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A MODEL OF CONSUMER'S ATTITUDE
TOWARDS DURABLE GOODS

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ABSTRACT

Attitude, as elementary process of consumer's behavior is one of the most widely discussed topics in the research addressed to consumer behavior study. Study of consumer attitudes knows an impressive history that transcends scientific literature on consumer behavior, originating in psychological studies of human and social behavior. The present research aims to underline de importance of attitude as behavioral process upon the decision purchase process. The model proposed by the authors is verified in the research conducted. The research itself shows how attitude dimensions influence different steps of the decision process and underlines the impact of attitude on the customer choice of car brand. The paper also presents the limits of the proposed model and possible directions for further studies...

KEYWORDS: *attitude influence, decision purchase process, attitude dimensions*

JEL CLASSIFICATION: *A14, C14, C87, M31, P46*

1. INTRODUCTION

Attitude, as elementary process of consumer's behavior is one of the most widely discussed topics in the research addressed to consumer behavior study. The attitude is most often studied alongside the other elementary processes as a factor influencing the actual purchase and consumption behavior.

There are numerous studies addressed only to the relationship between consumer attitudes and behavior. Many of these studies (Glasman & Albarracin, 2006; Ajzen & Fishbein, 2000) were designed to highlight the relationship between attitude and behavior, relationship developed and outlined in various models of consumer behavior.

Ajzen and Fishbein (1977) stated that the relationship between attitude and manifest behavior is particularly pronounced, if they refer to the same object. Consumer attitude research must be carried out in relation to a particular object, called attitude's object; it can be a product, a service, a shop, an advertisement, a person or the entire staff of a restaurant for example etc.

Based on attitude arise the opinions and prejudices and a person exercises its cognitive-evaluative functions. Some of the attitudes manifested by the individual throughout life are unchangeable, while others are an undergoing process (Codreanu, 2008).

Determining consumer attitude is particularly important for marketers from the perspective of its conative dimension which expresses the consumer's purchasing and consumption intentions. In the vision of Cătoiu and Teodorescu (2004) the peculiarities presented by durable goods (relatively high market value, sharing in the household etc.) require the existence of well-defined attitudes this consequently making them easier to research.

Most experts (Ajzen, 2002) agree that the attitude influences manifest behavior. Studies (Grewal et al., 2004) show a significant relationship between the stages of decision making and the various dimensions of attitude. Even if the attitude does not affect the need identification, it influences the search for information through the consumer attitude towards source of information and, as well, alternatives' evaluation. Numerous multi-attribute models (Bettman et al., 1975) describe how attitudes are formed and influence consumer choice.

2. CANTITATIVE RESEARCH OF ATTITUDE

In modelling attitude consumer's research there are two paths usually taken, paths that derive from the definition of attitude.

(1) If the attitude is regarded as having an one-dimension character „predisposition learned to react in a manner favorable or unfavorable to an object or class of objects" (Allport, 1935), then the research of consumer's attitudes aims only variables that influence the formation of this favorable or unfavorable disposition towards the object in question, knowing that an unfavorable attitude will determine not purchasing and ignoring the object in question while a favorable attitude will lead the search for information to encourage this attitude and will lead to repeat purchases;

(2) In most cases, however, the attitude is considered to have a three-dimensional character (affective, cognitive and conative), being defined as the way a person thinks, feels and acts on a social object (Hawkins and Mothersbaugh, 2010), in those circumstances shaping consumer attitudes research must take into account the interdependence of the three components. This results in some important conclusions (Cătoiu and Teodorescu 2004):

- Attitudes are stable as long as the interdependence of its components is maintained
- If one of the components changes being influenced by an external factor, the attitude is destabilizing, leading consumers to seek information and items in the environment to restore balance between the three components
- The balance can be achieved by either removing the contradiction (changing attitudes) or by reducing it to a tolerable level for the consumer.

Because many previous studies have shown a higher intensity attitude for durable goods (Juster & Wachtel, 1974), in validation of the model created by authors passenger cars were chosen as the object of attitude, taking into account 24 brands of cars most sold on the Romanian car market and in circulation in the last 3 years.

Direct research of consumer's attitude can be approached from two perspectives:

 A. The cross–section type – allows the determination of a static image of the researched process, attitude in this case. The research conducted in this case makes possible to determine the simultaneous influence of several factors on actual behavior and also allows the analysis of relations between variables that explain a certain phenomenon. This type of research allows validation of functional relationships and to determine the intensity of these relationships. However, this type of research is cannot determine the attitudes and foresight behavior changes over time under the influence of external factors.

