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Motivational antecedents in modeling the decision to buy a passenger car in Romania

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Introduction

At global level, the passenger car market confronts with changes in consumer preferences, with a trend on western markets that favors a longer ownership period and small, city vehicles that are more efficient energetically, and, on emergent markets, an increase in sales of large dimension cars. Romanian consumers find themselves amidst these global trends, as general sales of new cars have constantly decreased in the last five years, while car brands in the luxury segment have only experienced stagnations or even growth.

The first explanations that may come to mind are the reducing of consumer purchasing power and the restrictions imposed on consumption credits, as well as the lack of consistent public policies that encourage new cars purchase. Yet, looking at these changes from consumer behavior theories, we can ask ourselves whether the buying behavior can simply be explained by rational factors (such as the need for transportation, or income level) or else, are there other factors less 'rational' like the hedonic and symbolic dimension of consumption.

The perspective from the existing research on the factors determining the decision of buying and using a car, suggests in many cases that such a choice cannot be explained only by the need of transportation from one place to another. Lois and Lopez-Saez (2009), Steg (2005), Mokhtarian, Salomon and Redmond (2001), Marsh and Collett (1986), Sachs (1983) argue that a car is appreciated by its owner for a series of functions, other than instrumental, such as the sensations experienced during driving, the feeling of power and superiority, the feeling of independence. Still, this volume of research has concentrated on testing the presence of these multiple motivations, for which the car is bought and used, but they haven't studied the influence of these motivational antecedents on the decision to buy or not a car.

The literature on consumer behavior proposes several theoretical frameworks for modelling behavior, that have their origin in cognitive psychology or social psychology, among which, models based on Expectancy-Value Theory are most influential, being tested and discussed in many research articles (Conner & Armitage, 1998; Hagger & Chatzisarantis, 2006). These models assume that intention

is immediately and automatically the antecedent of behavior, which on its turn is influenced by attitudes.

Although less popular, in literature we can find enough other behavioral models, that try to take into account aspects neglected by the expectancy-value theories, such as the symbolic and affective dimensions of consumption, as well as some cognitive elements, like to concept of habit. Among these we mention the Interpersonal Behavior Theory proposed by Triandis (1977), Attitude-Behavior-Context Model of Stern (2000), Bagozzi (2002) Model of Consumer Action or the Motivation-Opportunity-Ability Model of Olander and Thogersen (1995). These alternative models are helpful for a better understanding of the consumer behavior, also being integrative and taking into account external influences along with the internal (psychological) ones. Probably, one of these models could become a suitable framework to examine the influence of the multiple motives surrounding car use on the buying decision.

The aim of this research is **to propose and empirically test an integrative decision-making model, that includes affective and symbolic motives, along with instrumental one, thus contributing to consumer behavior understanding in the context of passenger cars.** Research in the decision-making of consumers represents a multidisciplinary area, by its nature, involving psychology, sociology, marketing and communication (Hung & Petrick, 2012), but usually, the proposed models concentrate either on the internal factors of the individuals, either on the influence of the external factors, coming from the social and physical environment. Integrative models for consumer behavior are less commonly tested, even though several researchers emphasize that including psychological factors along with external factors could significantly increase the knowledge of consumer decision-making (Olander & Thogersen, 1995; Jackson, 2005).

The research objectives are the following:

1. Examining the influence of non-instrumental motives of car use on the purchase decision of this product.

2. Proposing an alternative and integrative model for the buying decision, that includes rational, hedonic and symbolic factors.

3. Empirically testing of the proposed model and of the relationships among its main constructs, in the context of the car buying decision.

The operational objectives are:

1. Identifying in existing literature models of behavioral decision relevant to the aim of this research (integrative and with empirical application).
2. Identifying in existing literature of the different types of motives involved in the decision to use a car.
3. Inserting within the integrative conceptual framework the different types of motives for car use, so as the model accounts for them.
4. Building the hypothetical relationships among the constructs of the integrative model, based on existing research.
5. Developing valid measurement scales, adapted to the research context, for each of the model's constructs.
6. Testing the proposed model fit to the collected data, using structural equation modeling (SEM).

Organization of the thesis

The thesis is structured in five chapters. The Introduction presents the justification for choosing the research topic, offering arguments for the need to use an integrative model of consumer behavior that can maintain its analytical and explanatory capacity, in the same time. Having these as a starting point, then are presented the aim and objective of the research as well as the theoretical and managerial relevance of the study.

Chapter I presents several decision-making models for consumers that contribute their understanding and body of knowledge available. The Chapter II describes building up of the model proposed for testing, in the same time presenting the main ideas in the literature concerning the constructs studied and the relationships among them. The Third Chapter presents the methodology used to research consumer behavior and to test the model and proposed hypothesis.

