

## EXOGENOUS AND DIRECT OBSERVABLE FACTORS AFFECTING ATTITUDE – CASE STUDY ON ROMANIAN CAR MARKET

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### ABSTRACT

**A**ttitude is the process that influences in the most visible way the actual consumption behavior, considering all consumer behavior processes. Although theorists have studied for the last century how attitude is formed and influenced, there is still room for approaching the attitude study and the way it is influenced by external factors. The paperwork presents a model of how exogenous and direct observable factors influence every dimension of attitude. Knowing what factors influence attitude and what is their impact on its dimensions can highlight which are the “pressure-points” that can be pushed in order to form the expected attitude or change the existing one into the desired one. Research conducted by the authors aimed Romanian car market as an example for durable goods, knowing the fact that in their case, attitude has greater stability over time and consequently, a higher degree of predictability.

*Key-words: exogenous factors, direct observable factors, attitude's dimensions, car market*

## 1. Introduction

The consumer behavior is mostly defined as a resultant of a dynamic relationships system between the processes of perception, information, attitude, motivation and actual manifestation (actual behavior). Among the processes that define consumer behavior, attitude is the one that presents the greatest stability over time. Attitudes are the result of affective and knowledge processes that create the predisposition to act based on beliefs. They are an important factor influencing consumer behavior. Some researchers (Catoiu&Teodorescu, 2003) state that attitude is a latent dimension of consumer behavior.

Most of the times, attitude is defined as a learned predisposition to act consistently in a favorable or unfavorable way towards an object (Shiffman, 2007) and as a syndrome of constant reactions towards social objects (WT Campbell, 1950 cited in Catoiu&Teodorescu, 2003). To this syndrome, specialists have associated the following dimensions: cognitive, conative and affective.

The cognitive dimension – knowing or ignoring the object in question - is closely related to age, personality, level of culture and with the concrete possibilities of the individual to inform, given by the exterior environment. Beliefs to an object, product, event, etc., as essential elements of the cognitive component, can be positive or negative. Being often in large numbers, these beliefs are not always consistent, and at a certain point can be in conflict. However, at the level of consumer, there is the tendency to give coherence to the data held about a product, a service or a brand (Solomon, 2009).

The affective dimension – favorable or unfavorable predisposition towards a social object – includes feeling and emotions presented under different aspects and degrees of intensity. One cannot say there is a clear and equivocal relationship between affectivity and evaluation. Sometimes emotional evaluation may be prior to knowledge and in such situations knowledge confirms, if necessary, the choice in question.

The conative dimension – the firm intention to act or behave in a certain way towards an object – consists in formulating the conclusion of evaluation and in manifesting the intention to buy. This may mean the decision to buy the product, to postpone the purchase or to firmly not by.

During last decades attitude lost in the eyes of specialists (Schwarz& Bohner, 2001) from central concept of social psychology (1920's) to an evaluative component of consumer behavior (1970's) nowadays literature suggesting that self-reports of attitudes are highly context dependent and can be influenced by minor changing's in questions, phrasing or situational context of interview. Still, because attitudes are internal dispositions (Ajzen, 2012) that reflect approach-avoidance tendencies they are expected to induce corresponding behavior toward the attitude object.

## 2. PROPOSED MODEL FOR RESEARCH

Modeling consumer attitude research cannot ignore the other elementary processes that define consumer behavior: perception, information/ learning and motivation. Research has constantly shown (Wright, 2006) that the environmental inputs, incessantly experienced during our formative years will influence consumer behavior in terms of the types of products, brands and services anyone might want to purchase through the whole of their life.

At the same time, it's important for decision makers to know the determinants of attitude and the extent to which factors affect it. To create such a research model, we proceeded to testing several variants, through the congruence of model components and its functional relations with theoretical precepts accepted as defining consumer attitude research.

The proposed model (figure 1) is structured in two main levels: morphological and functional, respectively, on one hand, the strict adherence to the requirements associated with the functioning of opened systems and on the other hand, the express research of consumer attitude- so that it is easily possible the validation of conceptual and experimental valences associated with the created model.

When creating these functional blocks were taken into account, among others, some general properties of social systems (which are opened systems) - such as consumer behavior – i.e. equifinality, stability, sensitivity to certain parameters and the fact that these systems are not linear, assuming retroaction curves (feedback) with the role of adjusting the system.

For the purpose of this paper we will analyze the direct observable influences and the exogenous influences on attitude as a tridimensional concept.