 B. The longitudinal type - allows the collection of information characterizing the time evolution of processes and phenomena studied (Cătoiu and Teodorescu, 2004). Researches are methodologically similar but assumes the cross sectional research to be repeated at a given time. In the evaluation of attitudes towards durable goods such research allows assessing whether the stated purchase intentions have resulted in acts of sale. Research

cycle, may vary from several weeks to several years, depending on the period of use of the economic good.

In order to validate de proposed model for consumer's attitude influence on the decision making process, authors decided on a cross-section research.

3. MODELLING THE CONSUMER'S ATTITUDE

The proposed model for consumer attitude research is based on theoretical models analyzed by the authors and their own findings on consumer behavior modeling in general and its attitude in particular (Uta & Popescu 2013; Uta et al., 2014).

The model developed is composed of two functional blocks, each on specific issues examined in the study of consumer attitudes: the attitude, as elementary process of consumer behavior which determines the actual behavior though it's conative dimension, other elementary processes that determine the manifest behavior of the consumer and respectively, the buying decision process.

The functional relations set by the proposed model are highlighted by four types of arrows:

- Main functional relations – gray block arrows – describe the fundamental links between blocks;
- Secondary functional relations – blue lines - describe the structural links between certain components of a block with other components from different blocks;
- Feed-back curves – red block arrows - which outlines the influence of purchase decision-making process on both consumer attitudes and other elementary processes consumer behavior;
- Secondary feed-back relations – red lines – describe de influence of diverse pases of the decisional process upon attitude's dimensions.

Functional relationships that allow materialization model can be described as follows:

• Elementary Processes of consumer behavior (Block C) influences directly overall and individually, the formation and stability of attitude. Perception, information/ learning and motivation influence differently each dimension of attitude. Such, information and perception tends to influence cognitive dimension, while motivation especially the conative dimension. Daniel Katz (1960) claimed that attitudes are determined by a person's motivation. Consumers that expect to meet similar information in the future are more likely to form attitudes anticipated.

• Block D, purchase decision process, is determined by the configuration and influences of behavioral processes and has two significant results:

- On the one hand, feedback curves on consumer attitudes (Block C), in particular through three of its components, namely information search, evaluation result and post-purchase evaluation;
- On the other hand, the influence on the other behavioral processes.

Significant in this area are the functional relations established between attitude's dimensions and stages of decision making process.

The model aims to describe both the action of each attitude's dimensions upon the various stages of the decision and the synergistic effect of these dimensions on the resultant evaluation of alternatives considered by the consumer.
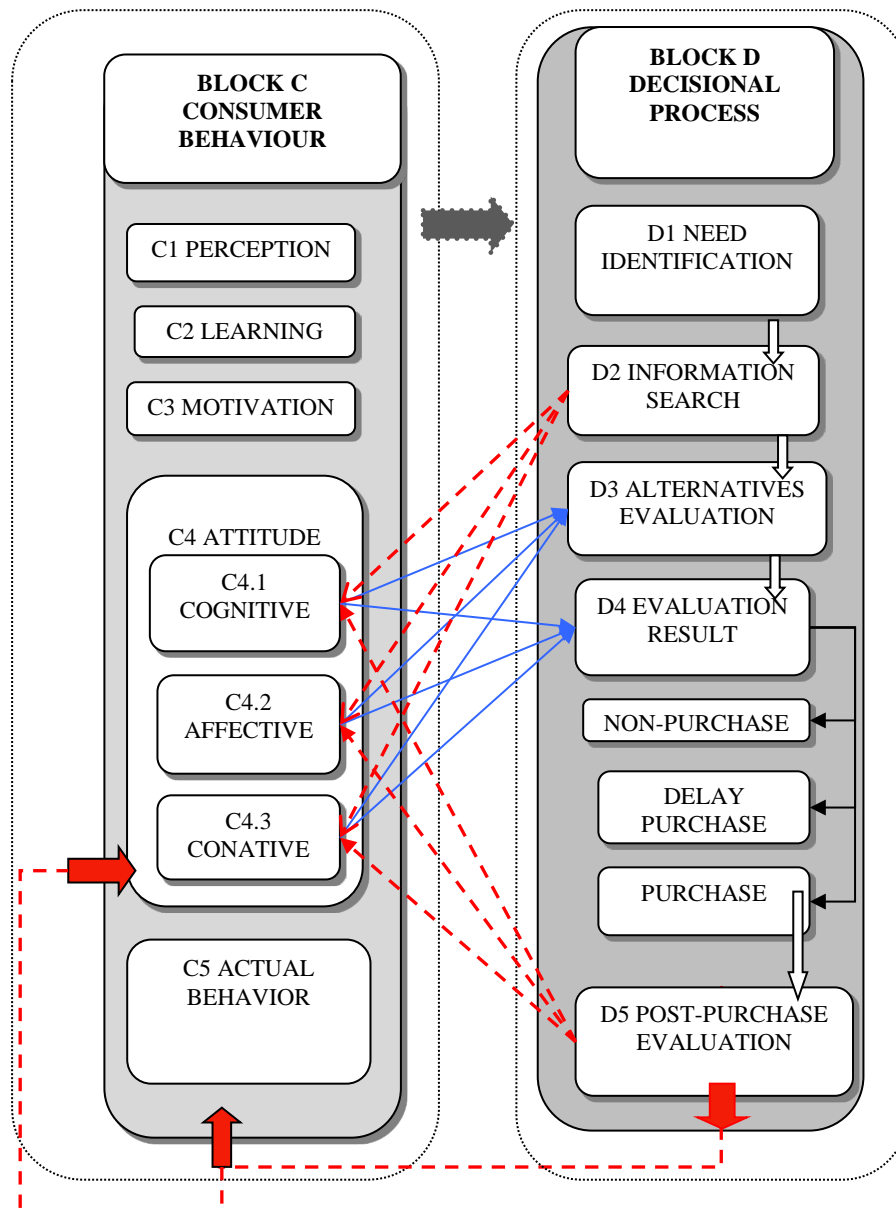
Figure 1 Model proposed by author for attitude research
Source: Authors' own design