The following chapters describe the findings of the research, that resulted from qualitative and well as quantitative methods. Chapter IV presents the stages followed in measurement scale development, based on the procedures proposed with this aim by Churchill (1979). The Fifth Chapter presents the results from data analysis, using the procedures of structural equation modeling, and reports about the hypothesis testing and the main findings in this research. Conclusions summarize the research findings and present their interpretation. In the same section are presented the theoretical contributions of the present research as well as the managerial implications. In the end of the thesis, are shortly presented several recommendations for future research, based on the findings and limitations of the present study.

The Proposed Integrative Model for Buying Decision-Making

The integrative conceptual framework chosen for this study has been the Motivation-Opportunities-Abilities Model, within which we adopted a different perspective for the concept of motivation. Thus, in the MOA model proposed by Olander and Thogerson (1995), intention and its antecedents were conceived as in the Theory of Planned Behavior of Ajzen (1991), but the current study proposes that the antecedents of intention are conceived according to a level in the hierarchical model of psychological functions of material goods proposed by Dittmar (2008). In fact, the current study follows one of the recommendations of Olander and Thogerson, that the motivation concept represented as in the theory of planned behavior is only one possible illustration, of the many other available, and that the model is open to alternative approaches to motivation.

Nevertheless, Olander and Thogerson criticize the Theory of Planned Behavior for its exclusive focus on the differences of behavior only at individual level (such as motives, values, attitudes, theoretically correlated) and the little attention paid to behavioral changes over time. This focus on individual differences may be useful in order to get the necessary information for setting and achieving the aims of information campaigns, or similar purposes, but it doesn’t reveal aspects related to change mechanisms, especially regarding the

processes of learning and the effects of habit on behavior (Olander & Thogersen, 1995).

On the other hand, Dittmar (2008a) emphasizes in her work that material goods are many times perceived as integral parts of the self and their psychological importance is closely connected to their roles of symbols for the way in which we define our identity. According to this view, material goods don't merely represent instruments to reach a clearly defined goal for the individual, and they fulfill, in the same time, the role of symbol through which we relate to the social environment as well as to our own self-concept. Thus, Dittmar (2008a, p. 34) defines the symbol as "an entity that stands for another entity, which can have meaning only to the extent that there is a shared understanding among people that gives the symbol reality".

The current study, following its purpose of contributing to a better understanding of the buying behavior, has identified two theoretical frameworks, the Motivation-Opportunities-Abilities Model of Olander and Thogerson (1995) and the model of the psychological functions of material possessions of Dittmar (2008a), that could be combined in order to produce more insight. The theoretical framework used subsequently is illustrated in Figure 2.1. below.

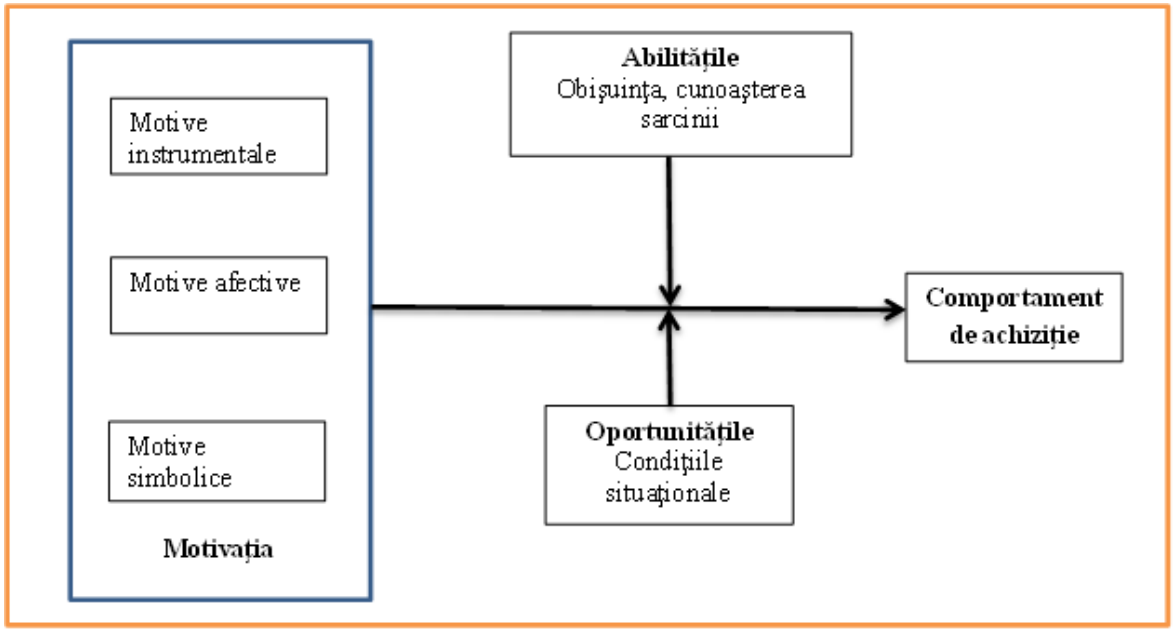

Figure 2.1. The theoretical framework – the adapted MOA Model

Having this theoretical framework as a starting point, after an extensive study of existing literature, 14 hypotheses were proposed, concerning the relationships between the constructs studied. Nine of them referred to direct effects of the studied constructs, and four hypotheses concerning the impact of moderation variables.

