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## The Impact of Cognitive Learning on Consumer Behaviour

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### Abstract

This paper presents a descriptive and empirical elaboration of the importance of cognitive learning as a motivator of consumer behaviour. Commencing from the previous scientific knowledge related to cognitive learning as a complex mental process of forming opinions, attitudes, making decision for reacting either positively or negatively, etc, the main goal of this paper is to prove its impact on consumer behaviour. The field of research is the tourism business, while tourist consumers are the respondent sample (generally domestic) who have stayed in Ohrid. Through opinion polling of tourist consumers about the impact advertising has on the creation of their travel decision, directly, through their expressed judgment, a conclusion could be made about the importance of cognitive learning. The information obtained point out to the need of restructuring of advertising messages for reasons that the dominating factor for making a decision whether and where to travel lies in the consumer personality, in its structure to store knowledge and experience. The applied psychology finds scientifically founded methods and procedures on how to more reliably motivate and convince consumers to use products and services through cognitive learning. This paper makes a modest contribution not only in resolving the obstacles for attracting consumers in the tourism business, but to achieve higher credibility of suppliers as well.

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**Key words:** cognitive learning; consumers; behaviour; motivating factors; advertising and non-advertising factors.

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## 1. Introduction

Every business has the sales of its products or services and gaining the expected profit as the ultimate goal of its operation. Modern way of functioning understands consumer oriented organizations, where the consumer (buyer, client) is in the focus of all their activities. Such an approach requires thorough and an in-depth study of consumer behaviour. Why and how consumers make their decisions to behave in a certain manner, what motivates them, what attracts their attention, what retains their loyalty. The formation of the process of decision making is affected by a number of variables: the individual differences, environment and the psychological processes. These variables develop specific categories of impact, such as consumer resources (time, funds, abilities), motivation, knowledge, attitudes, culture, social class, family, personal influence, situation. The intensity of impact and the possibility of involvement of the said variable modalities depends on the psychological processes: **Information processing** – the ways information are found, transformed, reduced, elaborated, stored, arranged and obtained; **Learning** – change of behaviour as a result of gaining new knowledge and experience; **Change in opinion and attitudes** – perceiving the relation between objects, phenomena and events, the tendency to react either positively or negatively, as well as the consistency of the reactions in a given constellation of events.

Every consumer reacts depending on the stimulation intensity (satisfaction or dissatisfaction from the purchased product or service), in correlation with the mental mechanisms, i.e. processes.

Cognitive learning is a complex mental process of inclusion of all consumer mental activities in resolving the problem of purchasing certain products or services and resolution of the situation occurred. It involves learning of ideas, concepts, attitudes and reasoning abilities. Cognitive learning allows consumers to utilize the stored information (memory) for building new knowledge used for the current behaviour, or it stores it in the memory as additional information for future use.

The impact of cognitive learning is directly connected with decision making, while the probability that the brand has been remembered may considerably increase the chances of that brand being bought.<sup>†</sup> The purchased product or service which the individual remembers directly determines individual's future selection. In situations where consumers do not consider alternatives which are physically present and which are being offered to them, their assessment and decisions may completely depend on the previously remembered knowledge and experience.

Cognitive learning means storing short-term memory into a long-term memory. These two memory forms are the result of cognitive learning, thus the key factors for their establishment are **repetition** and **elaboration**.

Repetition involves mental recycling (processing) of information through the short-term memory which is identified with the process of thinking.

Elaboration determines the degree of integration between the current knowledge and the already existing knowledge. The quantity of elaboration depends on consumers' motivation and their learning ability. Elaboration allows acquiring and integrating of information into a stable, stored, knowledge within the frames of the long-term memory.

The consumer reaction depends on a number of factors, one of which is cognitive learning, which is considered as a key factor. It would be very beneficial for the companies to have available certain indicators for the possible expected (unexpected) consumer reaction (both active and potential). Consequently, a developed business means investing in scientific research of consumer behaviour, thus contributing to the mutual gains: accomplishing business goals, and satisfying consumer requirements. Sales of products and services at most favorable terms is the most sought goal, but this can only be

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<sup>†</sup> R.D. Blackwell, P.W. Miniard, J.F. Engel, *Consumer Behaviour*, Copyright by Thomson Corporation, 2006, p. 655.

reached through consumers who function guided by cognitive learning and memory cards which it creates.