Block A presents the external factors influencing consumer attitude that can be directly observed. In this sense, the model takes into account:

- Demographic factors: consumer distribution by gender, age, sex and provenance
- Economic factors: household income
- Factors specific to the marketing mix: include the components of the marketing mix: advertising commercials and sales representatives as sources of information and overall product's attributes. These factors sum up the influences exercised by the components of the marketing mix over the elementary processes of the consumer behavior in general and over attitude in particular.
- Situational factors: all those factors specific to an observation or to well-defined situations in time and space. These factors are not the result of intra-individual personal attributes or of those that characterize the stimulus (selected choice), but have a systematic and provable effect on the current behavior of the consumer. The situational influences can be linked to three distinct moments: the moment of marketing communication, time of purchase, time of consumption. In this particular research situational factors were not considered as directly influencing on attitude formation and change.

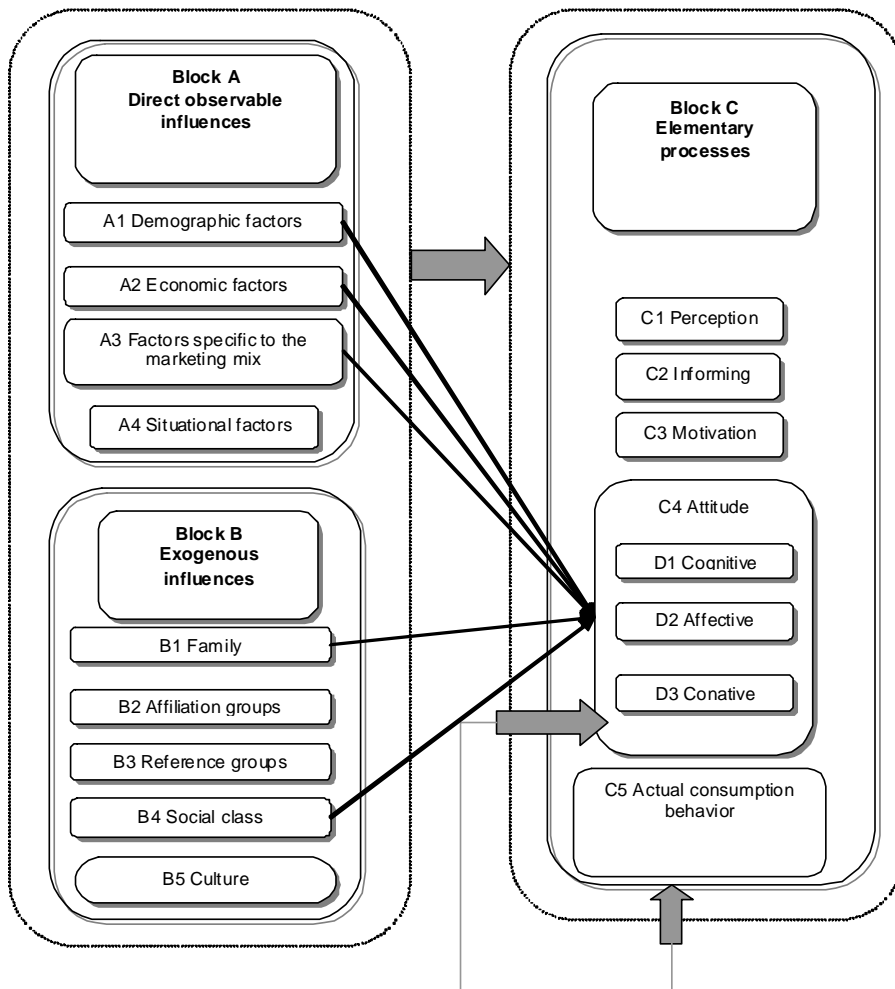




Figure 1. Model proposed for identifying factors influencing attitude. Source: authors' own design

Legend	
	Main functional relations
	Secondary functional relations

**Block B** consists of exogenous factors that influence consumer's attitudes and behavior. The components of consumer social environment have great importance, especially on the development and stability of consumer attitudes. The considered factors with direct exogenous influence on attitude are: family and social class. Nevertheless all exogenous factors must be considered when evaluating influences on consumer behavior.

Family is the membership group that carries the greatest influence over consumer attitude as a whole and especially over conative and affective levels. Family is defined as a distinct social entity influencing the decisions of each of its members for a long period of time (Catoiu&Teodorescu, 2003). Its communication structures and interaction features make possible allow the existence of a specific decisional system of consumption and purchase.

Other membership groups are a type of social structure, whose members have the consciousness of belonging to the structure, having a common purpose, a sense of unity and some common rules. Although

family is considered a membership group, here are also taken into account different professional organizations, groups of friends, study groups, ethnic groups, sports, etc. Interactions within a group of belonging are influenced in turn by the status of the members, the roles they play and the way influences are exerted. According to Wright (2006) these groups will influence the choice of clothes, music, mobile phones entertainment and leisure activities.

Reference groups are entities that are regarded as landmarks, as standards of self-evaluation in the formation of opinions, attitudes, norms and manifest behavior.