The current study analyzed several relations among the relevant constructs such as: *instrumental motives -> intention; affective motives -> intention; symbolic motives -> intention; constraints -> intention; intention -> behavioral estimation; specific self-efficacy -> behavioral estimation; constraints -> behavioral estimation*. As well, in the study were analyzed the influence of the moderating variable *habit*, on the direct influence of *instrumental motives* on *intention*, *affective motives* on *intention* and *symbolic motives* on *intention*, as well as the influence of the moderating variable *previous experience* on the relation between *intention* and *behavioral estimation*.

The research hypotheses are presented below, along with the main references in literature that led to the formulation of those hypotheses:

H1. Consumers can identify three main motives of car use: instrumental, affective and symbolic motives (Mokhtarian, Salomon, & Redmond, 2001; Steg, 2005; Dittmar, 2008a).

H2a. Instrumental motives of car use are negatively correlated with the symbolic car use motives (Steg, 2005).

H2b. Symbolic motives of car use are positively correlated with the affective car use motives (Steg, 2005).

H2c. Affective motives of car use are negatively correlated with the instrumental car use motives (Steg, 2005).

H3a. Instrumental motives influence positively the intention to buy a car (Ajzen, 1991).

H3b. Symbolic motives influence positively the intention to buy a car (Dittmar, 2008a).

H3c. Affective motives influence positively the intention to buy a car (Dittmar, 2008a).

H4. Intention influences positively the behavioral estimation, when controlling for income and education (Shepperd, Hartwick, & Warshaw, 1988).

H5. The constraints in buying a car influence negatively the intention (Hung & Petrick, 2012).
H6. Specific self-efficacy influences positively the behavioral estimation, when controlling for income and education (Kim & Kim, 2005).
H7a. Habit of car use moderates the relationship between instrumental motives and intention, such that for those who have a strong habit of car use, the effect of instrumental motives on intention is weaker than for persons with weak car use habit (Thogersen & Moller, 2008).
H7b. Habit of car use moderates the relationship between symbolic motives and intention, such that for persons with a strong car use habit, the effect of symbolic motives on intention is weaker than for those with weak car use habit (Thogersen & Moller, 2008).
H7c. Habit of car use moderates the relationship between affective motives and intention, such that for persons with a strong car use habit, the effect of affective motives on intention is weaker than for those with weak car use habit (Thogersen & Moller, 2008).
H8. Previous experience moderates the relationship between intention and behavioral estimation, such that for people with less previous buying experience the effect of intention on behavioral estimation is weaker than for those with greater previous buying experience (Ouellette & Wood, 1998).

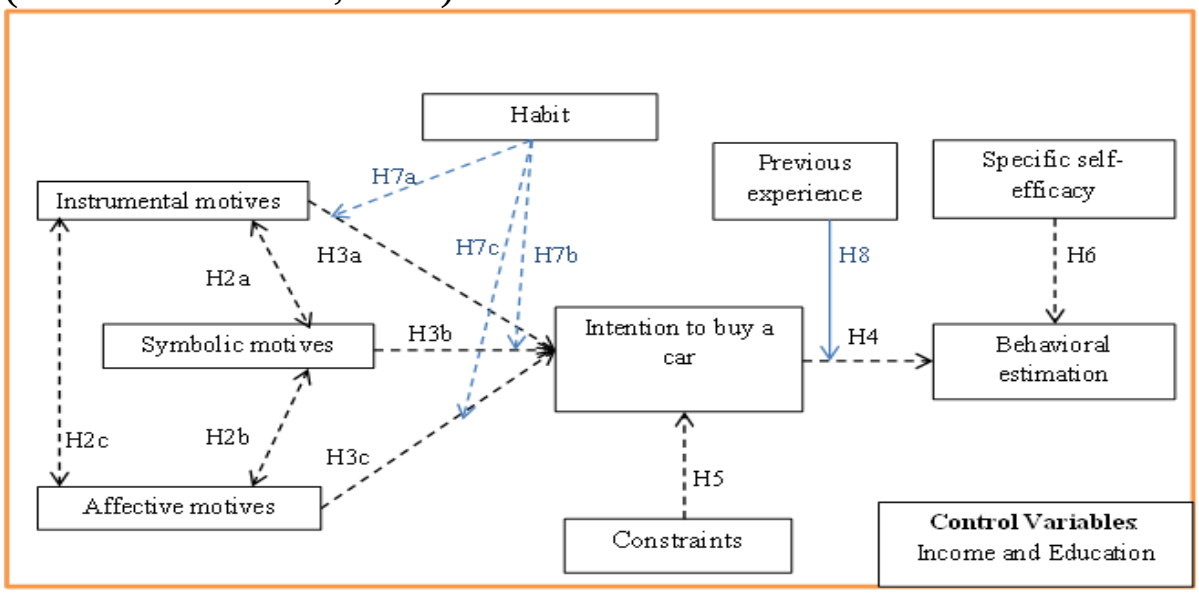

Figure 2.8. The adapted general MOA model, proposed for testing

Research methodology

In order to reach the aim of this study, qualitative as well as quantitative methods were used. The qualitative methods were involved in adapting the research to the specific context of the passenger car market and to the specificity of the Romanian cultural research context. The quantitative methods were those that enabled the testing of the general MOA model and of the hypothesized relationships.