Through opinion polling of tourist consumers (both active and potential) about the impact advertising has on the creation of their travel decision, directly, via their expressed judgment, this paper allows a conclusion to be made about cognitive learning, and about the degree of integration of the current knowledge and the already existing knowledge and experience.

The data obtained with the research should indicate to the need of either restructuring of advertising messages, i.e. it would be sufficient to allow tourist consumers conditions to tune to the existing advertising messages. Peter and Olson (J.P. Peter, J.C. Olson, 1999) point out to the basic forms of cognitive learning: I. Accretion, II. Tuning, and III. Restructuring.

Through description and comparison of a series of business environment examples, Peter and Olson demonstrate the marketing implications of cognitive learning. Marketers often present simple messages (information signs/marks) on their products, hoping that consumers will accept them just as they had wanted, and will only attach them to their structure of knowledge, i.e. memory. Is this, however, always successful? Modern marketing tries to stimulate and motivate consumers by tuning to their structure of knowledge and, if necessary, to find ways to restructure their existing knowledge and experience.

## 2. Methodology

Having into consideration the scientific knowledge, according to which cognitive learning leaves deep traces in the conscious in the form of long-term memory,<sup>‡</sup> and the possibility of such trace leaving is in a causal relationship with, among the other factors, motivation as well, the presented research commences from tourist consumer opinion about the motivational factors contributing to making their decision to travel.

The process of cognitive learning allows establishing of such a situation in tourist consumers which will direct their behaviour towards achieving specific goals, i.e. specific reactions desired by the suppliers of tourist products and services. In order for this to be achieved, suppliers are compelled to tune their advertising message (presented in various forms) in compliance with the needs and requirements of tourist consumers. Cognitive learning, however, will not develop in the desired direction unless suppliers make efforts to find out the true opinion about the quality of their offer, thus gaining knowledge about their own credit rating among the consumers of their products and services. The credit rating is in direct positive correlation with the trustworthiness of the offer, i.e. consumers' positive opinion and judgment.

In cases where the content of the offer is non-compliant with the primary attitudes (long-term memory) of tourist consumers, a situation of cognitive dissonance is created ("psychological discomfort"). Reducing the psychological situation of indecisiveness is in the hands of the highly-skilled, scientifically founded, marketing strategy in order to avoid unfavourable communication with the consumers.

The hypothetical framework of the research takes into consideration the possibility of proving the mutually dependant relationship between tourist consumer behaviour and cognitive learning by means of **the advertising messages built into the contents of film and TV stories/reports, the suggestions from travel agencies, the contents of travel folders and catalogues, as well as the appearance of the posters and advertising decorations of tourist offers.**

The second verifying step in the hypothetical framework is the existence of a mutually dependant relationship between tourist consumer behaviour and cognitive learning by means of **suggestions made**

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<sup>‡</sup> D.G. Mick, Levels of Subjective Comprehension in Advertising Processing and their Relations to Ad Perception, Attitudes and Memory, *Journal of Consumer Research*, 18. March, 1992, pp.411-424.

by friends and relatives, as well as the personal interests and desires, which are, at the same time, independent and intervening variables.

Such a hypothetical framework allows tourist offers (presented through several forms of advertising action) to have a dual role in the research: as independent variables, and as intervening variables.

Consumer behaviour is a dependant variable which, at the same time, depicts the degree of established cognitive learning about the tourist possibilities for given destinations. Providing indicators that would indicate to the existence, i.e. to the non-existence of mutual impact of the variables, has been carried out by developing a Scale of Judgments. The scale is of the graphical and numerical type, with several modalities of responses, from 1 to 4, in order to observe the opinion of tourist consumers about the primary impact of tourist offers for motivating their consumer behaviour. A conclusion may consequently be drawn about the motivating power of the offer, devised through various advertising forms, over cognitive learning, and thereby on the primary motivating factors as well.

Applying the Scale of Judgments has been carried out in both group, and individual manner, with detailed instructions as to the way of giving the responses, on 400 randomly selected respondents, in the period spring – summer, 2010.. The descriptive power of the questions was checked through a probing test, which proved not only their logical and psychological strategy, but also their proper semantic and syntactic arrangement.

