

INDICATORS OF THE QUALITY OF LIFE IN THE SOUTH MORAVIAN REGION ACCORDING TO THE SELECTED METHODOLOGY

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ABSTRACT

The submitted paper is devoted to exploring quality of life at NUTS 4 level in the South Moravian Region. The quality of life is influenced by natural, social and cultural conditions, as well as economic and political situation in the territory, health, environment, education, leisure activities of residents and their daily program, but also the security of the area or quality of service. For the analysis of the material the method was used, which used the three-stage so called Index of living conditions. Complete data available for all districts are in the range of the years 2006 – 2010. The results of the analysis allow us to evaluate the living conditions in the districts of South Moravian Region, both overall and in terms of specific characteristics. In the overall outcome of average quality of life index in the years 2006 - 2010 the districts were lined up as following: Brno - country, Břeclav, Vyškov, Blansko, Znojmo , Brno - city and Hodonín.

Key words: districts, index of living conditions, quality of life index, South Moravian Region

INTRODUCTION

The quality of life represents (hereinafter QOL) a broad and not clearly definable concept, which is currently paid relatively much attention, and which is the subject of qualitative and quantitative research of many scientific disciplines. The quality of life can be defined in many aspects, but generally accepted definition or a clear understanding of this concept does not exist (Heřmanová, 2012). The content of individual definitions is significantly related to the field of science that deals with the investigation of this phenomenon, to the objectives of the given research, and to the author's approach to this issue. Everyone's life is affected by specific conditions that occur in the territory in which the individual lives. These factors affect on how good life can be in a given area to live (Petrůj, 2008). The quality of life is influenced by natural, social and cultural conditions, as well as economic and political situation in the territory, health, environment, education, leisure activities of residents and their daily program, but also the security of the area or quality of service. We can say that certain conditions in the area affect people either positively or negatively. The quality of life can be measured by a variety of methods, which can involve both the subjective and the objective aspects of quality of life. Subjective evaluation of quality of life is focused on the overall human satisfaction with his life, in relation to his personal goals, expectations, interests, values and lifestyle (Hnilicová, 2004). Measuring subjective component of quality of life is more difficult than measuring the objective one, as each person has his/her own concept of quality of life. Objective approach to evaluation is focused primarily on specific, usually measurable welfare and on the reached standard of living of an individual or population (Heřmanová, 2012). To measure the objective aspects of quality of life the so-called quality of life indicators as quality of life are used, because the quality of life as such cannot be measured directly. Appropriately selected indicators then allow to determine the status and trends of the development, to transmit the summary information about the environmental, demographic, social, economic and other phenomena, at local, regional, national and international level (Svobodová, 2008). The submitted paper is devoted to exploring QOL at NUTS 4 level in the South Moravian Region. In terms of spatial level of the territorial NUTS 2-4 units QOL research is being conducted on a more general level than in the case of micro-regional and local levels, where you can carry out both the QOL objective and the subjective QOL analysis without any major problems with high-quality, unbiased and unrepresentative results (Heřmanová, 2012). At the level of NUTS 2-4 units rather objective QOL researcher prevails, as it seeks to QOL assessment in larger social units or the larger number of individuals (Heřmanová, 2012). Subsequent paper thus deals with a comparison of objective QOL researches in the South Moravian Region in the Blansko, Brno – city, Brno -country, Břeclav, Hodonín, Vyškov and Znojmo districts. For the analysis of the material the method according to Petrůj (2008) was used, who used the three-stage so called Index of living conditions (hereinafter ILC), which is composed of three sub-indices, and each of them contains four basic indicators. Selection of the indicators for this analysis was mainly influenced by the availability of data for individual districts and partially therefore it differs from the indicators used by Petrůj (2008). Complete data available for all districts are in the range of the years 2006 - 2010.

MATERIAL AND METHODS

ILC by Petrůj (2008) contains 12 indicators, which are divided into three sub-indices - Index of economic conditions, Index of environmental conditions and Index of social conditions.

