The well-being of residents in an urban environment: the case of a Russian megapolis

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Abstract: *The issue of ensuring the well-being of residents is central to systems of municipal governance. The purpose of our study is to measure the well-being of residents in an urban environment and, based on the obtained results, to identify problem areas that impede the achievement of strategic development goals in the megapolis. We conducted a representative survey of residents in one of the largest industrialized Russian megacities, Ekaterinburg. Based on the survey data, an index of subjective well-being in the urban environment was obtained, which included 4 blocks of assessment indicators: 1) assessment of the current state of the urban environment; 2) assessment of the changes in the urban environment; 3) assessment of personal well-being; and 4) assessment of intentions to live in the city. The study revealed that the most prosperous citizens in the urban environment are: 30-39 years old; married; employed. The problems of low well-being and the absence of youth intent to connect their futures with the city are identified as the main threats to the megapolis' development. The results of our study are of practical importance for making informed management decisions in urban restructuring planning, urban infrastructure upgrades, and the development of social policy measures aimed at improving the quality of life and well-being of citizens.*

Keywords: Well-being, megapolis, urban environment, residents, survey

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Introduction

Recent rapid urbanization and its associated negative effects have made the creation of a high-quality and comfortable living environment for urban residents highly relevant. Comfortable, convenient, open, and safe cities are an integral part of the new sustainable development agenda (United Nations, 2019: 44). Overloaded infrastructure and support systems, along with the environmental and social problems

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of large cities, have stimulated the emergence of various programs and projects aimed at improving the urban environment.

Official reports from municipal authorities often present cities as "statistical reports", where they are characterised in terms of indicators showing life expectancy, birth rates, GDP, the construction of housing, highways, roads, and social welfare facilities, and the introduction of digital technologies and electronic services. While recognizing the extreme importance of the conceptualisation of a city as a mosaic of objective statistical data, we would also note that it is important not to "lose" people in the pursuit of formal indicators. A city is for people. Human assessments of the urban environment and the study of resident well-being are essential for implementing sustainable development strategies and assessing a city's real, concrete existence. This approach makes it necessary to learn how residents assess their well-being, the parameters of the urban environment, and the "efforts" of the authorities, as well as how comfortable they feel in their city and whether they want to connect their futures with it. The value of subjective indicators lies in the analysis of socio-demographic subgroups and the establishment of determinants of high / low life satisfaction as an information resource for the development of measures aimed at improving the well-being of the population and its individual groups (Kroll, 2011: 21).

The well-being of the population is a pressing issue for Russian socio-economic policy in its regions and cities. Negative shifts in Russian quality of life caused by the economic crisis and deepening social inequality (Sobol, 2018) require social policy measures aimed at achieving a balance between the economic and social components of sustainable development. Since people are the main capital of a territory, considering their subjective opinions is a necessary element in assessing the position of specific cities on the "quality of life" scale, as well as developing priority directions for improving certain areas of the urban environment.

The purpose of our study is to measure the well-being of residents in an urban environment and, based on the obtained results, to identify problem areas that impede the achievement of strategic development goals in the megapolis. We conducted a representative survey of residents in one of the largest industrialized Russian megacities, Ekaterinburg (n = 3570, November - December 2016). Based on the survey data, an index of subjective well-being in the urban environment was obtained, which included 4 blocks of assessment indicators: 1) assessment of the current state of the urban environment; 2) assessment of the changes in the urban environment; 3) assessment of personal well-being; and 4) assessment of intentions to live in the city.

1. Literature review

The topic of the population well-being is not new in academic discussions. Extensive experience in studying this area has been accumulated in international practice (Tamulevičienė & Androniceanu, 2020). Many international and national research organizations have developed well-being measurement methods and conduct research on a regular basis. At present, the interest in this topic is

increasing because of the consequences of the global financial crisis and the need for national governments and city administrations to take adequate measures to maintain/improve current living standards (Pauhofova et al., 2018).

D. Smith's work was one of the first fundamental studies on measuring urban and regional well-being. He explored the geography of social well-being in the United States via statistical data (Smith, 1973). Since then, the number of studies and measurement techniques for developing well-being has steadily increased. Researchers are not unanimous in defining the concept of well-being, which reflects its multidimensional nature (Searle, 2008; Diener et al., 2018) and, accordingly, a variety of indicators measuring it. Long-term research practice has allowed researchers to develop a general construct where well-being is empirically operationalized as a very broad concept through which one analyzes how well people live. This construct consists of 5 broad areas that define vectors for measuring well-being: society, economy, environment, management, and personal resources (Kislitsyna, 2016: 11).

For example, OECD identifies 2 key areas for measuring well-being: material conditions and quality of life. Material conditions cover aspects such as income and wealth, jobs and earnings, and housing. Quality of life is defined here as a combination of non-monetary attributes that form people's opportunities and prospects and have lasting value across various cultures and contexts. Quality of life covers aspects such as work-life balance, health status, education and skills, social connections, civic engagement and governance, environmental quality, personal security, and subjective well-being. The New Economics Foundation measures well-being based on a different structure of indicators: personal and social well-being. Personal well-being includes the measurement of the following subcomponents: emotional well-being, life satisfaction, vitality, resilience and self-esteem, and positive functioning. Social well-being includes supportive relationships, trust, and belonging. The Gallup company, together with Healthways, measures well-being with 5 elements, based on global survey data: 1) Purpose (liking what you do each day and being motivated to achieve your goals); 2) Social (having supportive relationships and love in your life); 3) Financial (managing your economic life to reduce stress and increase security); 4) Community (liking where you live, feeling safe and having pride in your community); and 5) Physical (having good health and enough energy to get things done on a daily basis) (Gallup–Healthways Well-being Index, 2014).

