



HOLISTIC AND SUSTAINABLE QUALITY OF LIFE Conceptualization and Application

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Received: January 14, 2020 | Revised: February 24, 2020 | Accepted: March 1, 2020
Paper No. 20-62/1-550

Abstract

In the article we focused on incorporating sustainability into the concept of quality of life in response to the current accelerating environmental problems. Quality of life is understood holistically as a link between the personal or subjective dimension with a geographic dimension or objective, expressed in terms of quality of place. Two goals were formulated in the article. The first is to analyze the possibility of including sustainability in the concept of holistic quality of life. It includes an answer to the question of which lifestyle - hedonistic or eudaimonic is sustainable. The second goal, closely related to the first, is to explore the spatial differentiation of holistic quality of life in districts of the Czech Republic. In the theoretical part of article, we explore quality of life, holistic quality of life and sustainable quality of life. In the empirical part we measure both dimensions of holistic quality of life in the form of satisfaction with life and satisfaction with the place in districts of the Czech Republic. The data were obtained by face-to-face interviews so that all districts were proportionally represented in terms of population. The informative value of such measurements, based on correlations, is high, much higher than the measurement of place quality in the form of set indicators. The value of the correlation between life satisfaction and place satisfaction according to the verbal evaluation of the correlation values is medium high.

Key words

Quality of life, holistic quality of life, quality of place, sustainable of quality of life, districts of the Czech Republic.

INTRODUCTION

Over the last period, in the study of quality of life, interest in the holistic approach to the quality of life has been increasing, usually expressed by its conceptualization (Veenhoven 2000, 2016; Phillips, 2006; Murgaš, 2016). At the same time, over the past few months, we have witnessed a paradigmatic change in terms of climate change, or in a broader sense, on environmental issues. These problems have moved from the academic sphere to the public sphere. Comprehensive warnings about the impacts of climate change on contemporary life are being formulated.

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In relation to quality of life, the outlined development raises sustainability as a primary requirement.

Improving the quality of life in developed countries, linked to a long period of economic growth, is coming to an end, and the effort to improve quality of life is likely to be replaced by an effort to maintain the current quality of life. In the article we focused on incorporating sustainability into the concept of quality of life and applying measurement of such a holistic quality of life in districts of the Czech Republic.

Vedou, ktorá je zameraná na explore ako kvalita života vzniká, resp. čo ju nasycuje je psychológia. V psychológii as with all new concepts, there is terminological inconsistency in this new field on the border of psychology and sustainability. Therefore, in addition to the term 'psychology of sustainability' we can also come across the term 'environmental psychology' (Pol et al. 2017). Attention is paid to the relationship between sustainability and quality of life or similar phenomena of well-being, happiness etc. (Chiras, Corson 1997; Moser 2009), some authors associate them into one term "quality and sustainability of life" (Mederly et al. 2003; Vonk 2011). One of the main sustainability factors is land use (Boltížiar et al. 2016; Izakovičová, 2000; Jedlička et al. 2019; Karlík et al. 2018; Kubinský et al. 2015; Lieskovský et al. 2018; Muchová, 2019; Olah 2003; Olah, Žigrai 2004; Petrovič, Muchová 2013; Slámová, Belčáková 2019; Tárníková, Muchová 2018).

We have two goals in the article. The first is to verify the possibility of including sustainability in the concept of holistic quality of life, including answering to the question of which way of life - hedonistic resp. eudaimonic is sustainable. The second goal, closely related to the first, is to explore the spatial differentiation of holistic quality of life in districts of the Czech Republic. Based on the above statements, we hypothesize: Sustainability can be a part of the concept of the quality of life.

This article has two parts. In the first, theoretical part, we outline the key concepts focused on quality of life, holistic quality of life and quality of place. In the second, empirical part, we will measure the quality of life at the geographical level in the districts of the Czech Republic, describing data, methods and findings. In discussion we explore the validity or invalidity of the hypothesis and whether we met objectives.

THEORETICAL FRAMEWORK

Quality of life

Exploring the quality of life (or the phenomena with which it is identified, such as well-being, life satisfaction or happiness) has gained prominence in the social sciences in recent decades (Kroll, 2008). The interest in exploring the quality of life has been and is accompanied by an effort to bring knowledge applicable to 'policy and practice in the field' (Hughes et al., 1995). In this period, the quality of



life entered the public sphere and became part of government programs in many countries as well as programs of international organizations such as the UN or the European Union. The consequence of these processes is that the quality of life has become a vague term meaning anything. A large part of the population of developed countries lives in prosperity, and therefore researchers identify the quality of life with the life satisfaction that is called well-being. This identification was supported by a paradigmatic change in psychology in the form of the emergence and rapid spread of positive psychology. In addition to satisfaction with life, there is dissatisfaction called ill-being. Moreover, none of us lives in a vacuum but in a specific geographical environment. This affects life satisfaction through its facilities, the level of social pathology, the quality of the environment and aesthetic values. It should also be emphasised that the researchers' interest to explore quality of life was primarily in a quantitative form with the development of its epistemology lagging behind. One of the consequences of this development is the terminological chaos, so the quality of life is identified not only with well-being, satisfaction with life or happiness, but also with their various modifications, such as economic well-being, material well-being, mental well-being, objective well-being, physical well-being, psychological well-being, personal well-being, subjective well-being, well-being of nations, economy of happiness, objective happiness, or welfare. The solution to the problem of terminological chaos is to define the key terms.

