

STRATEGICAL APPROACHES IN EVOLUTION OF RISK PERCEPTION IN RELATION WITH SOCIO ENVIRONMENTAL FACTOR

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Abstract: This paper surveys the evolution of the risk perception related to the health in connection with socio environmental factors for the district of Constanța. The methodological approach is descriptive using triangulation concept. The quantitative component used a questionnaire validated in the CESAR-PHARE project. Here are showed the partial results of the first section. The maximum score were registered for the items related to health. The results are statistical significant different for those of the CESAR Project 1995.

Cuvinte cheie: percepția riscului, abordare cantitativă, factori de mediu fizic și social

Rezumat: Lucrarea și-a propus evaluarea percepției riscului pentru sănătate în relație cu factori de mediu fizic și social în populația Județului Constanța. Metodologia propusă este descriptivă, folosind triangulația. Componenta cantitativă utilizează un chestionar din proiectul CESAR-PHARE. Sunt prezentate rezultatele parțiale ale primei secțiuni. Scorul maxim a fost înregistrat pentru itemi vizând sănătatea. Rezultatele sunt diferite față de cele obținute în studiul CESAR din 1995 în România.

INTRODUCTION

Evaluation of risk perception related to some factors interesting for the lay people is only the first step to developed adequate interventions for risk communication. The background of getting a base line for general characteristics of the audience, mental models, source and way of communication, structure of messages for six central European countries was developed in the PHARE CESAR-Project funded by European Commission. The project being conducted during 1994-1997 in Bulgaria, the Czech Republic, Hungary, Poland, Romania and Slovakia in collaboration with the coordinating institutes in the Netherlands and the United Kingdom. The CESAR Project has three components being implemented simultaneously: Air Pollution and Respiratory Disease in Children, Quality Assurance and Control and Risk Perception and Communication study. The objectives of the Risk Perception and Communication study are as follows: to provide descriptive data on the environmental risk perception of different stakeholders and different communities; to determine belief and conception about risk, in general, and in particular how air pollution is viewed relative to other social and environment issues; to understand how the public and stake holders view responsibility for environmental risk management; to generate baseline descriptive data against which future survey might be compared: to capacity build in the participating countries for the integration of qualitative methodologies used in risk perception and communication research into risk management activities. During the quantitative epidemiologic study was developed and validated a questionnaire.

THE AIM OF THE STUDY

Purpose of study: Risk perception evaluation for socio environmental issues related to health in Constanta District.

General objectives: to identify the issues socio-environmental related with health.

- to identify the risks of the some environmental issues
- to identify unhealthy habits according to empirical date
- to identify the sources and channels with highest credibility

MATERIAL AND METHOD

The methodology propose will use the triangulation approach as the literature advise for risk perception study (Baban 2002)

For assuring external validity of the survey will be used the questionnaire developed during the CESAR Project. The baseline data had the same source. During the qualitative research was also used an interview guide which core sections were developed in 1994. The only main change of the questionnaire was to eliminate the section focusing on air pollution related to internal and external sources.

This paper describes some results of the quantitative study. There are empirical data of the population survey conducted for evaluation of the opinion. The instrument of research is self administrated questionnaire build by 27 questions: 10 close questions, 8 with scalar answers, 5 actuarial questions, and 2 half close question and 2 opened question.

The study population was made by a stratified sample for gender, age group, residence (urban/rural). The volume was calculated by the Taro-Yamane formula (used in health surveys).

The reference population was made by adults (more 18 years old) residents of Constanța District one year longer. Was calculated a sample of 1670 individuals. During the selection period 150 refused to be involved. in the study. At the end were included 1520 people which were invited to answer at the questionnaire at the level of GP practice (32 in rural area, 22 in urban area).

The field survey were conducted between October 2008 and may 2009. The cold season was preferred because the

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people are less occupied in touristic activities. After a letter of invitation which introduces the study, were distributed questionnaires (at locals GP practice).

RESULTS AND DISCUSSIONS

The amount of non-respondent was around 20% (291 people), it was appreciated as convenient regarding the difficulties related to fulfill the questionnaire and anyway lower than 27% given by CESAR Project in Romania. 9 questionnaires were excluded for misunderstandings. We obtain a final database made by 1220 questionnaires. During the statistical pathway were used descriptives, correlationals, and multivariate analysis.

For having data line for comparison we compute an average value of that obtained in CESAR Project in 4 districts (Maramureş, Târgu Mureş, Prahova, Argeş). Bucharest which was also site in that survey was excluded, being too specific. The compute value will be called Romanian "country value" (different from the real average which included Bucharest)

The distribution of respondents for gender and age group is shown in graph nr 1

The homogeneity between groups was tested and there are not statistical significant differences.

First question testing the perception is build of 22 items. The answers are scored on a Likert scale, between 1 = no interest to 5 maximum interest. The meaning of this question is to explore the general level of involving in proposed issues. The answers are shown in the table.