Social classes are relatively homogenous and enduring divisions in a society (Kotler, 2002). In defining social class, several characteristics of consumers like income, occupation and education are taken into account. There are 6 major classes defined (Teodorescu, 2013), each presenting particularities on purchasing and consumption habits, on the expression of demand, on the marketing mix response and on the different forms of promotion.

- **A:** Professional people, very senior managers in business, commerce or top- level civil servants;
- **B:** Middle management executives in large organizations, with appropriate qualifications, principal officers in local government and civil service, top management or owners of small business concerns, educational and service establishments;
- **C1:** Junior management, owners of small establishments, and all others in non-manual positions. Jobs in this group have very varied responsibilities and educational requirements;
- **C2:** All skilled manual workers, and those manual workers with responsibility for other people;
- **D:** All semi-skilled and unskilled workers, and apprentices and trainees to skilled workers. Retired people, previously grade D , with pensions from their job;
- **E:** All those entirely dependent on the state long-term, through sickness, unemployment, old age or other reasons. Those unemployed for a period exceeding six months (otherwise classified in the previous occupation). Casual workers and those without a regular income.

Culture, through its norms, moral and material values, beliefs and customs created in time, possessed and shared by the members of the society, can determine to a large extent attitudes and actual behavior.

Subculture is a distinct cultural groups constituted by criteria such as geographical, ethnic, religion or age. Subculture can influence consumer buying habits, especially regarding food, clothing and footwear.

In order to highlight the influences of direct observable factors and of exogenous factors on consumer attitude we have chosen to make the study on the Romanian auto market. This choice is motivated by the fact that cars are durable goods, so attitudes are easier to determine and track. The Romanian car market has undergone significant changes over the past 7 years. Its structure and dynamics have changed over the influence of global economy. The strong growth between 2006 -2010 and the constant regression since 2010 are not only due to economic factors, but also to actual consumption behavior of buyers.

### 3. RESEARCH METHODOLOGY

The studied collectivity is represented by the population of Ploiesti, people over 18 years old, owners or not-owners of cars. Total adult population of Ploiesti is 176 793 people, according to data from the National Statistics Institute, Department of result dissemination, Prahova subsidiary.

In order to determine the size of the sample it was chosen a 95% degree confidence within a margin of error of  $\pm 4\%$ . As the proportion of the components in the sample that possessed the characteristic studied was not known, it was considered 0.5. The resulted sample size is 600 people. The sampling method chosen was the Kish grid and the method to collect data was face-to-face interviews questionnaire based at the individual's households.

To ensure the matching of the sample with the population, the data were analyzed with weighting factors,

calculated according to sex and age of respondents.

The rectification operation consists of proper weighting of variables that have values higher or lower than the existing general collectivity, collectivity to which ultimately the calculation will be extended (Teodorescu, 2009).

Stable population, Person of 18 years old and over		Age (years)					
		18-24	25-34	35-44	45-54	55-64	65 and
0	1	2	3	4	5	6	7
Both sexes	176793	17461	30222	36732	27921	31151	33306
Male	81796	8811	15301	17626	12783	14367	12908
Female	94997	8650	14921	19106	15138	16784	20398

Source: National Institute of Statistics, Romania <http://www.recensamanromania.ro/rezultate-2/>

For determining the weighting factors, first off all the structure of Ploiesti population (table 1) is reflected in a statistical sample (table2) with the same size as the research sample size (600 respondents).

Statistic sample		Age (years)					
		18-24	25-34	35-44	45-54	55-64	65 and over
0	1	2	3	4	5	6	7
Both sexes	600	59	103	125	94	106	113
Male	278	30	52	60	43	49	44
Female	322	29	51	65	51	57	69

Source: author own computation

The statistic sample structure (table 2) is weighted with the research sample structure (table 3) and for each subgroup of the sample the weighting factors are determined (table 4).

Statistic sample		Age (years)					
		18-24	25-34	35-44	45-54	55-64	65 and over
0	1	2	3	4	5	6	7
Both sexes	600	56	102	136	105	91	110
Male	324	35	57	70	61	40	61
Female	276	21	45	66	44	51	49

Source: author own computation

The rectification must not affect more than 15% of the sample size; otherwise all results lose their credibility.