In the sense of quality of life, we consider the cognitive assessment of how good an individual's life is. When one expresses himself on the quality of his life, he evaluates it. Assessment can be verbal or numerical, on a prescribed scale expressing the degree of satisfaction with life. Satisfaction with life that has achieved above-average value is referred to as wellbeing, life satisfaction, which reached below-average values (in other words, dissatisfaction) becomes ill-being (Murgaš, 2019). Satisfaction with life is a synonym for quality of life, not happiness. The reason for this finding is that happiness is an emotion, expressing affective evaluation of satisfaction with life. Happiness is a short-term emotional state of joy. From the fact that happiness is an emotion comes the knowledge that happiness forms an effective part of the quality of life. We define it as the highest achievable well-being. An individual has a quality of life all his life, happiness is his just an occasional part.

Most people in developed countries are happy with their lives, in the United States, according to Gallup, 86% of Americans are content with their lives (McCarthy, 2019). Scientists that explore quality of life respond to this by identifying well-being with quality of life. This is a simplification, as well-being is only one part of the subjective dimension of quality of life, the other is ill-being. Dichotomy well-being - ill-being is one of many dichotomies of quality of life. Another is the fact that on the one hand the quality of life is a complex multidimensional complex,



on the other it is the answer to a simple question: How are you? The answer can be verbal on the Likert scale or numerical on the Cantril scale.

The multidimensionality and complexity of the quality of life cannot be expressed by one indicator, but there is no consensus about optimum number or the way of their measurement. The optimal solution is to identify the smallest number of indicators with the greatest possible informative value. The effort to express the complexity of quality of life leads to its conceptualization, which is formulated especially by authors focused on healthy related quality of life (Cella 1994; Schalock 2004; Kaplan, Ries 2007) but also by authors dealing with quality of life generally (Veenhoven 2000, 2016; Phillips 2006; Jakubcová et al. 2016; Murgaš, Klobučník 2018; Murgaš 2019). Geographically, the quality of life is conceptualized and an overview of the authors dealing with it is presented by Murgaš (2016). From conceptualizations there is a general consensus on knowing the existence of two dimensions of quality of life, subjective, referred to as well-being and objective, referred to as quality of place. Complex quality of life is described by researchers as holistic quality of life. The article is focused on that.

The introduction of the concept of quality of life into the public space was due to politicians. In the 1960s US President Johnson announced the Great Society program with aim to improve the lives of Americans (Rapley, 2008). In Europe, German Chancellor Brandt in the early 1970s included improving the quality of life of German residents on his party's agenda (Murgaš, 2012). The interest in the quality of life in terms of the offer of its improvement has become part of the agenda of political parties in developed countries. Quality of life has thus become part of government programs in many countries, as well as programs of international organizations such as the UN or the European Union. Researchers responded to this demand by bringing knowledge applicable in policy and practice in the field (Hughes et al. 1995). The current achieved high level of satisfaction with life is not sustainable in the future, this is explicitly stated by the third Sustainability monitor of the Netherlands (2015), which urgently states the need for the formulation of sustainability of quality of life.

Holistic quality of life

The quality of life was described in previous text. Why is it necessary to deal with holistic quality of life? The need lies in the recognition that if researchers have the ambition to bring valid knowledge to the public and politicians in terms of decision-making information, this is then necessary. The difference between quality of life, respectively for what is being declared as such - most often well-being - and the holistic quality of life is that holistic means two-dimensional quality of life. The Quality of Life Research Unit, which is a part of the University of Toronto, came up with the 'Being, Belonging, becoming' quality of life model known as the Raphael



et al. In this model there are three dimensions to quality of life, each of which consists of three domains. According to the authors „The model is multidimensional and assumes that quality of life is holistic in nature“ (Quality of Life Research Unit, on line). The influence of both dimensions on the holistic quality of life is not the same; Lyubomirsky et al. (2005) analyzed it from the psychological point of view, Murgaš and Klobučník (2016b) explored it from the spatial point of view. Although the influence of the place in which one lives does not seem great at first sight, it is not negligible either.

System analysis and evaluation of quality of life factors affecting Faceted action system theory within metatheory framework can be considered as part of the creation of epistemology of quality of life (Shye, 2014a). Based on this meta-theory Shye (2014b) formulated The Systematic Quality of Life (SQOL) Model as a matrix of four subsystems: Personality, Physical, Social, and Cultural, and four modes: Expressive, Adaptive, Integrative, and Conservative. The SQOL model, as well as the familiar models of Allardt, Raphael et al., or Veenhoven, which is described by Murgaš (2019) are models of a holistic, two-dimensional quality of life. A holistic approach to quality of life is common in the written works that are focused on healthy related quality of life (Dossa 1989, Ventegodt et al. 2006, Kelley-Gillespie 2009, Bower et al. 2010, Carrieri et al. 2018, Werneburg et al. 2018). Therefore, it is surprising that a holistic approach to quality of life has not become significantly represented in the general quality of life.

Sustainability of quality of life

As we have already mentioned, the interest of researchers focused on quality of life in sustainability is obvious, as well as the interest of sustainability researchers in quality of life. In the last two decades, quality of life has begun to be classified within sustainable development as its fourth pillar. According to Ira and Huba (2007: 197) “Sustainable development has been redefined as a holistic concept of quality of life”. The natural consequence of this is the unification of approaches to the use of the term “quality and sustainability of life”. For the sake of completeness, it should be noted that only the eudaimonic quality of life in the sense of Aristotle is sustainable. Hedonic quality of life is not sustainable.

When we talk about the quality and sustainability of life, do we mean every life? Are all forms of contemporary human life sustainable? Aristotle divided the experience of human life into two basic types: hedonic and eudaimonic. This division is naturally simplistic, there are several transitional types, but we can accept it. At present, the level of life satisfaction is high in developed countries, especially in countries with a high quality of public policy. This is evidenced by almost all measurements by researchers, international organizations such as the UN or OECD and other entities such as The Economist or The Legatum Prosperity Institute.



