”. In terms of new Marketing functions, we recommend the *Viral Marketing* and the “*Peer-to-Peer*” *Marketing*.

Next, we present the main limitations of this research:

a) The reliability of the achieved factors. In spite of having obtained values above 0.7, other indicators did not reach these *scores*.

b) The administration of the questionnaire. In spite of all caution, the way in which we chose to fill in the questionnaire (self-administration) may have caused some distortion. The personal character of the undertaking (in spite of all the efforts to keep impartiality and eliminate subjectivity) may have influenced the results.

c) The form, structure and dimension of the questionnaire. The translation as well as the adaptation of the original scales to children and to the Portuguese context may have caused some deviation in them.

d) The sample. The results of the research are limited by the specific sample chosen for this purpose. It is very difficult to generalize the results taking into account all the children. The sample presents a slight disproportion in terms of age and school levels. The sample being based on convenience, it becomes difficult to generalize it to the entire universe investigated.

e) The scales. The option for the use of scales of the differential semantic type supported simultaneously by “*smile faces*” and by descriptions with intervals (YES – yes – no – NO), may have caused some distraction.

f) Time limitations. The results obtained within a certain time period and a certain space cannot be extended to other periods of time and other spaces. The results are limited to a space (the classes and schools studied) and to a determined time period (year 2003).

g) The determination of the choice was not made directly, as it resulted from a *proxy* related to clothing choice.

Taking into account children's idiosyncrasies and knowing that what is meant here is to deeply analyse all the dimensions, as a way to discovering and to understanding the web of relations and senses that children assign to their actions, we recommend a multidisciplinary and multimethod approach, in which the quantitative and qualitative dimensions complement each other. The recourse to several methods allows for a more complete picture of the universe and of the problem under research, while making it possible for us to seize different aspects of this phenomenon.

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