Sample rectification		Age (years)					
		18-24	25-34	35-44	45-54	55-64	65 and over
Male		0,8571	0,9123	0,8571	0,7049	1,2250	0,7213
Female		1,3810	1,1333	0,9848	1,1591	1,1176	1,4082

Source: author own computation

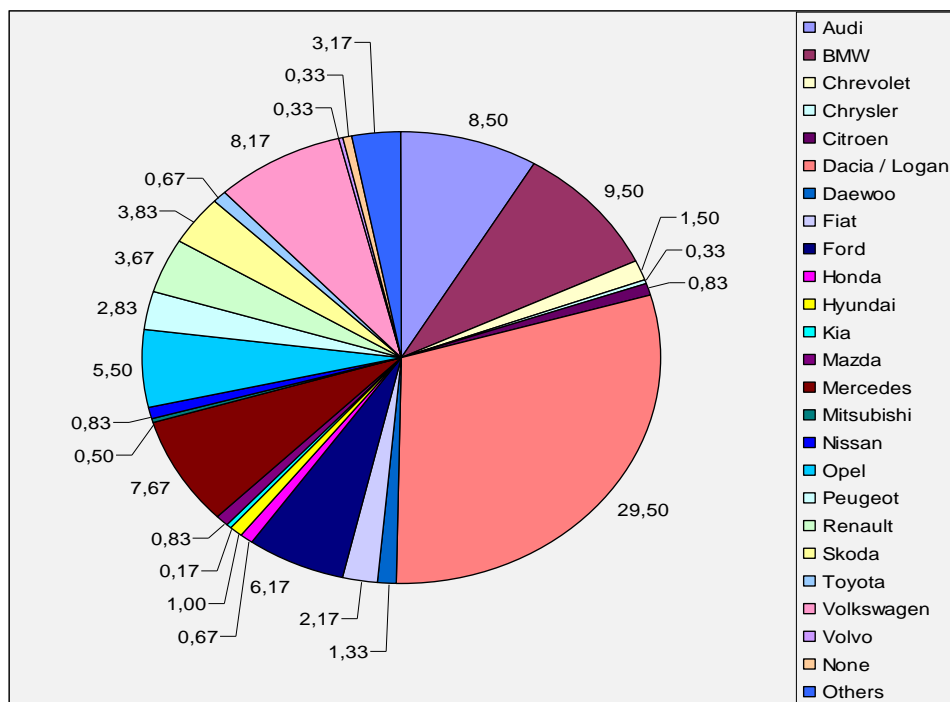


Figure 2. The first brand mentioned by respondents (% of total sample), without using weighting factors  
 Source: authors own research

This operation is done before proceeding to compute tables presenting the results of the statistical survey. Weighting factors are attached to all information categories obtained in the survey; this way, the truthfulness of the study is ensured. Differences between results when weighting factors are not used are reflected in figures 2 and 3.

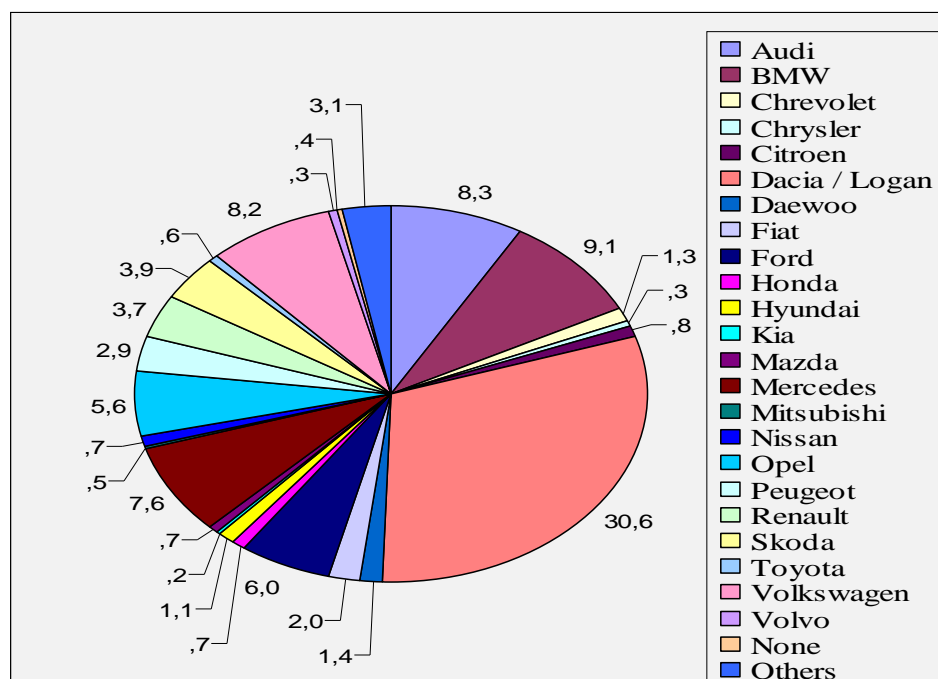


Figure 3. The first brand mentioned by respondents (% of total sample), after applying weighting factors  
 Source: authors own research

### 3. Research results

For the measurement of the *cognitive dimension* of attitude where used 5 five questions regarding: the first mentioned brand (top of mind); other mentioned brands; brands heard off (from a list); brands ever had; brands had in present. Based on the answers to these questions one can determine a notorious synthetic index by weighting the scores obtained by each brand with a different percentage, depending on the relevance given to notoriety by the researcher.