The present high level of satisfaction with life has many hedonistic features. Is it sustainable in the future? It is not (Pol et al. 2017), even the third Sustainability monitor of the Netherlands (2015) states this explicitly. This implies the need to formulate sustainability of quality of life. In one of many definitions of sustainability, this is defined in relation to quality of life:

In one of many definitions of sustainability, this is defined in relation to quality of life: "Sustainability is a dynamic process which enables all people to realise their potential and improve quality of life in ways that simultaneously protect and enhance the Earth's life support system" (Forum for the Future, on line). *In the article, the sustainable quality of life is considered to be a quality of life that is not at the expense of future generations.* This implies that sustainability is not an indicator of (environmental or other) quality of life and therefore cannot be measured as an indicator. Sustainability is the goal of a quality of life and at the same time the path to this goal.

Quality of place

In the previous part of the article we focused on the need for a holistic approach to quality of life, meaning inclusion of its objective spatial dimension. The need for a geographical approach to quality of life is based on the recognition that quality of life always has a spatial dimension (Murgaš 2016). In this approach, the irreplaceable position of the ecological domain, respective ecological indicator when measuring quality of life, is accepted.

The characteristics of the physical environment in which people live their lives affect their quality of life (Pacione 1982), the same can be said about the social environment in which people live. Each individual has emotional ties to the physical environment, in which social relations are manifested but also our personal identity is rooted in (Kyle 2014). Raison d'être dealing with the quality of life by a geographer lies in focusing geography on a physical space that in reality takes the form of a place. The place is related to the phenomenon of good place (McCann 2004; Kyle 2014), which is a place of different hierarchical levels ranging from settlements to states. A place is good if it allows you to live a *good life* (Veenhoven 2014). An objective dimension focused on space some authors call the *quality of the place* (Trip 2007; Burton 2014; Murgaš and Klobučník 2016a). It can be defined as "*emotional and cognitive assessment of external, spatially differentiated material and immaterial conditions for the experience of good life*" (Murgaš 2016: 311). In exploring the spatial dimension of quality of life, emphasis is placed on the quality of life in regions (González et al. 2011; Murgaš and Klobučník 2016a) and in settlements (Ira, Andráško 2008; Biagi et al. 2018), while the quality of urban life is significantly superior to the quality of rural life (Murgaš 2016).



DATA AND METHODS

Satisfaction with life and quality of the place was evaluated in the Czech Republic, while the districts were considered as the place. The data was obtained by a personal questionnaire survey and survey via social networks ($N = 1,356$) from respondents over 18 years of age from all 77 districts of the Czech Republic so that it would meet the quota selection for the district quota (LAU 1). The investigation took place for period from June 2018 to March 2019. The number of respondents is based on the minimum number of respondents ($N = 10$) in each district and simultaneously on the minimum number of respondents in each region ($N = 70$). In districts with the smallest population, the number of respondents was higher than mathematically should be. For Prague with a population of 1.3 million, the number of questionnaires was arbitrarily set at 150.

In the questionnaire survey, respondents rated their satisfaction with life and the quality of the place on the Cantril's scale 0-10, where 0 represents the lowest value and 10 represents the highest value. Questions were formulated as follows:

- How satisfied are you with your life?
- How satisfied are you with the quality of the place you live in?

RESULTS AND DISCUSSION

The result of the questionnaire survey is the finding that the inhabitants of the Czech Republic are satisfied with their life on the Cantril's scale 0-10 at 7.38, with the place where they live, they are satisfied at 7.08.

The degree of correlation between life satisfaction variables and place quality is 0.41, according to the verbal correlation evaluation (de Vaus 2002), this correlation is moderately high. The values of satisfaction with life correspond to the values (Table 1) found by the Centre for Public Opinion Research at the Institute of Sociology of the Academy of Sciences of the Czech Republic (Spurný 2019) in period between June 2018 and March 2019.

Table 1 Life satisfaction from June 2018 to March 2019 in the Czech Republic as a percentage

Scale	2018					2019			average
	june	sept.	oct.	nov.	dec.	jan.	feb.	march	
very satisfied	17	17	16	15	17	15	18	15	16
satisfied	51	52	53	50	52	51	50	53	52
satis./dissat.	22	21	22	23	22	23	24	23	22
dissatisfied	9	9	8	10	8	10	7	8	9
very dissatisf.	1	1	1	2	1	1	1	1	1

Source: authors according Spurný (2019)



The following tables show the districts with the highest life satisfaction values (Table 2) and the lowest life satisfaction values (Table 3). The range between these values is 8.43 - 6.30.

Table 2 Districts with the highest life satisfaction in the quantile

Rank.	Districts	Value
1.	Cheb	8,43
2.	Břeclav	8,23
3.	Praha – východ	8,20
4.	Rychnov nad Kněžnou	8,18
5. - 6.	Hradec Králové, Jičín	8,10
7.	Kladno	8,05

Table 3 District with the lowest life satisfaction in the quantile

Rank.	Districts	Value
75.	Rakovník	6,40
76.	Jindřichův Hradec	6,36
77.	Tachov	6,30

The spatial structure of satisfaction with life in districts is shown in picture 1, based on the division of districts into quantiles. The fundamental statement is that in all districts of the Czech Republic, satisfaction with life is above average, so it takes the form of well-being. However, it is not easy to derive some regularity from spatial differentiation. Only three districts are in the first quantile with the lowest values (but above average in the absolute value). On the other hand, in the fifth quantile with the highest values, there are close to border districts but also districts

