

EVALUATION OF THE RESPONSE OF A QUESTIONNAIRE STUDY BY USING THE GIS AND STANDARD STATISTICAL METHODS

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SUMMARY

This study is a part of a larger project Nr. NJ 6139-3 funded by the Grant Agency of the Czech Ministry of Health. The aim of the paper was to analyse the response rate using standard statistical methods and the Geographical Information System (GIS); to indicate differences in the response by sex, age, education, and employment; to determine the breakpoint for the collection of questionnaires according to which we can estimate the total response rate; to indicate whether the study sample was representative enough to generalize the project results. The additional aim of the paper was to collect those background literary sources dealing with the response rate as a methodological paradigm.

The statistical and GIS analysis were based on comparison of the total population data (Census 2001), the study sample and the sample of the completed questionnaires data in the 23 districts of the city of Ostrava. The information from the data collection was derived from the date of receipt for each questionnaire. The literature sources were obtained from the Internet - in total 228 papers from the period since 1986 to the present have been checked.

The main results of this study are: the GIS analysis was confirmed in all stages by standard statistical methods - it can therefore be used as a valid tool for quick orientation in data and for the comparison of a study sample with the general population; we did not find significant differences in the course of the collection of the questionnaires between sex, age, education, and the employment of respondents; it can be seen that the breakpoint according to which we can estimate the total response rate, is the 10th day after the questionnaires are distributed by post (75% of the questionnaires collected); our sample is representative enough from the geographical point of view. More detailed information about the whole project and results already published or presented are available on the following web site: www.zuova.cz/projekty/ses/php

Key words: response-rate, GIS, course of response

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