Legend	
→	Main functional relations
→	Secondary functional relations
- - →	Secondary feed-back relations
←	Feed-back

4. QUANTITATIVE RESEARCH OF CONSUMERS ATTITUDE

4.1 Research methodology

The main purpose of the researched conducted by authors (Uță et al., 2014) was to validate the model presented above.

Other objectives of the research were:
- Identify how attitude affects stages of decision making;
- Highlighting attitude influences exerted on the main stages of the decision;
- Identify the extent to which search information and post-purchase evaluation are influencing consumer attitudes.

The research conducted by the authors of this paperwork can be considered representative at national level.

Sample size: 600 persons

To determine the sample size was chosen a probability of 95% results guarantee and an acceptable limit error of $\pm 4\%$. As the proportion of sample components that have the researched feature is not available, it was considered 0.5.

The sampling method selected: random model (lists of respondents, Kish grid).

Method of information collection: face to face interviews in respondents' homes based on questionnaire.

The questionnaire contained a total of nine questions about: first mark remembered by the respondent, other trademarks mentioned, marks recognized from the list, brands ever and brand / brands currently owned (these questions were used to determine an index notoriety of marks), questions about the affective and conative dimensions of attitude and two questions regarding information sources used by respondents and attributes considered by them as important in choosing a car.

4.2 Results interpretation

Analysis and interpretation of quantitative research results requires tracking research objectives in order to validate the model proposed by the author.

Data processing was performed using SPSS (Statistical Package for the Social Sciences), the most widely used statistical software to analyze data for marketing research and more.

To determine the influence of the attitude on decision making process in conducting the research the result of the evaluation of alternatives is considered the brand currently owned by respondent. Alternatives considered for evaluation are car brands, depending on their reputation among respondents and post purchase evaluation as the correlation between brand owned by the respondent in the past and that held today.

For operationalization of cognitive dimension of attitudes authors consider, as defining variable, notoriety index determined by weighting the responses of people interviewed about the knowledge and possession in the past and today of different car brands.