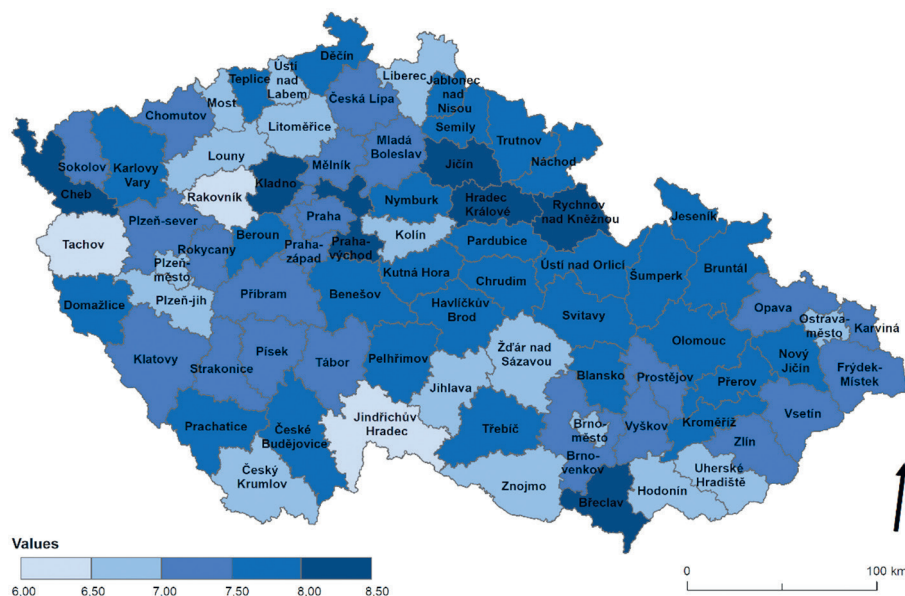


Figure 1

The average value of satisfaction with life in the districts of the Czech Republic



in the Prague agglomeration. There are no city districts in this quantile, and except from the Hradec Králové district, there are no districts with regional offices. The grouping of districts in this quantile in the form of an area can be talked about only in one case of the districts of Jičín, Hradec Králové and Rychnov nad Kněžnou.

The second component of holistic quality of life is the quality of the place. The following tables show the districts with the highest value of quality of place (Table 4) and the lowest value of quality of place (Table 5). The range between these values is 4.54 - 8.70, so it is larger, as it was the case with life satisfaction. Since there is only one district in the quantile with the highest value of quality of the place - Jičín, for better understanding of spatial differentiation I also mention the districts with the second highest values in the quantile.

Table 4 Districts in quantile with highest and second highest value of quality of place

Rank	Districts	Value
1.	Jičín	8,70
2.	Kroměříž	8,00
3.	Tábor	7,92
4.	Olomouc	7,85
5.	Praha	7,83

Table 5 Districts in quantile with the lowest and second lowest value of quality of place

Rank	Districts	Value
72.	Rakovník	6,00
73.	Jindřichův Hradec	5,91
74.	Tachov	5,70
75.	Česká Lípa	5,63
76.	Ústí nad Labem	5,13
77.	Most	4,54

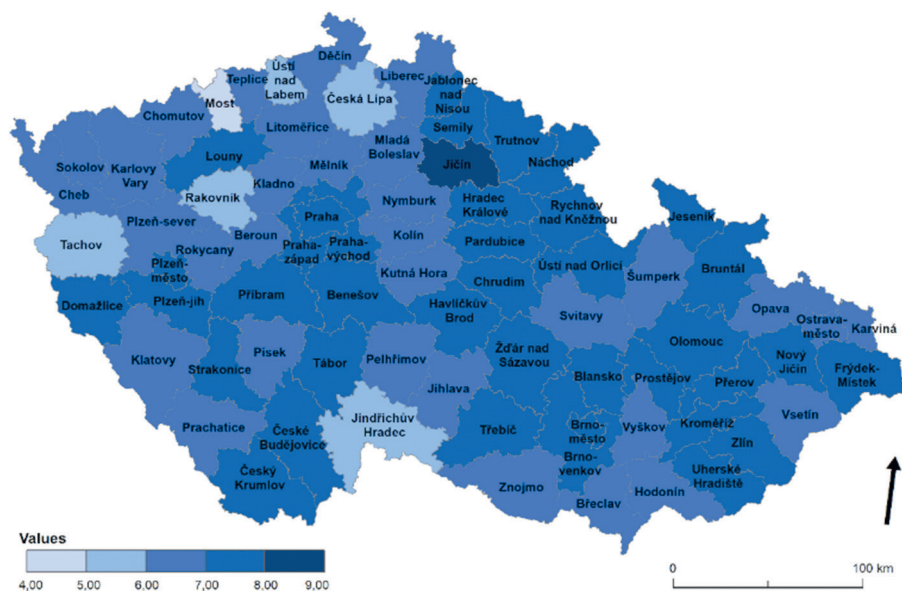


Figure 2

The average values of quality of place in the districts of Czech Republic (2019)



The comparison of the districts in quantiles with the highest and lowest values of satisfaction with life and quality of the place implies that in the case of districts with the highest values, the only district of Jičín is represented in both cases and in the case of the districts with the lowest only district of Jičín is represented in both cases and in the case of the districts with the lowest values, the district of Jindřichův Hradec is represented in both quantiles. Spatial differentiation of place quality in districts is shown in Fig. 2, also based on the division of districts into quantiles.

A holistic understanding of quality of life means evaluating both of its dimensions in one whole. Measuring holistic quality means adding up data from life satisfaction measurements and quality of place. Both dimension values were measured on a 0-10 scale, so theoretically, the holistic quality of life values could range from 0-20, in fact, the range was 11.3-16.8. This means that the holistic quality of life in the districts of the Czech Republic is above average good (Fig. 3).

Table 6 Districts in quantile with the highest value of holistic quality of life

Rank.	Districts	Value
1.	Jičín	16,80
2.	Rychnov nad Kněžnou	16,00
3. - 4.	Kroměříž	15,85
3. - 4.	Olomouc	15,85

Table 7 Districts in quantile with the lowest holistic quality of life

Rank.	Districts	Value
75.	Tachov	12,00
76.	Ústí nad Labem	11,73
77.	Most	11,31

In Table 6 we show the districts in quantile with the highest value of holistic quality of life. The Jičín District ranked first in quantiles with the highest value of life satisfaction (Table 2) and the quality of the place (Table 4).