a. The Qualitative Study

The qualitative research methods were first used in an exploratory purpose, as to obtain a first confirmation from the professionals in the field (the sales managers for car dealerships in Galaţi and Braila area) that the major concepts in the MOA framework, motivation, opportunities and abilities, are meaningful for the consumers (clients) in the specific market of passenger cars. The implementation of the qualitative research methods meant organizing semi-structured interviews and was also a mean to collect data on the main aspects related to the study of buying abilities in the case of the car as well as context specific details on opportunities, since these concepts were seldom studied previously, in this particular behavioral choice setting.

In a later application, the qualitative methods were used in pre-testing the questionnaire aimed to collect the data that could serve to the statistical testing of the model and the hypotheses. With this occasion, interviewing techniques were used for a second time, in this case through a cognitive interviewing setting, based on collecting the information through “think-aloud interviewing”. In this way, I was able to identify the questions that created understanding difficulties, that were differently understood by different participants, or those that were constantly receiving the same socially desirable answer. Cognitive interviewing was applied on 30 participants, with different ages and coming from different social environments, and the results of this stage has led to adjusting the proposed measurement scales.

b. The Quantitative Study

The quantitative part of the research consisted of a questionnaire based survey, that was used to collect data mainly online, but this strategy was combined with several questionnaires administered on a printed questionnaire format. This study followed the detailed procedures of developing a survey, as suggested by Groves and his colleagues (Groves, Fowler, Couper, Lepkowski, Singer, & Tourangeau, 2009), and for the development of measurement scales were used the procedures recommended by Churchill (1979).

The variables studied in this research setting were measured through multi-item scales, as all of them concerned psychological aspects, that cannot be observed directly, but only through indicators of these latent variables that the study wants to measure. The independent variables studied were motives for car use, constraints and specific self-efficacy, and the dependent variables were intention and behavioral estimation.

The methods used for data analysis, in the case of measurement scales development, consisted in exploratory factor analysis, aimed at identifying the dimensions of the scales, and computing of Cronbach's alpha coefficients, in order to test the internal consistency of each dimension of the scales. Scales testing procedures followed up with confirmatory factor analysis, through which I tested the convergent and discriminant validity for each construct of the model. Finally, I used structural equation modeling (SEM) in order to test the general model fit to the data as well as the hypotheses of the study.

The Participants

In the case of the semi-structured interviews, the sampling strategy has been non-probabilistic, thus the participants were selected among the sales managers of the car dealerships available in the geographical area of the researcher. The sampling was based on convenience aspects, such that the visits to the car dealership were organized only within the area of Galaţi and Braila cities, and some of the interviewees were selected upon the recommendation of other participants (snow-ball type of sampling). In total, in the semi-structured interviews participated 9 persons.

In the pre-testing of the questionnaire, which took place through cognitive interviewing techniques, as method of diagnosis for the research instrument, 30 participants were involved. These persons were selected according to their willingness to participate at the interviewing, using convenience sampling again, so that in the sample were included persons that with whom the researcher usually interacts, as well as people met in a car dealership in Galaţi who were willing to participate.

In the questionnaire based survey, a total of 371 persons participated from the target population defined as the persons aged over 18, holding a car driving license and living in Romania. In the current study, the influence of the other family members that don't hold a driving license was not directly studied, even though we don't deny its impact in buying a car. This was a conscious choice, justified by the fact that this research wants to depict the link between car use and car buying, so we needed answers based on own experience with the car. The sampling strategy was also in this case non-probabilistic, being based on convenience sampling and snow-ball sampling.

Even though sampling strategies adopted in the study don't offer the possibility to generalize the results to the whole population, the sample was evaluated with respect to the size of the model tested. In this case, the recommendations on the sample size followed have been those referring to factor analysis and to structural equation modeling, as proposed by DeVellis (1991, p. 156), Kline (2005, p. 111) or Hung and Petrick (2012), which take into account the ratio between number of subjects and the total number of items in the research instrument. The questionnaire used in this research counted 64 items, which requires a minimum of 320 subjects, in order to respect the 5:1 ratio mentioned by the sources cited, but the final sample comprised 363 validated cases, respecting this good sense rule.