**Table 1. Correlations between notoriety index and brands of cars
ever owned by respodents**

What are the brands of cars in this list that you ever had in your household?		Notoriety index	What are the brands of cars in this list that you ever had in your household?		Notoriety index
[Alfa Romeo]	Correlation	.190**	[Mercedes	Correlation	.298**
	Sig. (2-tailed)	.000		Sig. (2-tailed)	.000
	N	581		N	581
[Audi]	Correlation	.417**	[Mitsubishi	Correlation	.086*
	Sig. (2-tailed)	.000		Sig. (2-tailed)	.038
	N	581		N	581
[BMW]	Correlation	.353**	[Nissan]	Correlation	.208**
	Sig. (2-tailed)	.000		Sig. (2-tailed)	.000
	N	581		N	581
[Chevrolet]	Correlation	.284**	[Opel]	Correlation	.596**
	Sig. (2-tailed)	.000		Sig. (2-tailed)	.000
	N	581		N	581
[Chrysler]	Correlation	.113**	[Peugeot]	Correlation	.410**
	Sig. (2-tailed)	.006		Sig. (2-tailed)	.000
	N	581		N	581
[Citroen]	Correlation	.338**	[Renault]	Correlation	.502**
	Sig. (2-tailed)	.000		Sig. (2-tailed)	.000
	N	581		N	581
[Dacia / Logan]	Correlation	.655**	[Skoda]	Correlation	.452**
	Sig. (2-tailed)	.000		Sig. (2-tailed)	.000
	N	581		N	581
[Daewoo]	Correlation	.503**	[Toyota]	Correlation	.174**
	Sig. (2-tailed)	.000		Sig. (2-tailed)	.000
	N	581		N	581
[Fiat]	Correlation	.468**	[Volkswag	Correlation	.532**
	Sig. (2-tailed)	.000		Sig. (2-tailed)	.000
	N	581		N	581
[Ford]	Correlation	.513**	[Volvo]	Correlation	.251**
	Sig. (2-tailed)	.000		Sig. (2-tailed)	.000
	N	581		N	581
[Honda]	Correlation	.204**	*Source: authors own computation*		
	Sig. (2-tailed)	.000			
	N	581			
[Hyundai]	Correlation	.362**			
	Sig. (2-tailed)	.000			
	N	581			
[Kia]	Correlation	.183**			
	Sig. (2-tailed)	.000			
	N	581			
[Mazda]	Correlation	.104*			
	Sig. (2-tailed)	.012			

Correlation analyses carried out lead to the following conclusions:

1. There is a moderate or strong correlation between brands owned by respondents in the past and the cognitive dimension of attitudes manifested today.

By applying the Spearman correlation coefficient in correlating index of notoriety with the brands in the household ever possessed by the respondent (Table 1) a strong or moderate, positive interdependence is revealed.

2. There is a weak or modest correlation between the brands owned in the past and the affective dimension of attitude manifested today to all car brands.

A difference in this case is that a positive correlation between brand had in the past and the measure in which that brand is currently liked by the respondent, results in a negative correlation between brand had in the past and feelings toward other brands.

For example a person who was previously a BMW car, considers that brand significantly more than other respondents ($\rho = 0.088$, $p = 0.001$) and less than other respondents brands like Chevrolet ($\rho = -0.107$, $p = 0.016$), Citroen ($\rho = 0.60$, $p = 0.000$), Dacia ($\rho = -0.176$, $p = 0.000$), Daewoo ($\rho = -0.089$, $p = 0.043$), Fiat ($\rho = -0.116$, $p = 0.008$), Ford ($\rho = -0.110$, $p = 0.011$), Honda ($\rho = -0.105$, $p = 0.019$), Kia ($\rho = -0.91$, $p = 0.048$). Mazda ($\rho = -0.092$, $p = 0.042$), Renault ($\rho = -0.135$, $p = 0.002$) and Toyota ($\rho = -0.198$, $p = 0.007$). You can also see a modest positive correlation between BMW, owned in the past, and appreciation of the Mercedes ($\rho = 0.145$, $p = 0.001$).

3. There is also a weak to moderate correlation between brands owned in the past by the respondent and its intentions on buying other brands or same brand.

For example, respondents who in the past had BMW have expressed intention to buy a car in the near future still BMW ($\rho = 0.190$, $p = 0.001$). In this case there is no intention to re-brand, or intentions are very weak and statistically insignificant.

But those who had the last car brand Dacia plans to buy predominantly Volkswagen ($\rho = 0.133$, $p = 0.008$) and avoid brands like Alfa Romeo ($\rho = -0.099$, $p = 0.021$) and Audi ($\rho = -0.110$, $p = 0.011$).

4. Trademarks owned in the present (considered in these research outcomes of alternatives evaluation) are correlated with cognitive dimension of respondents' attitudes towards brands, cognitive dimension illustrated by the index of notoriety.

True, the notoriously index calculation were considered as factor of knowledge of the brand and car brands currently held by respondents, thus resulting correlations are influenced by this connection. But it can be seen that having a brand is correlated with the notoriety indices for other brands. For example, there is a positive correlation between brand owned Mercedes and Audi notoriety index ($\rho = 0.190$, $p = 0.001$), Chevrolet ($\rho = 0.101$, $p = 0.015$), Citroen ($\rho = 0.94$, $p = 0.023$), Volkswagen ($\rho = 0.117$, $p = 0.005$) and Volvo ($\rho = 0.103$, $p = 0.013$).

1. Modest, positive or negative, correlations can be seen between brand currently owned by respondent and its emotional attachment to the brand in question or for other brands.

