## STATISTIC AND ECONOMETRIC ANALYSIS OF THE MOTIVATIONL FACTORS ON TURISTC BEHAVOUR

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The paper present the main customer reasons for the choice to practice rural tourism activities.

The survey targeted focused on analysis and opinion on the situation of people at a time of rural tourism activity overall, assessed primarily through the prism Bucharest and working in stressful conditions and polluting unlike other urban residents. Following research attitudes of potential tourists, the information on rural tourism provide a basis for determining the starting level of service quality and diversity of this type of tourism, as a reference for the formation of competitive tour packages.

*Keywords: survey, nonparametric correlation, statistic assumptions,*  $\chi^2$  *test.* 

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#### 1. Introduction

Scientific research of the market is a creative approach to review current knowledge and prospective market argued based on the results obtained by investigating objective, rigorous and relevant to the phenomena and processes.

Market studies by results, not replace court decisions in the process of adopting them, but provide facts and objective evaluations and assumptions instead of intuition is thus a valuable aid in the clarification of decision problems, in that the decisions they take.

Selective Application of research study on preferences for tourism rural population interviewed in Bucharest entails defining community investigated as both consist of persons residing in Bucharest, and the passing of this town.

## 2. Issues concerning survey conducted in Bucharest, on attitude to potential tourists in terms of rural tourism

The process for conducting a survey shall be based on setting clear objectives and presenting them as relevant to the purposes pursued.

With the establishment of objectives and assumptions should trigger and the preparation and establishment of a rigorous program to allow possession of more real data, following a series of running complex operations.

Among the targets set in the identification of basic aspects outlined was aimed at identifying the main reasons for the choice to practice rural tourism activities. Setting goals of the survey take into account included in the sample, those persons who live or are passing through Bucharest and practice rural tourism.

Important in the survey is the place on the still, so it has been established through the points of interviewing subjects: Romexpo - which was conducted by the Tourism Fair, metro stations: Union Square, the People's Army, The Sudului, Aviatorilor, Gara de Nord, May 1, various

"points" in the set: Unirii Square, Camp Road, Bucur Obor, Television, The Roman, Gara de Nord (the stations of the vehicles jointly, near markets, public institutions or of large stores)

Period of ongoing research on selective preference for rural tourism Bucharest population was 15 days (during deployment Tourism Fair - Autumn 2008).

Conduct the proposed survey involves determining, after the manner of communication with the unit investigated, a questionnaire with 22 questions. They are presented to all subjects investigated in the same order and with the same forms, so, how to record the responses, is established and recording responses by the respondents.

As an essential element of the process of preparing the sample is simple random sampling method, which led to the establishment of a sample volume of 400 people.

The methodology for the application of selective investigation included testing of the questionnaire as an inseparable stage, pre-course survey itself. The process of testing the questionnaire is ensured by carrying out a pilot survey in which 100 questionnaires are completed the objectives if these pilot surveys concern the validation of all elements which will involve research.

One of the most suitable theoretical methods used in the survey for determining and measuring the correlations intensity form associations between qualitative and quantitative variables may be achieved by applying the method of  $\chi^2$  nonparametric correlation test.

Checking existence of an association between two variables by the method of nonparametric correlation test and measurement intensity, the crossing involves the following steps:

- specify the two basic assumptions of the test: null  $H_0$  and alternative  $H_1$ ;
- calculate the theoretical function  $f_t = \frac{\sum l \cdot \sum c}{T}$  (where l = line, c = column, T = total);
- determination of  $\chi^2$  calculated  $\chi^2 = \sum \frac{(f_e f_t)^2}{f_t}$  ( $f_e$  = empirical function);
- comparison of the calculated  $\chi^2$  with the theoretically  $\chi^2$  in order to establish the final decision;
- calculating the coefficient of association  $C_a = \sqrt{\frac{\chi^2}{n + \chi^2}}$  .

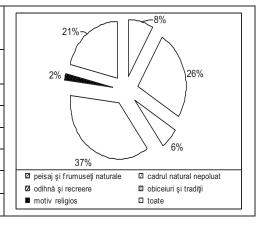
# 3. Statistic end econometric analysis methods of the motivational influence factors on the rural tourism behavior

Statistic and econometric analysis methods of the motivational influence factors on the rural tourism behavior take into account the presentation of the structural reasons people interviewed after practice this type of tourism.

The number of responses on reasons for the practice of rural tourism is an important element of research, as a starting point for analysis and interpretation of results, especially those based on the correlation method.

Graph 1 Number of persons interviewed and the group after their motivation

practice of rural tourism			
Motivation	Number of person	Structure (%)	
Landscapes and			
natural beauties	33	8.25	
natural unpolluted	102	25.50	
Leisure and Recreation	25	6.25	
Customs and traditions	148	37.00	
Religious	8	2.00	
All combined	84	21.00	
TOTAL	400	100	



The main reason who decided the choice of the type of rural tourism is the customs and traditions of the areas to which tourists are turning (37%) followed by the natural unpolluted by 25.5%, respectively, combined by 21%. Long-distance placed the desire to just admire the landscape and natural beauties (8.25%), the need for recreation (6.25%) or the religious duties which only 2%. The reason the practice of rural tourism is influenced by many factors, among which were noted in the study achieved only age and gender. In this context, to set the sample structure by age group, as follows:

Graph 2 Number of persons interviewed and their structure by age group

Group under	Number of person	Structure (%)	11,50% 5,50% 11,00% 15,00%
sub 25	44	11.00	
25-35	60	15.00	
35-45	98	24.50	
45-55	130	32.50	
55-65	46	11.50	24.520/
over 65	22	5.50	32,50% 24,50%
TOTAL	400	100	<b>2</b> Sub 25

Among respondents who have practiced rural tourism majority (32.5%) were aged 45-55 years. In descending order, the following two age groups 35-45 years 24.5% 25-35 years 15%. Weights of 11.5% and 11% are persons aged 55-65 years and under 25 years, for over 65 years to practice rural tourism in the proportion of only 5.5%.