The districts with the lowest holistic quality of life in quantile are in Table 7. Their location, especially in the districts of Ústí nad Labem and Most, was decided by very low values in the quality of the place.

When there are two dimensions of quality of life, it is natural to deal with their relationship.

It is not equal, life satisfaction is generally considered more important than the quality of the place (Rapley 2003), according to other opinions, the relationship of both domains is relatively independent (Allison et al. 1997). In the article, the weight was not given the dimensions, they are understood as equal. When both variables have the same weight, one would expect that the resulting holistic quality of life is equally influenced, but it is not. Pearson's correlation coefficient of life satisfaction and holistic quality of life is .77, the correlation of place quality and holistic quality of life is .88, meaning that quality of place affects the holistic quality of life more as life satisfaction.

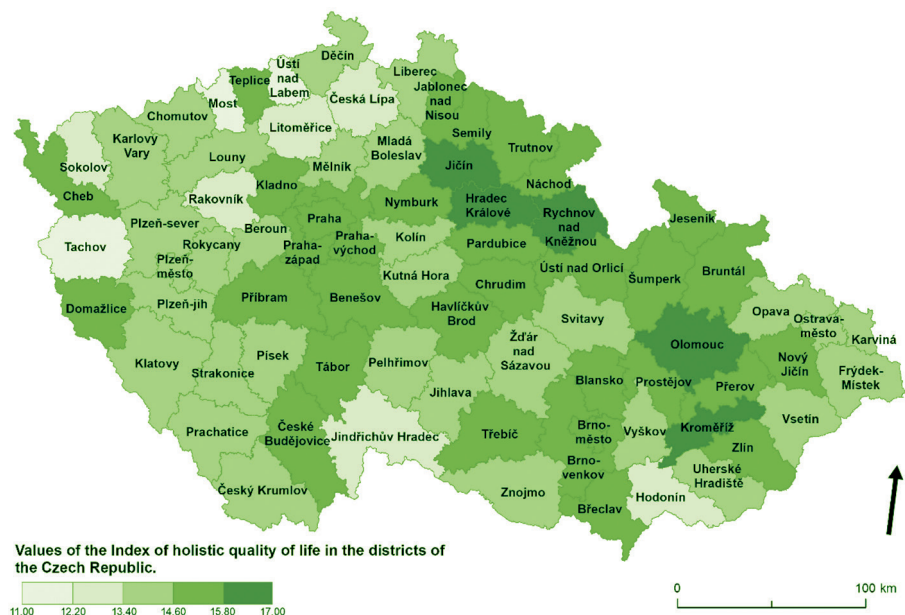


Figure 3

The Average values of the Index of holistic quality of life in districts of the Czech Republic

The following important conclusions come from the measurements:

- (i) life satisfaction and the quality of a place have different measured values, so life satisfaction cannot be identified with the quality of life,
- (ii) the level of satisfaction with the life of the Czech Republic population on the Cantril scale of 0-10 is high (7.38), the level of satisfaction with the place they live in is also high (7.08), only slightly lower than the level of life satisfaction,
- (iii) correlation coefficient between variables of life satisfaction and place quality is 0.41, according to the verbal correlation (de Vaus 2002), correlation is moderately high,
- (iv) from the analysis of spatial differentiation of holistic quality of life (Picture 3) shows that there is no regularity. There are five districts in quantile with the highest values, they are not urban districts, two out of five are districts with regional towns (Hradec Králové, Pardubice). The districts in quantile with the lowest values are three, the district of Tachov is a sparsely populated district with a small district town (less than 13,000 inhabitants), while the district of Ústí nad Labem is the district with a regional town with a population of 93,000 inhabitants.
- (v) Thus, the values of holistic quality of life do not correlate with the population or the meaning of the district city. The peculiarity that future research could focus on is the relatively large difference between the values of two neighboring districts in Eastern Moravia - Kroměříž (15.85) and Hodonín (13.04).



DISCUSSION

In the previous part of the article the holistic quality of life in an example of districts of the Czech Republic was described, the data for life satisfaction and quality of place was obtained by questionnaire survey. In the case of an objective dimension, this means satisfaction with the quality of the place. As we have already mentioned, Murgaš and Klobučník (2016a) dealt with municipalities and regions of the Czech Republic as good places to live. They used the values of 10 indicators as data, obtained from statistical sources and constituting „golden standard quality of life“. According to the authors „the essence of the golden standard of quality of life are quantifiable manifestations of the age-old archetypal human desire common to all people in human history: desire to live long in health, in family, surrounded by children and later grandchildren, to be educated, to have a meaningful job which is fulfilling and to be considered a good person, respectively to have a good reputation. The desire to live, to be healthy, to live in a functional family and have a job is expressed by indicators of their absence. Suicide is the final phase of the lack of will to live, mortality is the final phase of the absence of health, divorce is breaking of a family functioning, and unemployment is the absence of job“ (Murgaš, Klobučník 2016a: 555). A similar procedure when the quality of a place is a sum of variables obtained from statistical sources was used in the creation of the World Happiness Report (Helliwell et al. 2019). An approach where scientists or politicians tell people what life is good can be described as the ‘top down’ approach. Its essence is the belief that a high-quality place must match a high-quality life in special units (districts or states). Murgaš a Klobučník (2016b) dealt with the influence of the quality of place on the life satisfaction in districts of the Czech Republic. The quality of the place was measured by a set of ten indicators of the golden standard of quality of life whose values were obtained from statistical sources. The result of a comparison of life satisfaction and place quality is the Pearson correlation coefficient of -0.1183, which represents the low to very low correlation interface. In a particular form in 15 districts out of 77, life satisfaction was lower than the quality of the place, in 2 districts both values were the same, and in 60 districts, life satisfaction was higher than the quality of the place. It turned out that the assumption of “at a good quality place a life is of a good quality” does not apply in 78% of the districts of the Czech Republic. It is remarkable that people “were better off than they should” in the district of Most and other districts of the Ústí nad Labem and Karlovy Vary regions. At the same time, it was true that people were “the worse off than they should have” in the city district of Brno, where the quality of the place is the tenth best of all 6251 residences in the Czech Republic.