Tab. 1 Index of living conditions structure

Index of living conditions	
Index of economic conditions	Registered unemployment rate (%)
	Applicants for 1 vacancy
	Number of registered economic subjects per 1000 inhabitants
	Total number of expired economic subjects
Index of environmental conditions	NO _x REZZO 1 – 3 emissions per year (t/km ²)
	SO ₂ REZZO 1 – 3 emissions per year (t/km ²)
	Share of the acreage of small-scaled protected areas (%)
	Investments into the environment (in thousand Kč)
Index of social conditions	Age index
	Crude mortality rate
	Number of physicians per 1000 inhabitants
	Total number of detected criminal acts

Source: Comparison of living conditions in the regions of the Czech Republic (Petrůj, 2008), own construction

Individual indicators are further converted to a dimensionless number between $< 0, 1 >$ interval according to formula: a) if with the increasing value of the indicator X_i the quality of life improves

$$I_{xi} = (X_i - X_{min} / X_{max} - X_{min}),$$

b) if with the increasing value of the indicator X_i quality of life decreases

$$I_{xi} = (X_{max} - X_i / X_{max} - X_{min}).$$

I_{xi} – final dimensionless number, X_i – chosen indicator, X_{max} , X_{min} – maximum and minimum values of the indicator X from a given set of indicators.

As a result, the value of 0.00 expresses least favorable conditions regarding the quality of life. The value of 1.00 indicates the most favorable conditions in the evaluation of quality of life. Using this approach the districts can be arranged according to reached indicator values in a given year in relation to (relatively) to other districts (Petrůj, 2008). Individual sub-indices are calculated as arithmetic averages of the indicators and the overall ILC is the arithmetic average of all sub-indices (Heřmanová, 2012).

RESULTS AND DISCUSSION

The results of the analysis allow us to evaluate the living conditions in the districts of South Moravian Region, both overall and in terms of specific characteristics. The following ranking of districts is lined up always from the best conditions to the worst ones. In the overall outcome of average quality of life index in the years 2006 - 2010 the districts lined up as following: Brno - country, Břeclav, Vyškov, Blansko, Znojmo, Brno - city and Hodonín. Based on the average level

of the Index of economic conditions in the period 2006 - 2010 district the lining up of the districts looked like following: Brno - country, Vyškov, Brno - city, Blansko, Břeclav, Znojmo and Hodonín. According to the average level of the Index of environmental conditions in the period 2006 - 2010 was linking up of the districts: Břeclav, Brno - country, Blansko, Vyškov, Brno - city, Znojmo and Hodonín. Average value index of social conditions in the period 2006 - 2010 lined districts as follows: Brno - country, Breclav, Vyškov, Znojmo, Blansko, Hodonín and Brno - city.

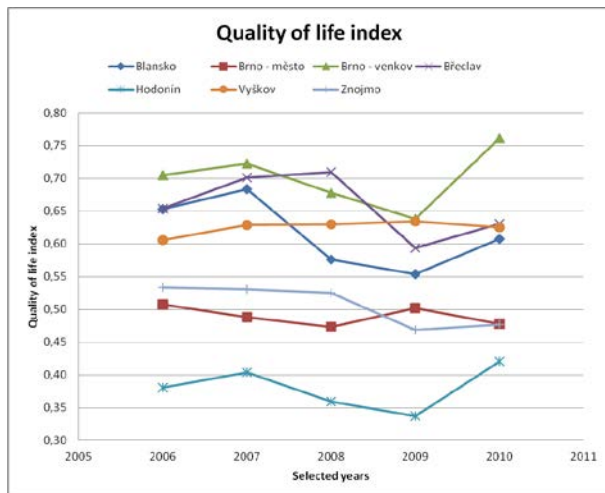


Fig. 1 Development of quality of life index in the selected areas - Source: own construction

Tab. 2 Index of living conditions in 2010

Index of living conditions in 2010							
District	Blansko	Brno - city	Brno - country	Břeclav	Hodonín	Vyškov	Znojmo
Value	0,61	0,48	0,76	0,63	0,42	0,63	0,48
Order	4.	5.	1.	2.	7.	3.	6.

Source: own construction

The results of the analysis of the data available for 2010, we can summarize as follows: in terms of evaluation of the three areas of quality of life the Brno – country district won. On the contrary the worst situation was in the Hodonín district. District with the most favorable economic conditions is the Brno – city district, the situation was less favorable in the Hodonín district. In terms of environmental conditions the best choice is the Brno – country district and the worst the Brno city district. District with the most favorable social situation is the Břeclav district and the worst the Brno – city district.

CONCLUSIONS

Results of the QOL index showed interesting results that allow evaluating the living conditions in the South Moravian Region's districts. Analyses carried out helped to describe the situation that prevails between the two districts, more accurately. A major problem, however, was the lack of complete data at the district levels, which also very influenced the choice of indicators for each sub-indicator. Some fairly important statistics for an objective assessment of quality of life are not kept at all or the data in them are no longer very up-to-date. Perhaps the best conditions in terms of choice and evaluation of available data prevail at the regional level.

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