2. There are also correlations between brand currently owned and purchase intent in the future.

Most brands owned by respondents in the present have, as affective response, a stronger appreciation statistically significant, favorable from them. A positive affection towards car brand owned and a higher knowledge of that brand determines a positive purchase intention not to much towards the current car brand but more towards a brand from the same geographical area (German, Italian, European, Asian and American).

In the particular case of national brand, Dacia, owners of this brand have a strong positive affect towards the brand ($\rho = 0.361$, $p = 0.000$) but also towards other brands like Chevrolet

($\rho = 0.137$, $p = 0.002$), Citroen ($\rho = 0.109$, $p = 0.013$), Daewoo ($\rho = 0.145$, $p = 0.001$), Hyundai ($\rho = 0.102$, $p = 0.020$) and Renault ($\rho = 0.99$, $p = 0.022$), even if not so strong. Regarding purchasing intentions as mentioned earlier they are more geared towards the same kind of brand as brand currently owned. Respondents who own a car brand Daewoo (still considered Asian brand although a time has been produced in Romania as well) plans to buy one of the following brands of cars: Honda ($\rho = 0.146$, $p = 0.001$), Hyundai ($\rho = 0.186$, $p = 0.001$), Kia ($\rho = 0.151$, $p < 0.001$), Mazda ($\rho = 0.159$, $p < 0.001$) or Toyota ($\rho = 0.167$, $p < 0.001$).

The same trend is observed for the European brands. Respondents who currently own an Audi oriented their intention to brands like BMW ($\rho = 0.193$, $p = 0.001$), Mercedes ($\rho = 0.219$, $p < 0.001$) or Volvo ($\rho = 0.212$, $p < 0.001$). Volvo, Mercedes and BMW car owners have expressed very weak intentions to re-purchase the same brand and insignificant intentions to buy other brands. They have a positive affect towards current brand owned and almost no intention to by another brand in the next year.

3. There are many correlations between attitude's dimensions.

Thus there is modest but positive correlation between brand notoriety index and affection for the brand, this correlation is met for all brands evaluated. More is observed as in the case of brands owned an affect association between brands on geographic bases. For example the BMW notoriety index is positively correlated with affection for Mercedes, Audi and Peugeot.

Affective dimension is often negatively correlated with purchase intent.

Basically, there is a positive correlation between brand currently owned and affection expressed to it, accordingly, purchase intent will have negative correlation to other brands and not because we intend to buy back the same brand but are satisfied with the brand and respondent do not intend to buy another.

For example there is a negative correlation between the appreciation of the Dacia brand and the purchase of the Mercedes. Previously it could be seen a negative correlation between the notoriety index of the brand Mercedes and the appreciation of the national brand. These correlations can be explained in another way: who knows Mercedes has a weaker appreciation of the national brand and accordingly does not intend to buy it.

5. CONCLUSIONS

In order to determine the attitude's influence on the decision making process were used correlational analysis which led to the following conclusions:
- There is a strong or moderate correlation between brands owned by respondents in the past and attitude's dimensions towards a particular brand of car;
- Most brands owned by respondents in the present have, as affective responses, a stronger appreciation statistically significant, favorable from them. Regarding purchasing intentions as mentioned earlier they are more geared towards the same kind of brand as brand currently owned;
- In both affective and conative dimensions of attitude respondents relate the currently owned brand with other brands originating from the same geographical area. Such persons holding a European brand cars tend to appreciate more favorable all brands of European origin but those who possess an Asian brand gives higher scores for both the currently owned Asian brand as for other Asian brands.

- A modest but positive correlation exists between notoriety index of the brand and affection for the brand, this correlation being met for all brands evaluated. More is observed, as in the case of brand owned, joint scores on geographic bases.

Based on the analyses carried out we conclude that attitude influences both the evaluation and the result of alternatives' evaluation (brand acquired). The respondent experience with a particular brand leaves a mark on his attitude towards the brand more than external factors.

The quantitative research conducted has its limits, limits that can generate further research orientations.

The main limit of the research was the fact that it fallowed only how attitude's dimensions influence the steps of the decision-making process and didn't take under consideration the influence of the other elementary processes.

Another limit is the restricted statistical instruments used (only non-parametric tests) as a consequence of the way question were formulated in the questionnaire.

The quantitative research pursued the interaction between different components of the proposed model and not the interaction between them in the blocks, except of course the interactions between attitude's dimensions.

The proposed model presents conceptual and applicative limits. First, it shows only the relationships between blocks, but not including, the relationships between components of the blocks and the feedback curves only targeted consumer's attitudes and its actual behavior.

Another limitation is that the model does not allow direct analysis of external factors influences on decision-making process.

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