Research Findings

A. Findings from semi-structured interviews

The main findings from the themes discussed with the sales managers with the occasion of the semi-structured interviews are summarized below:

- Among the recent changes observed in their clients buying behavior, the sales managers remarked an increase of the importance of the concerns related to the basic need for transportation, and to cost reduction, but this isn't noticed in young consumers or for the clients of luxury brands.
- The presence of affective and symbolic motivation is clearly noticed by the majority of the sales managers, regardless of the brand they represent, and among the two, the symbolic motives seem to stand out as influence.
- On the topic regarding the opportunities and constraints in buying a car, the sales managers have focused especially on the constraints, and those of financial concern occupied the most of the discussion.
- The buyer abilities, according to the perspective of the sales managers, are illustrated with examples of calculations of future fuel consumption, but these are mentioned, rather, as an exemption, thus the domain of consumer abilities in car buying was quite poorly depicted by the interviews.
- In describing the demographic profile of the buyer, the sales managers mentioned that, usually, buyers are men, favoring known brands in their choice, if they are young and paying more attention to the warranty offer, when buyers are over the age of 60. Buyers income, obviously influenced the car buying decision, but the statement of the income sources and their value remains a very sensitive subjects for the clients, and usually they give such details only after the purchase decision in taken.

B. Findings in general MOA model and hypotheses testing

Results from measurement scale development

These results can be found in chapter 4, where can also be found the description of the way these scales were developed in the preliminary stages of questionnaire formulation. For this study there was the need to develop scales for the following constructs: motives for car use, constraints, intention, specific self-efficacy and behavioral estimation. These scales were then evaluated and reviewed after the stage of questionnaire pre-testing, which comprise the use of

cognitive interviewing with the think-aloud technique. After collecting the data, with online questionnaires as well as printed, I have used exploratory factor analysis to identify the dimensions of the scales and tested they internal consistency with Cronbach's alpha coefficient. These tests were used to purify the measurement instrument, as Churchill (1979) recommends, and the items with a poor performance within the scales were considered for elimination.

The further testing of the scales continued with the procedures of confirmatory factor analysis that enabled the evaluation of construct validity, based on its two subcategories, convergent and discriminatory validity (Bagozzi & Yi, 1988). The results of the confirmatory factor analysis were also used to examine the composite reliability of the factors, which is another measure for the internal consistency of the items allocated to a certain factor (Fornell & Larcker, 1981). According to Bagozzi and Kimmel (1995), a factor displays a good consistency when its composite reliability is beyond 0,60. The values for composite reliability and the Cronbach's alpha coefficients for all the constructs in the present study had been bigger than 0,70, as can be seen in Table 5.9.

Tabel 5.9. Internal consistency of the measurement scales

The Construct	**Composite reliability**	**Cronbach alpha**
Behavioral estimation	,965	,963
Intention	,944	,943
Motives for car use		
Symbolic motives	,864	,860
Affective motives	,798	,783
Instrumental motives	,811	,805
Self-efficacy		
Individual self-efficacy	,886	,893
Social self-efficacy	,885	,890
Constraints		
Personal constraints	,857	,859
Financial constraints	,779	,779
Lack of interest	,909	,885

Results from testing the general MOA model

The testing of the MOA model followed the structural equation modeling (SEM) stages, which is formed of two components: (1) a measuring model, that connects a large set of observed variables with a smaller one, of latent variables, and (2) a structural model that connects the latent variables in a set of recursive and non-recursive relationships. Confirmatory factor analysis corresponds to the measurement model within SEM (Albright & Park, 2009, p. 3) and it is used to determine the latent constructs based on the observed variables. In order to interpret the relationships among the latent variables, regression analysis was used, and the model that presents the relationships between constructs is named structural model or model of the latent variables (Byrne, 2001; Bollen, 1989).

The actual testing of the proposed model was accomplished with the analysis of the general model fit to the data, and was reflected by the proportion of the discrepancy between the covariance matrix for the sample and the covariance matrix supposed by the model, through the estimated parameters. The fit indices used to decide the model fit in this study have been: CFI (comparative fit index; Bentler, 1990) , GFI (goodness of fit index; Joreskog & Sorbom, 1986), AGFI (adjusted GFI; Joreskog & Sorbom, 1986) şi RMSEA (Root Mean Square Error of Approximation; Steiger & Lind, 1980).

In order to test the fit to the data for the whole model, we ran it in AMOS, with all the relevant constructs (symbolic motives, affective motives, instrumental motives, specific self-efficacy, constraints, intention and behavioral estimation) with the hypothesized relationships. A part of the fit indices indicates an acceptably good fit: CMIN/DF =2,472; CFI =,900 ; RMSEA =,064. But two fit indices displayed a weak fit to the data: GFI =,820 ; AGFI =,789. This suggests that the adapted MOA model is a pretty good research framework, yet not robust enough, so further testing of the model would be necessary in order to improve it.

Findings from hypothesis testing

Following the testing the fit to data for the whole MOA model, we tested the 14 hypotheses of the study. Among these, 10 were supported by data, one hypothesis was partially accepted and three

hypotheses were rejected. Nine of these hypothesis represented direct influence between the latent variables, and four of them concerned multi-group effects, with habit of car use and previous buying experience as moderating variables. Two hypotheses also included control variables, concretely we tested the influence of income and education on the behavioral estimation, but these control variables don't drive our theory. The final resulting model and the results obtained in hypothesis testing are illustrated below (Figure 6.1), where the constraints construct is presented with its three discovered dimensions (the three latent indicators of the constraints construct), and the regression or correlation coefficients can be found on the figure, near each arrow that illustrates the relationships among variables.