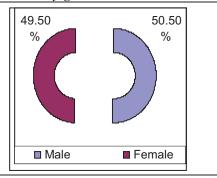
The second factor with significant influence on the motivations for establishing the practice of rural tourism is sex, whose structure is as in graph 3

The difference between the number of persons interviewed by gender is insignificant in the sense that they are also 4 men from the women's 198, which in relative value is 0.5% under these conditions share the male gender was 50.5%, while what women will return the remaining 49.5%.

As with tourism in general motivation or reasons for rural tourism travel include: need, impulse, intention, values and trends specific procedural nature, influenced by many factors.

Graph 3 Number of individuals and groups on their structure by gender

Groups	Number of person	Structure (%)
Male	202	50,5
Female	198	49,5
TOTAL	400	100



To highlight the influence of motivational factors on the behavior of the tourist population interviewed Bucharest, were established as a reference the two variables: age and gender, which have allowed the nonparametric correlation method.

Combination of reasons for the practice of rural tourism and age

Age influences the choice of the main reasons for the practice of rural tourism, as you know, in general, the older accept the most customs and traditions, and the young natural unpolluted. Checking existence of an association between the reasons for the practice of rural tourism and age by the method of  $\chi^2$  nonparametric correlation test, started to specify the two hypotheses (null  $H_0$  and alternative  $H_1$ ):

 $H_0$  - motivations for the practice of rural tourism does not depend on age tourists;

 $H_1$  - motivations for the practice of rural tourism tourists depend on age.

Theoretical calculation function ( $f_t$ ) allowed the determination of  $\chi^2$  calculated whose value was set as 279.02.

Determination of critical test (scales or theory) by taking the value of  $\chi^2_{n,x} = \chi^2_{(6-1)(6-1);0,05} = \chi^2_{25;0,05} = 37.65$  gives the possibility for the comparison with calculated value  $\chi^2_{calc.}$ . The comparison of the two values as  $\chi^2_{calculat} = 279,02 > \chi^2_{tab} = 37,65$  encouraged to obtain the conclusion that the reasons for the practice of rural tourism are significant age tourists.

The extent to which reasons are determined by age is indicated by the result obtained by calculation coefficient Association, whose 0641 value shows that this association is the average intensity.

### Combination of reasons for the practice of rural tourism and gender

Gender you can have it a significant influence on determining the reasons for leisure time practicing rural tourism, so this analysis can determine the combination and intensity of this link. Methodology of verification of a combination of reasons for the practice of rural tourism and gender as a result of applying the method of correlation nonparametric test, is the starting point for specifying all the two hypotheses (null and alternative):

 $\boldsymbol{H}_{0}$  - motivations for the practice of rural tourism does not depend on tourist gender;

 ${\cal H}_1$  - motivations for the practice of rural tourism tourists depend on gender.

The second stage methodological concerns theoretical calculation function ( $f_t$ ) test to determine calculated, whose value was set as 192.82.

Stage establish critical test (scales or theory) by taking the value of  $\chi^2_{\text{tab}} = \chi^2_{\text{n,x}} = \chi^2_{(l-1)(c-1);\alpha} = \chi^2_{(6-1)(2-1);0,05} = \chi^2_{5;0,05} = 11,07$  permit to continue the methodology by comparing the value calculated, so that:  $\chi$ 2calculat = 192.82>  $\chi$ 2tab = 11.07. Decision determined on the basis of this inequality leading to the conclusion that the reasons for the practice of rural tourism are significant sex tourists, a fact confirmed by the result of association coefficient whose value of 0.57 shows that this correlation is direct, the average intensity.

#### 4. Conclusions

Motivational factors play a particularly important role on the demand of tourist services. It is due on the one hand that tourist services, by their nature, nontransferable; on the other hand, because they are consumed in the same time they are produced. Moreover they involve moving consumer producer often over large distances. Therefore the image perceived by those who have benefited from such services and how it is transmitted has significant influence over the buying behavior of potential future consumers.

The journey becomes, therefore, a means of meeting the needs and desires. Course and achieve a purpose, "activities" that will be carried out there are ways of meeting the needs and desires only partially aware. A desire becomes aware of the need, under the influence of information. Motivation occurs when the individual wants to satisfy a need. The reason involves an action by a target that means to satisfy needs

Criteria of choice of destination, as connection between reasons and alternatives, are used to define more precisely the alternatives, the criteria are the result of previous experiences and reception of information from social or commercial, is continuously transforming.

### **References:**

- 1. Gogonea R-M Statistics. Theoretical basis for trade-applicative in tourism services, the University Publishing House, Bucharest, 2009.
- 2. Gogonea R-M, Zaharia M Econometrics with applications in the trade-tourism services, the University Publishing House, Bucharest, 2008.
- 3. Gogonea R-M-Statistic and econometric investigation methods and techniques of the tourist market, in order to establish current trends in the evolution of demand for tourism products, development of business tourism agency SCREZEDA TOURS LLC, research project with the business, no. contract: 56-25.03.2009
- 4. Zaharia M., Hapenciuc C., Gogonea R.M– Analysis of the Correlation Between the Existing Accommodation Capacity and the Number of Tourists Arrived in Suceava Country Structure of Tourist Reception, Tourism Review Nr.5/anul III/2008, p.43-48, ISSN 1844-2994