The article uses a bottom-up approach, in other words, the quality of a place is good when people consider it good. Numerically, the two approaches do not differ in the districts of the Czech Republic: in 17 districts the quality of the place



was higher than the satisfaction with life, in one district they were the same and in 59 districts the quality of the place was lower than the satisfaction with life. What is important, however, is that the Pearson correlation coefficient of life satisfaction and place quality in terms of satisfaction with it is 0.41, which is a medium-high correlation.

CONCLUSION

In the article we formulated two objectives.

The first concerned verifying the possibility of including sustainability in the concept of holistic quality of life, including the answer to the question of which way of life - hedonistic resp. eudaimonic is sustainable. We discovered that sustainability can be included in a holistically understood quality of life. However, sustainability is not an indicator and therefore cannot be measured. When asked if the quality of life is sustainable, the unequivocal answer is that sustainable is just a life lived eudaimonically. Today's hedonistic life is not sustainable. The second goal, closely related to the first, is to explore the spatial differentiation of holistic quality of life in districts of the Czech Republic. From the spatial analysis of holistically described quality of life the following important implications arise:

- Valid information necessary for both the public and the academic world will bring only holistic understanding of the quality of life, containing both its dimensions, satisfaction with life and the quality of the place.
- The acceptance of the claim that improving the quality of life is the primary objective of public policy is related to the need to approach the improvement of the quality of the place from the "bottom up" in the form of satisfaction with the quality of the individual population.

In this way, the quality of the place is correlated with life satisfaction.

- The quality of the place in terms of satisfaction with it correlates with the holistic quality of life more like satisfaction with life, this emphasizes the position of the quality of the place as the primary goal of public policy.

The analysis of the geographical approach to quality of life brings the following important findings:

- the need for a geographic approach to quality of life is essential because the quality of life always has a spatial dimension,
- geographic approach allows exploring the quality of life at all spatial size levels.
- The physical space that geographers are focused on can have a form of place in reality. A good place phenomenon is related to the place (McCann 2004; Kyle 2014). The place is good when its characteristics enable a good life experience (Veenhoven 2014).



In the next research, it would be appropriate to focus on two lines of enquiries. The first is repetition of the described procedure and thereby confirmation or refutation of its conclusions. In the event of confirmation of the conclusions, the next step should be the identification of indicators that contribute to the assessment of satisfaction with the place. The second line should be to create a minimum time series. Murgaš (2019) dealt with the development of quality of life in the years 2003-2015 in the regions of the Czech Republic based on data from the Centre for Public Opinion Research at the Institute of Sociology of the Academy of Sciences of the Czech Republic. He states that satisfaction with life in the period under review stagnated. The explanation of this fact the author sees in the validity of Easterlin's paradox and the influence of cultural-geographical characteristics of Czech society. Creating a time series at district level will enrich the exploration of the holistic quality of life and enhance its application character.

Acknowledgement

The authors thank two anonymous reviewers who have made a significant contribution to the quality of the article and support by project VEGA 1/0706/20.

REFERENCES

- ALLISON, P. J., LOCKER, D., FEINE, J. S. (1997). Quality of life: a dynamic construct. *Social Science and Medicine*, 45, 2, 221-230.
- BIAGI, B., LADU, M. G., MELEDDU, M. (2018). Urban Quality of Life and Capabilities: An Experimental Study. *Ecological Economics*, 150, 137-152. <https://doi.org/10.1016/j.ecolecon.2018.04.011>.
- BOLTIŽIAR, M. et al. (2016). Transformation of the Slovak cultural landscape and its recent trends. In Halada, Ľ., Bača, A., Boltižiar, M. eds. *Landscape and landscape ecology: proceedings of the 17th International Symposium on Landscape Ecology*. Proceedings. Bratislava (Institute of Landscape Ecology SAS), 57-67.
- BOWER, W. F., VLANTIS, A. C., CHUNG, T. M. L., VAN HASSELT, C. A., (2010). Mode of Treatment affect quality of life in head and neck cancer survivors: implications for holistic care. *Acta Oto-Laryngologica*, 130, 10, 1185-1192. DOI 10.3109/00016481003667366.
- BURTON, M. (2014). Quality of place. In A. C. Michalos (Ed.), *Encyclopaedia of quality of life and well-being research* (pp. 5212–5315). Dordrecht: Springer.
- CARRIERI, D., PECCATORI, F. A., BONIOLO, G. (2018). Supporting Supportive Care in Cancer: The ethical importance of promoting a holistic conception of quality of life. *Critical Reviews in Oncology Hematology*, 131, 90-95. DOI 10.1016/j.critrevonc.2018.09.002.