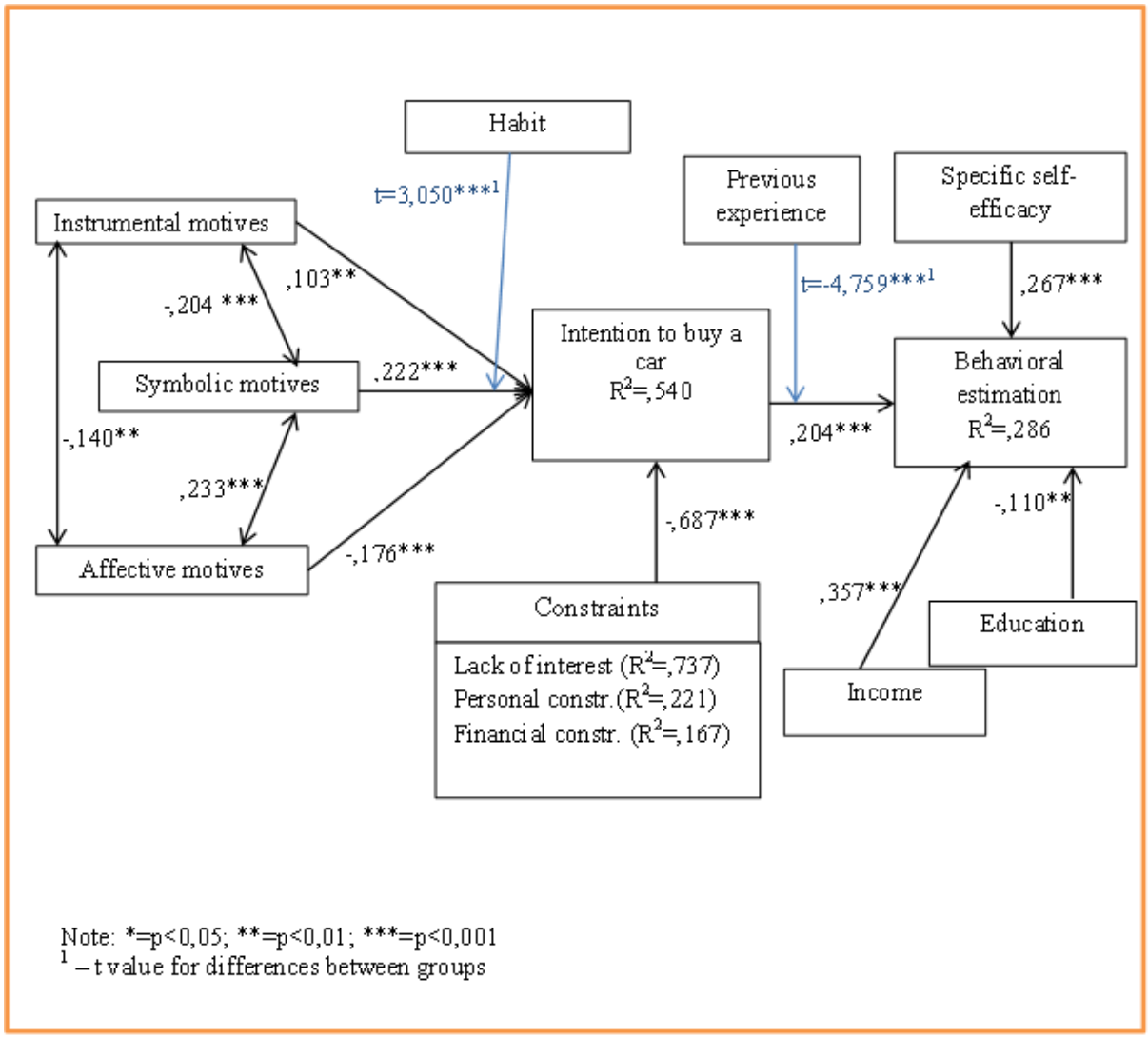

Figura 6.1. Results for the relationships in the whole MOA model

Conclusions

Results interpretation

Hypothesis 1 was accepted and it suggested that the three *motives* of car use, *symbolic*, *affective* and *instrumental* can be identified by consumers. This finding involves that non-instrumental motives are also important and, moreover, respondents can make a clear distinction between *instrumental*, *symbolic* and *affective motives*.

Hypothesis 2a, 2b and 2c referred to correlations between the three types of *motives*, and all of the three were supported by the data. This result means that there is a conflict between the instrumental perspective, on one hand, and the affective-symbolic perspective, on the other, when it comes to the way the individual sees a good subject to choice. This finding is in line with those in the study of Steg (2005), but contrary to the findings of Lois and Lopez-Saez (2009), who don't find this conflict.