For 3 items was obtained more then 50% for score 5. All are measuring health (your own health, children's health, quality of medical services in Romania)

The difference between score 5 was tested with χ^2 ; the

results are statistical significant for level 5 for general items: "children's health". "own health", "quality of medical services in Romania", "quality of educational facilities in Constanța", "quality of houses", "heating during winter". The tendency of answers obtained in suggesting for giving attention to family and local level, the micro universe knowned in relation with past experiences, short term dimensions of life style, affected by cognitive biases, unrealistic optimism for "major" events (War, natural disastres, economic crisis, nuclear accident)

Figure no. 1. The distribution of the respondents on gender and age group

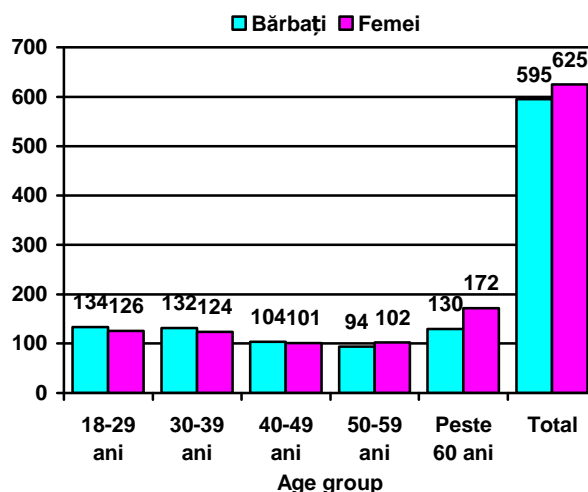


Table no. 1.

No. crt.	Interest subjects	Degree of interest				
		1	2	3	4	5
1.	AIDS	25,3	8,4	27,9	19,5	18,8
2.	Drug Abuse	26,9	10,3	5,6	21,2	16
3.	Însuficient heating during the winter	13,7	6,5	21,6	15	43
4.	Smoking	34,8	7,7	30,3	16,1	11
5.	Political rabblement	28,7	12,1	33,1	10,2	15,9
6.	Health	8,7	6,2	13,7	9,9	61,5
7.	Education's quality in Constance	14,8	9	14,2	13,5	48,4
8.	The quality of the living conditions	11,7	5,8	9,1	21,1	46,8
9.	The economical situation in Romania	13,6	5,8	16,2	26	38,3
10.	The environment status in Constance	12,2	9	14,1	26,9	37,8
11.	My children's health	12,7	2,5	13,3	5,1	66,5
12.	The environment's status in the world	16,4	5,3	21,1	20,4	36,8
13.	Unemployment	16	9,6	21,8	19,2	33,3
14.	The nuclear accidents risk	15	8,7	24,3	14,5	37,5
15.	The war's threatening	15,5	12,9	14,2	18,7	38,7
16.	The medical assistance's quality	13,6	5,2	14,9	14,9	51,3
17.	The public transport conditions in Constance	19,3	4,7	19,3	17,3	39,3
18.	Murder	17,3	13,5	32,7	16	20,5
19.	Road accidents	15,6	5,2	25,3	27,9	26
20.	Government's corruption	14,7	19,9	16	28,8	20,5
21.	Alcohol consumption	29,2	13,6	24	12,3	20,8
22.	Economic crisis in Romania	20,5	5,8	18,6	25,6	29,5

The IV decila is occupied by a mixture of major items: economic situation in Romania, environmental issues at global level, War, risk of nuclear accident, which are neighbours with few minor items such: local public transportation and unemployment. There is a statistical significant difference (χ^2 , 95%, $p = 0,0005$) between these results and those of CESAR surveys. The perception for major issues is diminished and we registered a growing of minor issues related to personal environment of living. The pattern surprise by extremely lower scores obtained by life style components (drug abuse, smoking, alcohol consumption, AIDS), items which agreed less than 20%. Once again we met the unrealistic optimism associated to the mental model of "it cannot happen to me", also lack of attention and preoccupation. Same attitude and lack of understanding the real meanings of issues is shown for major items as "economic crisis in Romania", "corruption at the governmental level". We gave a special attention analyse the issues which obtain the lowest score, as average value and expressed as proportion of option for 5. These issues are drug abuse and political troubles. Despite the type, first is minor issue and the second is major issue we compared the distribution of the scores, there is no significant statistical difference manifested between (χ^2 $p = 0,0891$). Meanwhile the lower scores issues manifested the same tendency of the group to be involved at meanings related to individual, personal level, to neglected the community level. Those results are similar with those of CESAR survey, the lowest items keeping the hierarchy.

CONCLUSIONS

Conclusions are suggesting for defining the population being interested for personal issues, related to own family, short time subjects. It is also affected by cognitive biases (unrealistic optimism) and lay mental models "of the hazard".

The followers questions focus on major items of the question 3 (we described here), the final analysis will be able to develop "the profile" to be centred in the communication strategy.

The impact of risk communication depends upon a complex interaction between the characteristics of the audience, the source of the message and its content. Audience perception of risk is influenced by demographic factors (age, gender), personality profile, past experience and ideological orientation. It is also affected by cognitive biases (unrealistic optimism) and lay "mental models" of faith (or hazard)

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