Table 5. Weighting percentage of results aimed at car brand reputation

Item no.	Question asked of respondent	Weighting percentage
1	Thinking about cars, which is the first brand that comes to your mind, regardless of whether or not you have it in your household?	35%
2	And what other brands do you remember? And others? And others?	20%
3	Which are the brands of cars from this list, which you've heard off or seen, regardless of whether you have or not (you did or did not) in your household?	10%
4	Which are the brands of cars from this list that you ever had in your household?	15%
5	Which are the brands of cars from this list that you currently have in your household?	20%
<b>Total</b>		<b>100%</b>

Table 6. Notoriety index calculation *Source: authors own computation*

No. Crt.	Brand	Frequencies		Percentage from sample, multiple answers
		Absolut	Relativ	
1	Alfa Romeo	51	2,5%	8,5%
2	Audi	119	6,0%	20,1%
3	BMW	123	6,2%	20,8%
4	Chrevolet	58	2,9%	9,7%
5	Chrysler	42	2,1%	7,0%
6	Citroen	59	2,9%	9,8%
7	Dacia /	226	11,3%	37,9%
8	Daewoo	64	3,2%	10,7%
9	Fiat	77	3,8%	12,9%
10	Ford	113	5,6%	19,1%
11	Honda	49	2,4%	8,1%
12	Hyundai	59	2,9%	9,9%
13	Kia	45	2,2%	7,5%
14	Mazda	47	2,3%	7,9%
15	Mercedes	98	4,9%	16,5%
16	Mitsubishi	48	2,4%	8,0%
17	Nissan	53	2,6%	8,8%
18	Opel	126	6,3%	21,2%
19	Peugeot	83	4,1%	14,0%
20	Renault	95	4,7%	16,0%
21	Skoda	90	4,5%	15,1%
22	Toyota	52	2,6%	8,7%
23	Volkswagen	124	6,2%	20,9%
24	Volvo	53	2,7%	8,9%
25	None	51	2,5%	8,5%
	Total	2005	100,0%	336,4%



In order to see if direct observable and exogenous factors affect the cognitive dimension of attitude chi-square tests were applied.

For all factors regarding the three dimensions of attitude the following analysis was made: first, based on sex, age, family size and social class, the means off categories where compared for the index of notoriety, for affectivity and for buying intention (like in table 7); second, for each car brand association and impact, statistical tests were calculated (see table 8). Due to the complexity and size of authors' computations in this paper is presented only the particular situation on how sex influences the notoriety index associated to the cognitive dimension of attitude.

Table 7. Compared notoriety index for men and women

Brand	Total	% of total column	
		Sex	
		Male	Female
Sample size	600	324	276
Alfa Romeo	8,5	9,5	7,6
Audi	20,1	22,1	18,3
BMW	20,8	24,0	18,1
Chevrolet	9,7	10,3	9,1
Chrysler	7,0	8,2	6,0
Citroen	9,8	10,4	9,4
Dacia / Logan	37,9	35,5	39,8
Daewoo	10,7	10,9	10,5
Fiat	12,9	13,8	12,1
Ford	19,1	21,3	17,2
Honda	8,1	8,9	7,4
Hyundai	9,9	10,2	9,6
Kia	7,5	8,4	6,6
Mazda	7,9	9,4	6,5
Mercedes	16,5	18,0	15,3
Mitsubishi	8,0	9,1	7,1
Nissan	8,8	9,9	7,9
Opel	21,2	22,7	20,0
Peugeot	14,0	13,9	14,1
Renault	16,0	16,6	15,6
Skoda	15,1	16,4	14,0
Toyota	8,7	9,6	7,8
Volkswagen	20,9	22,1	19,9
Volvo	8,9	10,3	7,7

Source: authors own computation

Table 8, Taticistic tests of association between factor "sex" and notoriety index