Hypothesis 3a, 3b and 3c suggested a positive and significant relationship between each of the three types of *motives* and *intention*, but the results indicated that only the relationships between *instrumental motives* and *intention* and *symbolic motives* and *intention* are positive. The *affective motives-intention* relationship has been statistically significant but negative, so hypothesis 3a and 3b were accepted, and hypothesis 3c was rejected. These findings involve that when a person hold *symbolic motives* or *instrumental motives* in car use, the chances are bigger that she has the intention to buy a car, while in the case a person hold affective motives for car use, her intention to buy a new car is lower. In other words, the more an individual loves his/her car, the less likely is that the individual intends to replace it.

Hypothesis 4 concerned the relationship between *intention* and *behavior estimation*, the latter being an approximation of the actual behavior, and data supported this relationship. Thus, similar to the proposition of Shepperd, Hartwick şi Warshaw (1988) and Warshaw and Davis (1985), including *behavioral estimation* leads to a better prediction of behavior, in addition to the intention, since it takes into account the situations when the person can foresee that his/her intention could change in a predictable manner.

Hypothesis 5 investigated the negative influence of *constraints* on the *intention* to buy a car, and it was accepted. The findings indicate a very strong influence of the *constraints* in the prediction of the *intentions* to buy a car, but among the dimensions of the constraints scale, the biggest influence is that of the *lack of interest,* followed by *personal constraints* and in the end, by *financial constraints*. The interpretation of these results is that the formation of the intention to buy a car is diminished especially by the *lack of interest* in this action, followed be a smaller influence of the personal difficulties in making that intention. *Financial constraints* have the smallest influence on *intentions,* meaning that when forming an intention to buy, individuals will not be concerned with the financial problems. These *financial constraints* intervene rather upon the *behavioral estimation,* through the income control variable.

Hypothesis 6 tested whether *specific self-efficacy* stimulates the formation of *behavioral estimation* with a bigger certainty, and the hypothesis was accepted. Thus, the more the person has *specific self-efficacy,* the more certainly that person will *estimate* the performance of that behavior.

Hypothesis 7a, 7b and 7c tested the moderating effect of *habit of car use* on the relationship between each of the three *motives* of car use and the *intention* to buy a car in the future. Among these three, only the relationship between *symbolic motives* and *intention* was accepted, and the other two were rejected. The results from hypothesis testing mean that *habit* to use a car moderates only the relationship between *symbolic motives* and *intention* but the relationships between *instrumental motives* and *intention* and *affective motives* and *intention* are invariant across groups. Thus, for the persons with a strong habit, the influence of *symbolic motives* on *intention* diminishes, but for the persons that use frequently the car, the presence of *symbolic motives* determines to a greater extent the intention to buy a car.

Hypothesis 8 tested the moderating effect of *previous experience* on the relationship between *intention and behavioral estimation.* This hypothesis was only partially supported by data, since, although the *previous experience* impacted the examined relationship, the link between the two variables was not statistically significant, for the

persons with reduced *previous experience*. These results correspond to the suggestions of Ouellette and Wood (1998), who argue that including the *previous experience* into the models predicting future behavior would increase the model's predictive capacity.

Research objectives achievement

Objective 1 consisted of identifying in the literature some behavioral models relevant to the aim of the current study (integrative but with empirical applicability). This was accomplished by proposing the MOA model (Motivation-Opportunities-Abilities Model) as a conceptual framework that can guide the research design in the further stages.

The second objective was reached by identifying the model of the functions of material possessions, proposed by Dittmar (2008a), as a suitable conceptual framework for integrating the affective and symbolic functions of goods, along with the instrumental ones, which are usually used for research in behavioral decision.

Objective 3 referred to inserting within the integrative model the three types of motives of car use, so that it accounts for their influence. At this stage, the current study proposed an adaptation of the MOA model, including the three types of motives: instrumental, symbolic and affective, as proposed by Dittmar (2008a).

The fourth objective has consisted of building the hypothetical relationships among the operationalized constructs of the integrative model, based on an extensive literature research related to each construct and taking into account the findings of previous research.

The fifth objective referred to the development of valid measurement scales, adapted to the research context, for each of the constructs of the model. The objective was reached through several stages of research that involved qualitative and quantitative methods, which had as a starting point the scales already available in the literature. The stages of scale development were guided by the recommendations of Churchill (1979).

Finally, the sixth objective consisted in testing the fit to the data for the proposed model, using structural equation modeling (SEM). For this purpose, AMOS program (Analysis of Moment Structures, 18.0) was used, and the investigation of the model fit referred both to the

measurement model and the structural model. Both types of models indicated an acceptable fit, and most of the hypotheses of the research were supported by data and accepted.

Theoretical contributions

The current study adopted the approach of the behavioral decision-making models, and has tested an adapted version of the MOA model proposed by Ölander and Thøgersen (1995), which on its turn is a development of the expectancy-value type of models. The adaptation of the MOA model, proposed herein, consists in a change in the antecedents of intention, so that it can account for the influence of the three types of motives on the studied behavior: instrumental, affective and symbolic motives. Thus, this study contributes to the empirical testing of the importance of non-instrumental factors on the buying behavior for consumers, in the specific case of the car. In addition, the inclusion in the same model the affective and symbolic factors, along with the instrumental ones, represents an attempt to reconcile the historical conflict between factors considered rational or irrational, with the aim to obtain a better understanding of consumer behavior.