- CELLA, D. F. (1994). Quality of life: Concepts and definition. *Journal of Pain and Symptom Management*, 9, 3, 186-192. [https://doi.org/10.1016/0885-3924\(94\)90129-5](https://doi.org/10.1016/0885-3924(94)90129-5).
- CHIRAS, D. D., H. CORSON, W. H. (1997). Indicators of sustainability and quality of life: Translating vision into reality, *Journal of Environmental Science & Health Part C*, 15:1, 61-82, DOI: 10.1080/10590509709373490
- De VAUS, D. (2002). *Surveys in social research*. 5th edition. London: Routledge.
- DOSSA, P. A. (1989). Quality of life: individualism or holism? A critical review of the literature. *International Journal of Rehabilitation Research*, 12, 2, 121-136.
- FORUM FOR THE FUTURE (online). What is sustainability? Available for <https://www.forumforthefuture.org/faqs/what-is-sustainability>
- GONZÁLES, E., CÁRCABA, A., VENTURA, J. (2011). The importance of geographic level of analysis in the assessment of the quality-of-life: The case of Spain. *Social Indicators Research* 102, 2, 209-228. DOI: 10.1007/s11205-010-9674-8.
- HELLIWELL, J., LAYARD, R., SACHS, J. (2019). *World Happiness Report 2019*, New York: Sustainable Development Solutions Network.
- HUGHES, C., HWANG B., KIM J. H., EISENMAN L. T., KILLIAN D. J. (1995). Quality of life in applied research: a review and analysis of empirical measures. *American Journal on mental Retardation*, 99, 6, 623-641.
- IRA, V., ANDRÁŠKO, I., (2008). Quality of life in the urban environment of Bratislava: two time-spatial perspectives. *Geografický časopis/Geographical Journal*, 60, 2, 149-178.
- IRA, V., HUBA, M. (2007). Udržateľnosť a kvalita života: niekoľko poznámok k teórii a konceptom výskumu In: Nováček, P., (ed) *Udržitelný rozvoj: Nové trendy a výzvy* (Sustainable Development: New Trends and Challenges. In Czech). Olomouc: Univerzita Palackého. (Sustainability and quality of life: some remarks on the theory and concepts of research. In Slovak).
- IZAKOVIČOVÁ, Z. (2000). Evaluation of the stress factors in the landscape. *Ekológia Bratislava*, 19, 1, pp. 92-103.
- JAKUBCOVÁ, A. et al. (2016). Impacts of flooding on the Quality of Life in Rural Regions of Southern Slovakia. *Applied Research in Quality of Life*, 11, 1, pp. 221-237.
- JEDLIČKA, J. et al. (2019). Assessing relationship between land use changes and the development of a road network in the Hodonín region (Czech Republic). *Quaestiones Geographicae*, 38, 1, pp. 145-159.
- KAPLAN, R. M., RIES, A. L. (2007). Quality of Life: Concept and Definition. *Journal of Chronic Obstructive Pulmonary Disease*, DOI 10.1080/15412550701480356.
- KARLÍK, L. et al. (2018). Vineyard zonation based on natural terroir factors using multivariate statistics - Case study Burgenland (Austria). *OENO ONE*, 52, 2, DOI: 10.20870/oeno-one.2018.52.2.1907



- KELLEY-GILLESPIE, N. (2009). An Integrated Conceptual Model of Quality of Life for Older Adults Based on a Synthesis of the Literature. *Applied Research in Quality of Life*, 4, 3, 259-282. DOI 10.1007/s11482-009-9075-9.
- KROL, Ch. (2008). Social capital and the Happiness of Nations. The Importance of Trust and Networks for Life Satisfaction in a Cross-National Perspective. Bruxelles/Frankfurt a. M./New York/Oxford: Peter Lang Publishing.
- KUBINSKÝ, D et al. (2015) Open Geosciences. Changes in retention characteristics of 9 historical artificial water reservoirs near Banská Štiavnica, Slovakia. 7, 1, pp. 880-887.
- KYLE, G. (2014). Place-Related Measures. In Michalos A.C. (eds) Encyclopedia of Quality of Life and Well-Being Research, pp. 4816-4819. Springer, Dordrecht.
- LIESKOVSKÝ, J. et al. (2018). Historical land use dataset of the Carpathian region (1819-1980). *Journal of Maps*, 14, 2, pp. 644-651.
- LYUBOMIRSKY, S., SHELDON, K. M., SCHKADE, D. (2005). Pursuing happiness: The architecture of sustainable change. *Review of General Psychology*, 9, 111-131.
- McCANN, J. E. (2004). 'Best Places': Interurban competition, quality of life and popular media discourse. *Urban Studies*, 41(10), 1909-1929. doi: 10.1080/0042098042000256314.
- MCCARTHY, J. (2019). Six in Seven Americans Satisfied with Their Personal Lives. Gallup Poll. <https://news.gallup.com/poll/246326/six-seven-americans-satisfied-personal-lives.asp> x. 5. 2019.
- MEDERLY, P., NOVÁČEK, P. TOPERCER, J. (2003). Sustainable development assessment: Quality and sustainability of life indicators at global, national and regional level. *Foresight*, 5(5):42-49, DOI:10.1108/14636680310507307.
- MOSER, G. (2009). Quality of life and sustainability: Toward person-environment congruity. *Journal of Environmental Psychology*. 29, 3, 351-357. <https://doi.org/10.1016/j.jenvp.2009.02.002>.
- MUCHOVÁ, Z. (2019). Assessment of land ownership fragmentation by multiple criteria. *Survey Review*, 51, 336, pp. 265-272.
- MURGAŠ, F. (2012). Prostorová dimenze kvality života. (Space dimension of quality of life. In Czech). Liberec: Technická univerzita v Liberci.
- MURGAŠ, F. (2016). Geographical Conceptualization of Quality of Life. *Ekológia (Bratislava)* 35, 4, 309-319.
- MURGAŠ F. (2019). Can Easterlin's paradox be applied to the development of satisfaction with life or does the explanation lie in cultural geographical characteristics?. *Geografický časopis*. 71, 1, 3-14. DOI: <https://doi.org/10.31577/geogrcas.2019.71.1.01>.
- MURGAŠ F., KLOBUČNÍK M. (2016a). Municipalities and Regions as Good Places to Live: Index of Quality of Life in the Czech Republic. *Applied Research in Quality Life*, 2016, 11, 2, 553-570. DOI: 10.1007/s11482-014-9381-8.