Brand	Pearson chi-square $\chi^2$	Asimp. Sig. (2-sides) "p"	Contingency coefficient "C"	Cramer's V coefficient
Alfa Romeo	1,797	0,180	0,056	0,056
Audi	10,645	0,005	0,134	0,135
BMW	17,131	0,000	0,169	0,175
Chevrolet	0,001	0,987	0,001	0,001
Chrysler	20,443	0,000	0,185	0,188
Citroen	0,198	0,656	0,018	-0,018
Dacia /	16,084	0,000	0,164	0,166
Daewoo	0,759	0,384	0,036	-0,036
Fiat	2,035	0,154	0,059	0,059
Ford	5,208	0,740	0,094	0,095
Honda	1,419	0,234	0,049	0,049
Hyundai	1,255	0,263	0,046	-0,046
Kia	16,044	0,000	0,164	0,166
Mazda	17,988	0,000	0,173	0,176
Mercedes	3,102	0,078	0,073	0,073
Mitsubishi	3,191	0,074	0,074	0,074
Nissan	2,637	0,104	0,067	0,067
Opel	7,231	0,027	0,111	0,112
Peugeot	0,037	0,878	0,008	0,008
Renault	0,368	0,544	0,025	0,025
Skoda	2,555	0,110	0,066	0,066
Toyota	1,877	0,171	0,057	0,057
Volkswagen	6,271	0,043	0,104	0,104
Volvo	10,232	0,001	0,132	0,133

Source: authors own computation

Pearson chi-square test result is significant for  $p < 0.005$ . In table 8 it can be seen that for only seven car brands (Audi, BMW, Chrysler, Dacia, Kia, Mazda and Volvo) the test has values indicating an association between the two variables, but in these cases the effect size given Cramer's V coefficient ( $V < 0.30$ ) can be considered modest.

In conclusion, it can be stated that sex does not significantly influence the cognitive dimension of attitude towards car brands.

According to their results ( $\chi^2=30,782$ ,  $p < 0,001$ ,  $V = 0,230$  for Audi and  $\chi^2=34,784$ ,  $p < 0,001$ ,  $V = 0,244$  for Chrysler and so on), there is a connection between age and synthetic notoriety of all brands considered, and the value of the contingency coefficient ( $C=0,224$  and  $C=0,237$  for the two brands mentioned before) shows a weak to moderate relationship between the two tested variables. Still, the association is present for all 24 car brand considered, so it can be stated that age influences the cognitive dimension of attitudes toward car brands.

There is also a weak to moderate association between income and the calculated index of notoriety. Audi has the highest notoriety among respondents with declared average income ( $\chi^2=20,990$ ,  $p=0,002$ ,  $V = 0,190$ ), closely followed by BMW ( $\chi^2=20,147$ ,  $p=0,003$ ,  $V = 0,185$ ) and other brands.

In some cases, there is a negative association between family income and brand's index of notoriety, as in the case of the national brand Dacia ( $\chi^2=29,183$ ,  $p < 0,001$ ,  $V = 0,224$ , Somers'd = -0,143) that has a higher notoriety among respondents from families with declared income below average. Still, brands like Mercedes, Volkswagen, Opel or Renault exceed the average notoriety regardless of the family's income.

The association tends to be stronger between higher income and the following brand cars: Chrysler

( $\chi^2=75,401$ ,  $p<0,001$ ,  $V =0,360$ ); Kia ( $\chi^2=75,300$ ,  $p<0,001$ ,  $V =0,360$ ) Mazda ( $\chi^2=71,902$ ,  $p<0,001$ ,  $V =0,352$ ). In this case, Somers's d association test also gives us reasons to sustain that income significantly influences brand notoriety as well as the cognitive dimension of attitude.

In evaluating the influence of marketing mix factors on the cognitive dimension of attitude, the following factors were considered: advertising messages, internet (forums, blogs, specialized sites) sales consultants (in places where the product is sold), exhibitions or other special events, as well as common attributes (price, design and comfort features, fuel type, fuel consumption and engine capacity). For the evaluation was used a scale with grades from 1= "not important" to 10= "very important". For evaluating the association between these independent variables and the notoriety index, the Spearman test " $\rho$ " was used.

In the great majority of cases there is no association between marketing mix factors and the cognitive dimension of attitude. There are 3 exceptions:

- respondents that have a high degree of confidence in internet as a source of information return a greater index of notoriety for Nissan brand ( $\rho=0,182$   $p<0,003$ )
- Opel has a greater notoriety among respondents that participate to expositions and read specialized publications. ( $\rho=0,216$   $p<0,001$ , for exposition and  $\rho=0,224$   $p<0,001$  for publications)
- Audi has the biggest notoriety among persons that consider fuel type and consumption as very important attributes for a car ( $\rho=0,248$   $p<0,001$ ).

Nevertheless, these results cannot overcome the global result, leading to the conclusion that attitude's cognitive dimension is not influenced by marketing mix factors.

Family size cannot be considered a factor of influence for brands notoriety. For 23 out of 24 car brands there is no association between family size and notoriety index. Only one association can be made: the national brand Dacia has greater notoriety among families with 2 or 3 members ( $\chi^2=23,187$ ,  $p=0,003$ ,  $V =0,199$ ).