### 3. Results

The basic method of this research was the causal one, by applying the quantitative and qualitative expressions to the studied events and **parameters**. The results have been analyzed by crossing the independent and dependent variables. In this way, systematization and verification of the set hypotheses was made. As the results obtained from the statistical processing have attributive characteristics, they are presented either as structure series, which show the arrangement of the statistical groups based on the values obtained, or based on the modalities. Having into account the attributive features of the results obtained, the following statistical procedures were used: establishing the realized (empirical) frequency, establishing the theoretical (empirical) frequency, calculating the chi-square ( $\chi^2$ ), establishing the correlation – contingency coefficient ( $c$ ), and an evaluation of the significance level ( $p$ ).

The results obtained, i.e. the values of the chi-square, suggest to the existence of significant differences in the opinion represented by the respondents in respect to the impact of the advertising motivational factors and the non-advertising motivational factors (Table 1):

Table 1: Matrix of measures for the opinion represented by the respondents

Motivating factors for cognitive learning	$\chi^2$	$c$	Level of significance $p$
Film and TV stories/reports content	6.66	0.13	*
Suggestions from travel agencies	12.20	0.17	**
Travel folders and catalogues	3.88	0.09	
Posters and advertising decorations	6.02	0.12	*
Suggestions from friends and relatives	2.88	0.08	
Personal knowledge	1.26	0.05	

\*\*  $p$  significant at level 0.01  
 \*  $p$  significant at level 0.05

The values presented show that the contingency coefficients are of low values, meaning that there is no strong connection between the three response modalities: strongest impact, moderate impact and no impact. These are clearly differentiated according to the frequency of responses, (Figure 1):

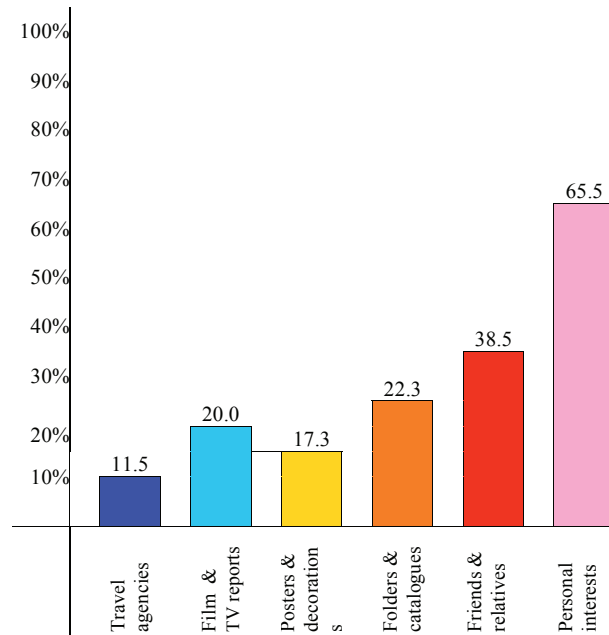
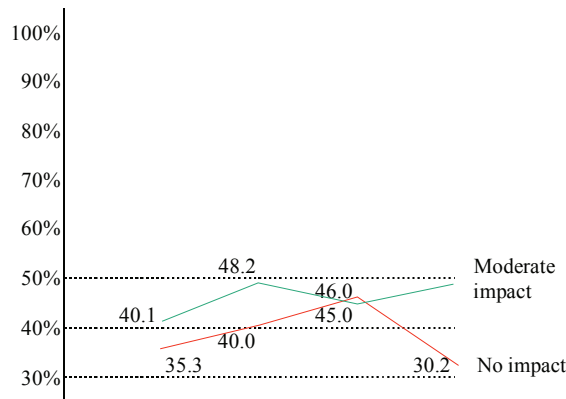


Figure 1: Frequency of responses

In respect to advertisements (tourist offer with an intent) as motivating factors, the attributive category **moderate impact** dominates among the respondents, with a curved-line connection of the response categories, (Figure 2), while the non-advertising factors are dominated by the attributive category **strongest impact**, with a straight-line connection of responses, (Figure 3):