Another theoretical contribution of this research refers to the inclusion of the constraints concept in determining the behavioral intention. The current study contributes to the existing literature concerning the constraints, as an indicator of the lack of opportunity (Hung & Petrick, 2012; Jackson, Crawford, & Godbey, 1993; Nadirova & Jackson, 2000), and the findings in this study show they have a significant and important influence in on intentions.

Although specific self-efficacy has been already used in modeling the behavioral choice, testing its influence in the context of buying a car is a novelty, important because of the impact of such a decision, on the short and on the long term, thus, consumer abilities, illustrated by self-efficacy do influence the decision.

Finally, another theoretical contribution is represented by the inclusion of the previous experience in modeling the future behavior and the finding that this variable intervenes in a significant way on the relationships in the MOA model. The findings of this research show that including previous experience in the model enhances the link

between intention and behavioral estimation, but only for those who have several experiences, but shows no link between these variables for people with single or no buying experience. In other words, intention isn't the antecedent of behavioral estimation in the case of little experience, but other factors. As a consequence, the current study supports empirically the suggestions of Ouellette and Wood (1998) or Conner and Armitage (1998), that previous experience contributes significantly to the prediction of future behavior and it is a construct that must be included in models aimed to understand and predict consumer behavior.

Managerial contributions

The statistically significant relationships of the three types of motives for car use on the intention to buy a car in the future involves that the purpose for which the consumers use their cars determines their propensity to buy or not a car in the future. These findings signify that promoting the car for symbolic reasons will lead to a great extent to form the intention to buy a car, yet the promotional message should not focus too much on instrumental or affective aspects.

The current study shows that constraints have an important negative impact in the decision to buy a car and that they are the biggest predictor of intention. Thus, professionals in marketing should conceive the products and the associated services to the car in a way that could reduce these constraints, which firstly need to be understood through the dimensions of the general construct of constraints that have the biggest impact.

The finding that the moderator *previous experience* moderator has a significant influence on the relationship between intention and behavioral estimation of buying a car showed that it is enough for persons with experience to forma an intention to buy, in order to put in into practice. On the other hand, for persons with a lack of buying experience, the presence of an intention to buy does not lead automatically to buying. Thus, the recommendation for the sales representative is that for a client with experience it is enough to raise interest and prove the ease of buying in order for the purchase to happen. But, when the sales representative has in front a person who

only bought once or never, the effort to increase the intention to buy will not necessarily lead to actual purchase.

The inclusion of specific self-efficacy in the model involves the fact that the degree of self-confidence in relation to a buying task influences directly the probability to effectively buy. The increase of this specific self-efficacy of buying could be done by encouraging the observation experience, which could be put into practice through fan-clubs and other forms of association of car buyers. The online communication means and the digital social networks could contribute to sharing the buying experiences, and the car dealerships could take on the role of guiding less experienced persons to enroll in such consumer clubs, for more information.

Limitations of the research

- As the research context was represented by Romania, the results obtained here are limited to the population of this country, and further testing of the model could be necessary, in other research contexts, in order to generalize these results.
- Keeping in mind that the sampling strategy has been non-probabilistic, the results of the research are not representative for Romanian populations, but are valid only from the perspective of testing a theoretical model.
- Another limit of this study is that the pretesting of the questionnaire has been based only on qualitative methods (cognitive interviewing) and there hadn’t been a statistical testing on a sample different from the one used to testing the model.
- As well, it should be remarked that in this study the modeling of the consumer behavior was based only on the perspective of the persons that hold a driving license and the other members in the family, that may influence the final buying decision were not considered.

Recommendations for future research

A similar research could be conducted in order to identify the way in which the three types of motives influence the choice of a

certain brand or the degree to which the different options and characteristics of the car are reflected in these three functions.

A further investigation of the differences among the ways to conceptualize the motivation could contribute to the knowledge on the differences in the predictive capacity of the model. Comparing the measurement could also take into account the purpose for which the findings are used, more precisely whether they aim to measure only the increase of sales or the satisfaction obtained by the consumer specifically from the product and as a general improvement or his/her quality of life, as a consequence of such decision.

The study suggested, as well, that people with reduced previous experience in buying a car (never bought or did it only once) differ greatly from those with more experience on one important relationship in the MOA model, the link between intention and behavioral estimation. Thus, this group of low experience persons should be studies with more focus, as the antecedent of behavioral estimation isn't intention, but the determinants of the latter could be.

Nonetheless, conceiving opportunities as the lack of constraints could not be the only way to measure this influence, as the opportunity and the lack of constraints are not necessarily equivalent. Future research could identify a better way to operationalize opportunities, so that they could better reflect the performance of behavior that is triggered by an opportunity.

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