Social class clearly influences the notoriety of car brands; there are only a few exceptions like in the case of family income: Volkswagen, Opel and Renault are the 3 brands that have a higher notoriety among all social classes. Brands associated with social classes are: BMW has the higher notoriety among social classes D and E ( $\chi^2=20,928$ ,  $p<0,001$ , Somers's d = -0,171, Gamma=-0,317), Chrysler has a better index of notoriety among C1 and C2 social classes ( $\chi^2=19,217$ ,  $p=0,001$ , Somers's d = -0,139, Gamma=0,250), Mercedes is less known by D and E and the examples could go on.

Considering the previous analysis one can draw the following conclusion: demographic factors, economic factors and social class influence the cognitive dimension of attitude, the awareness of car brands, but not directly the car brand owned.

To determine the ***affective dimension*** of attitude, respondents were asked to rate the 24 car brands on a 10 point scale, where 1=*I do not like* at all and 10=*I like it a lot*. The most appreciated brand was Mercedes (average score 8,72), very close followed by BMW (average score 8,67), Audi (average score 8,49) and Volkswagen (average score 8,38).

As in the previous case, the relationship between exogenous and direct observable factors was analyzed with chi-square tests. According to the results regarding the relationship between sex and every car brand there is no significant influence. For example, the lack of a meaningful connection can be observed in the case of the national brand Dacia (Table 3), where the value of Asymp Sig (0.122) is bigger than 0.05, accepting the null hypothesis.

Table 9. Chi-square for sex and appreciation of Dacia

	Value	df	Asymp. Sig. (2-sided)
Chi-square	14,010	9	,122
Likelihood Ratio	14,126	9	,118
Linear-by-Linear Association	2,601	1	,107
No of valid cases	567		

Source: authors own computation

Age, however, influences the assessment of brands. The relationship between the two variables is weak to moderate, depending on the brand. For example, in Table 4 also presented the case of Dacia. Also, Asymp. Sig. was 0.000, rejecting the null hypothesis.

Table 10. Grades for Dacia on age groups

	The age group						Total
	18 – 24	25 – 34	35 – 44	45 – 54	55 – 64	65 and more	
[Dacia / Logan] <sub>1</sub>	32	50	53	42	34	24	235
Considering whatever you <sub>2</sub> want, how much do you like the brands that I'll <sub>3</sub> read?	17	29	36	30	25	25	162
	8	15	30	19	43	55	170
Total	57	94	119	91	102	104	567

Source: authors own computation

Research results show that family income does not influence significantly the affectivity for almost all car brands considered. For example, we present the values obtained for the first 4 ranked car brands: Mercedes ( $\chi^2=2,459$ ,  $p=0,476$ ), BMW ( $\chi^2=5,132$ ,  $p=0,143$ ), Audi ( $\chi^2=4,167$ ,  $p=0,244$ ) and Volkswagen ( $\chi^2=10,421$ ,  $p=0,108$ ).

Marketing mix factors on the other hand tend to influence the affective dimension of attitude as resulted from tests.

For example, respondents that tend to consider the sales consultant as a very important source of information, have a greater affectivity towards brands like Alfa Romeo ( $\rho=0,174$   $p=0,005$ ), Dacia ( $\rho=0,180$   $p=0,003$ ), Honda ( $\rho=0,185$   $p=0,003$ ), Kia ( $\rho=0,197$   $p=0,002$ ) and Mitsubishi ( $\rho=0,194$   $p=0,003$ ). Even if the association is weak, it can be recommended that these car brands sellers focus their marketing efforts towards sales consultancy.

There is also a weak correlation between advertising messages and the affect towards all car brands considered. The exceptions are Audi, BMW, Mercedes, Opel, Volkswagen and Volvo, even if these car brands have the biggest average scores. An equally weak correlation is set between participation to exposition and the affect towards the following brands: Dacia ( $\rho=0,171$   $p=0,005$ ), Honda ( $\rho=0,146$   $p=0,020$ ), Mitsubishi ( $\rho=0,166$   $p=0,009$ ) and Nissan ( $\rho=0,157$   $p=0,013$ ).

A moderate correlation can be observed between affectivity towards 15 car brands and specialized publications viewed as an important source of information in choosing a brand of car.

Of all product attributes considered there are only 2 that have a moderate correlation with affectivity: security and comfort features. Price, even if it is seen as very important when intending to purchase a car, it is not affectively correlated positive or negative to any specific brand.

When considering the exogenous factors, family size does not influence the affectivity towards any car brand. For example, we present the values obtained for the first 4 ranked car brands: Mercedes ( $\chi^2=2,440$ ,  $p=0,655$ ), BMW ( $\chi^2=2,980$ ,  $p=0,561$ ), Audi ( $\chi^2=2,645$ ,  $p=0,619$ ) and Volkswagen ( $\chi^2=5,007$ ,  $p=0,757$ ). The same situation is encountered in the case of social class. The only weak association found between social class and affectivity is in the case of the national brand Dacia ( $\rho=0,142$   $p=0,001$ ).