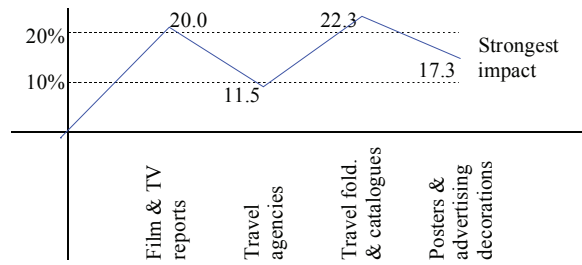


Figure 2: Curved-line connection of response categories for the advertising factors

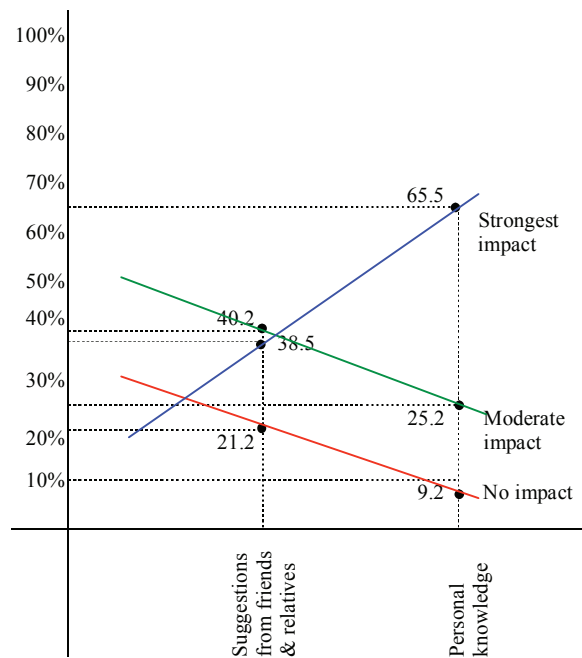


Figure 3: Straight-line connection of response categories for the advertising factors

The results obtained suggest to a high percentage of positive opinion of the respondents in respect to the importance of non-advertising motivating factors for cognitive learning: Strongest impact, with average values of 65.5%, are attributed to **personal interests**, 38.5% consider that the strongest is the impact of **suggestions from friends and relatives**. There are significant differences in opinion among the respondents in respect to advertising factors, where 22.3 of the responses about the strongest impact relate to the **travel folders and catalogues**, 17.3% relate to the **appearance of posters and advertising decorations**, 20.00% relate to the **film and TV stories/reports content**, while 11.5% relate to the **suggestions from travel agencies**. The percentages suggest to the existence of higher confidence in the personal knowledge and experience of tourist consumers, and in the transferred knowledge and experience of friends and relatives. This only verifies the hypothesis for the existence of a mutually dependent relationship between tourist consumer behaviour and cognitive learning arising from their own knowledge and experience and from suggestions from friends and relatives.

The domination, on the other hand, of the category of responses **moderate impact** for the advertising messages incorporated into the said forms of action, as well as the low values of correlation between the response modalities, suggests to the non-existence of a satisfactory level of cognitive learning which would to a considerable degree motivate the behaviour of tourist consumers. The hypothesis could not be fully verified.

#### 4. Conclusion

The importance of cognitive learning as a motivator of consumer behaviour, which is beneficial for contemporary businesses interested in finding efficient pathways for profitable sales of their products and services, is being increasingly studied in the scientific institutions. Through the carried out research of the opinion of tourist consumers about the impact of cognitive learning in making decisions to travel, this paper suggests to the existence of greater motivating power of personal knowledge and experience as compared to the intentional advertisements and marketing strategies. This is, of course, a straightforward research which could be expanded into a complex project. In any case, it is a valid indicator that experts engaged on creating marketing strategies should deepen and adapt their creations to meet consumer requirements.

The impact of cognitive learning is directly connected with decision making, and the probability that the brand, and the honoured offer of products and services, to be remembered, may considerably increase the chances for these to be bought by the consumers.

Consumer behaviour must not be reduced to sensual reaction, but it should rather be seen as a complex mutual action of emotions, motives and perceptions forming the cognitive learning that stores knowledge in the form of deep memory traces.

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