- MURGAŠ F., KLOBUČNÍK M. (2016b). Does quality of place affect well-being? *Ekológia* (Bratislava), 35, 3, 224–239, 2016. DOI:10.1515/eko-2016-0018.
- MURGAŠ F., KLOBUČNÍK M. (2018). Quality of life in the city, quality of urban life or well-being in the city: Conceptualization and case study. *Ekologia* (Bratislava), 37, 2, 183–200, DOI :10.2478/eko-2018-0016.
- PACIONE, M. (1982). The Use of Objective and Subjective Measures of Life Quality in Human Geography. *Progress in Human Geography*. 6 4, 495-514. <https://doi.org/10.1177/030913258200600402>
- PHILLIPS, D. (2006). *Quality of Life: Concept, Policy and Practice*. London: Routledge.
- PETROVIČ, F., MUCHOVÁ, Z. (2013). The potential of the landscape with dispersed settlement (case study Čadca town). Conference: Conference on Public Recreation and Landscape Protection - with Man Hand in Hand Location: Mendel Univ, Fac Forestry & Wood Technol, Dept Landscape Management, Brno, Czech Republic, p. 199
- OLAH, B. (2003). Potential for the sustainable land use of the cultural landscape based on its historical use (a model study of the transition zone of the Poľana Biosphere Reserve). *Ekologia* (Bratislava), 22, Supplement 2, 79–91
- OLAH, B., ŽIGRAJ, F. (2004). The meaning of the time-spatial transformation of the landscape for its sustainable use (a case study of the transition zone of the Poľana Biosphere Reserve). *Ekologia* (Bratislava), 23, Supplement 1, 231–243
- POL E., CASTRECHINI A., CARRUS G. (2017). Quality of Life and Sustainability: The End of Quality at Any Price. In: Fleury-Bahi G., Pol E., Navarro O. (eds) *Handbook of Environmental Psychology and Quality of Life Research*. International Handbooks of Quality-of-Life. Cham: Springer, https://doi.org/10.1007/978-3-319-31416-7_2. QUALITY OF LIFE RESEARCH UNIT (online) The Quality of Life Model. Toronto: University of Toronto.
- RAPLEY, M. (2008). *Quality of Life Research. A Critical Introduction*. London: SAGE.
- SCHALOCK, R. L. (2004). The Concept of Quality of Life: What We Know and Do Not Know. *Journal of Intellectual Disability Research* 48, 3, 203-216. DOI: 10.1111/j.1365-2788.2003.00558.x
- SHYE S. (2014a). Faceted Action System Theory (FAST). In: Michalos A.C. (eds) *Encyclopedia of Quality of Life and Well-Being Research*, pp. 2119-2125. Springer, Dordrecht.
- SHYE S. (2014b). Systemic Quality of Life Model (SQOL). In: Michalos A.C. (eds) *Encyclopedia of Quality of Life and Well-Being Research*, pp. 6569-6575. Springer, Dordrecht.
- SLÁMOVÁ, M., BELČÁKOVÁ, I. (2019). The Role of Small Farm Activities for the Sustainable Management of Agricultural Landscapes: Case Studies from Europe. *Sustainability*, 11, 21, DOI: 10.3390/su11215966



- SPURNÝ, M. (2019). *Spokojenost se životem – březen 2019*. Tisková zpráva. (Satisfaction with life-March 2019. Press release. In Czech). Praha: Centrum pro výzkum veřejného mínění při Sociologickém ústavu AV ČR v.v.i. Available at <https://cvvm.soc.cas.cz/media/comform2content/documents/c2/a4907/f9/ov190418.pdf>.
- SUSTAINABILITY MONITOR OF THE NETHERLANDS, third edition (2015). The Hague: Statistics Netherlands.
- TÁRNIKOVÁ, M., MUCHOVÁ, Z. (2018). Lands cover change and its influence on the assessment of the ecological stability. *Applied Ecology and Environmental Research*, 16, 3, pp-2169-2182.
- TRIP, J. J. (2007). Assessing quality of place: a comparative analysis of Amsterdam and Rotterdam. *Journal of Urban Affairs*, 29(5), 501–517. DOI: 10.1111/j.1467-9906.2007.00362.x.
- VEENHOVEN, R. (2000). The four qualities of life. Ordering concepts and measures of the good life. *Journal of Happiness Studies*, 1, 1-39.
- VEENHOVEN, R. (2014). Quality of life (QOL), an overview. In A. C. Michalos (Ed.), *Encyclopaedia of quality of life and well-being research* (pp. 5265–5268). Dordrecht: Springer.
- VEENHOVEN, R. (2016). Quality of life and happiness: concepts and measures. In: Bruni, L., Porta, P. L. (eds). *Handbook of Research Methods and Applications in Happiness and Quality of Life*, pp. 309-333. Cheltenham, UK, Northampton, MA, USA: Edward Elgar.
- VENTEGODT, S., KANDEL, I., MERRICK, J. (2006). *Principles of Holistic Medicine: Quality of Life and Health*. New York: Hippocrates Scientific Publications.
- VONK, M. (2011). *Sustainability and Quality of Life. A study on the religious worldviews, values and environmental impact of Amish, Hutterite, Franciscan and Benedictine communities*. Amsterdam: Vrije Universiteit.
- WERNEBURG, G. T., KONGNYUY, M., HALPERN D. M., SALCEDO, J. M., KOSINSKI, K. E. HAS, J. A., SCHIFF, J. T. CORCORAN, A. T., KATZ, A. E. (2018). Patient –reported quality of life progression in men with prostate cancer following primary cryotherapy, cyberknife, or active holistic surveillance. *Prostate Cancer and Prostatic Diseases*, 21, 3, 355-363. DOI 10.1038/s41391-017-0004-y.