To determine the *conative dimension* of attitude, the following question was asked: "Given your family's needs and financial possibilities, how likely are you to buy in the next 12 months the car brands that I am going to read to you?"

To answer use grades as in school, where 01 = "0% sure no" ... and 10 = "100% sure yes".

Naturally, you can give any intermediate grade according to your wish."

An overwhelming number of respondents declared that they have no intention to buy a car in the next year. Those who expressed their intention of purchasing a car had very strong intentions towards a specific brand. The applied statistical tests show no significant relationship between the expressed purchase intention and external factors considered. Still, associations could be made between particular car brands and specific factors.

There is a weak negative association between age and purchase intentions for most of the brands like Audi ( $\rho=-0,150$   $p<0,001$ ), BMW ( $\rho=-0,135$   $p=0,002$ ), Ford ( $\rho=-0,113$   $p=0,009$ ), Opel ( $\rho=-0,116$   $p=0,007$ ) or Renault ( $\rho=-0,127$   $p=0,003$ ).

Research also reveals a weak positive correlation between family size and the intention to purchase brands: Audi ( $\rho=0,160$   $p<0,001$ ), BMW ( $\rho=0,165$   $p<0,001$ ), Mercedes ( $\rho=0,127$   $p=0,003$ ), Opel ( $\rho=0,111$ ,  $p=0,010$ ) and Peugeot ( $\rho=0,127$   $p=0,003$ ). Sex and income do not correlate at all with the purchase intention.

Social class is associated in a weaker manner with purchase intentions, but still this association exists for Audi, Ford, Peugeot and Volvo ( $\rho=-0,137$   $p=0,002$ ).

## CONCLUSIONS

The importance of attitude as a powerful influence on consumer behavior has been long stated in specialized literature because of its relevance for the marketing practice. The operational valences of the concept are highlighted through the understanding of the factors that influence attitude formation and change, and the measurement of the extent to which these factors influence attitude. The focus in this direction gives the marketer the tools for the decisions regarding segmentation, targeting, positioning, but also regarding the different dimensions of the brand equity.

In order to understand the exogenous influences and direct observable factors affecting attitude, we have proposed a model that has been tested through a representative research on the Romanian car market. According to the results, we can state that the proposed model is validated. The cognitive dimension of attitude is influenced by demographic factors, economic factors and social class, by the awareness of car brands, but not directly by the car brand owned. Regarding the affective dimension, sex, family, household income and social class don't have a significant influence, while age and marketing mix factors tend to affect it. Sex and income are not significantly correlated with the conative dimension, while age, family size and social class have associations with certain car brands.

The research is also a useful source of information for car dealers and producers who market to Romania. They can better define their target consumers and they can see how they are perceived in relation to competitors. Based on these analysis, they can improve their marketing mix instruments.

Even though the research is representative, the present study has some limits. First of all, the reliability and validity of the model have to be tested through multivariate statistical methods and by repeating the research. Secondly, to generalize the applicability of the model, it should be tested not only in the case of durable goods, but also for goods with low level of involvement and for services.

## References

1. “ *Blackwell Handbook of Social Psychology: intraindividual processes*”(2001) edited by Abraham Tesser Norbert Schwarz, Blackwell Publishing
2. Ajzen, I. (2012). Attitudes and persuasion. In K. Deaux & M. Snyder (Eds.), *The Oxford Handbook of Personality and Social Psychology* (pp. 367-393). New York: Oxford University Press
3. Cătoiu, I., Teodorescu, N. (2003), *Comportamentul consumatorului* Ed. Uranus – București .
4. Kotler, Ph., (2002) *Marketing, Management, Milenium Edition*, Costum Edition for University of Phonix, Pearson Costum Publishing
5. Shiffman L, Kanuk L.L (2007), „ *Consumer behaviour* ”, 9<sup>th</sup> Edition, Pearson Prentice Hall,.
6. Solomon, M., Bamossy, G., Askegaard, S., Hogg, M., (2006) *Consumer behaviour an European perspective*, 3<sup>rd</sup> Edition Prentice Hall
7. Solomon, M., (2009) *Consumer behaviour – buying, having and being*, 8<sup>th</sup> edition, Pearson Prentice Hall, 2009
8. Teodorescu N., (2009), *Metode avansate de marketing- course support*, Ed. ASE – Bucuresti,
9. Teodorescu N., (2013) *Qualitative marketing research, - course support*, available at: <http://www.nicolaeteodorescu.ase.ro/wp-content/uploads/2013/12/The-Social-Class.pdf>
10. Wright, R., (2006) *Consumer behaviour ed.* Thomson Leaning ,