The academic literature and research group reports use the terms "quality of life" and "happiness" along with the term "well-being", often as interchangeable categories of analysis (for example, Easterling, 2003; Ballas, 2013; Androniceanu, 2017; Borocki et al. 2019; Bayar et al. 2020; Siekelova et al., 2020; Kinnunen et al., 2019; Ciobanu et al. 2019; Androniceanu, 2019; Ciobanu &Androniceanu, 2018;). In our opinion, there are some nuances between them. "Happiness" is, to a greater extent, a psychological category associated with positive feelings, emotions, and moods (David et al., 2013). The term "quality of life" is more appropriate to use in relation to objective living conditions, whereas well-being is

used in relation to the subjective assessment of these conditions (Hagerty et al., 2001; Seaford, 2013; Androniceanu, 2019). Subjective assessments of quality of life reflect objective circumstances and people's reactions to these circumstances (Diener et al., 2018: 2). A wide range of life conditions and circumstances, in turn, determines the different types of measurable well-being, including well-being in an urban environment.

Ballas notes that most urban research was based on an objective approach until recently (Ballas, 2013: 47). This makes it relatively easy to measure the factors of the social and physical environment of a city, which determine the well-being of a person living in it (Androniceanu, 2019). These factors are: income, housing, consumption, urban amenities, environmental pollution, etc. However, the last decade saw increased interest in the subjective indicators of the quality of urban life and the well-being of citizens. These indicators can be obtained from population surveys, in which people evaluate their perception of urban life and satisfaction with its various aspects. Currently, the importance of the subjective component in studies of urban well-being is increasing. This stems from the application of pluralistic approaches to urban development management (which considers the interests of all stakeholders). The importance of considering the needs and opinions of residents is becoming increasingly apparent in light of the widely discussed involvement of urban residents in the city governance (Kyung, 2018). Today, most urbanists agree that the assessments and opinions of citizens should be considered by the municipal authorities as a necessary information basis for improving urban infrastructure, urban design, and reconstruction.

2. Research

2.1 Case Description

Ekaterinburg ranks fourth among 16 Russian cities with a population of over one million people. According to municipal statistical data, 1,468,833 people live there. Historically, Ekaterinburg had the status of Russia's "industrial capital". Metallurgical and engineering industries were the basis of its economy. Over the past 10 years, qualitative changes have occurred in Ekaterinburg – namely, the transition from the "old industrial" regional megapolis to a city which is modern, innovative, high-tech, investment-attractive, and open to international contacts. The city's geographical position on the border of Europe and Asia determines its status as a transit center and the country's third largest transport hub. Ekaterinburg has hosted the summits of SCO and BRICS, FIFA World Cup matches.

Ekaterinburg is a megapolis with a large resource pool of political and civil activity. Citizens' initiatives to uphold their "rights to the city" is typical in Ekaterinburg. For example, civil actions aimed at protecting public spaces from "undesirable" construction projects that violate the unique atmosphere of established pastime practices receive powerful public and media resonance at the federal level. They also show other cities the possibilities for residents to influence the decision-making of city authorities.

2.2 Data and Methods

Our study was carried out using a subjective approach that involves measuring well-being based on a survey of residents. In total, we surveyed 3,570 Ekaterinburg residents. For the survey, we used a two-stage sample stratified by the city's microdistricts, with proportional distribution of units within each stratum. Age and gender quotas were monitored within the groups of respondents by their microdistricts. The sample reflects the structure of the Ekaterinburg population by gender, age, and micro-territory. We examined the well-being of residents in an urban living environment in close relation with a complex of elements of urban infrastructure and facilities. We did not study emotional assessments or affective reactions. We focused solely on measuring rational cognitive assessments.

We used four groups of indicators to measure resident assessments: 1) Assessment of the current state of the urban environment, was based on 15 indicators measuring satisfaction with various spheres of urban life; 2) Assessment of the dynamics of the urban environment – an assessment of the changes in urban infrastructure over the past 5 years; 3) Assessment of personal well-being – a combination of two indicators - self-assessment of the material situation and the housing conditions of the respondents; 4) The connection of personal and family future with the city (we used three questions to construct this variable: do the respondents connect their future with Ekaterinburg; and do they want their children and grandchildren to live in this city). In total, 21 indicators were included in the four groups. We standardized their values (transferred them onto a scale from 0 to 1), then calculated the group indicators (subindexes). Next, we assigned the same weight to all subindexes and calculated the integral index of urban resident well-being. We described the values of the variables using descriptive statistics. Since the mean was unreliable in some cases, we focused on the median values. We used nonparametric statistics (the Kruskal-Wallis test) to assess differences in the index values in groups of respondents, since the distribution of the variables' values was not normal.

2.3 Results

1) The residents of Ekaterinburg assess the current state of the urban environment as "slightly above average". The residents most often assign the highest assessments to certain areas in the urban environment (for example, shopping areas, transport, recreational areas). The respondents express the greatest dissatisfaction when assessing the improvement of the city and its appearance, as well as healthcare, entertainment, the environmental situation, and car parking (see Table 1).

2) Assessments of the dynamics of the urban environment over the past five years are quite different. The share of citizens who notice positive changes is almost three times greater than the share of those who see changes in different directions or do not notice any changes in the city at all is extremely large – almost three quarters of all respondents (see Table 2).

3) The assessment of personal well-being, which we measured through a self-assessment of material well-being and housing conditions, gave the following results (see Table 3). It should be noted that the residents evaluated the living conditions higher than the material ones. For example, only 3.3% of respondents rated their material well-being as high, while 23.6% of respondents estimated their housing conditions as such.

4) The intentions of respondents regarding Ekaterinburg (connection of personal and family future with the city) are presented in Table 4. The desire to connect one's fate with the city decreases as the planning horizon expands and concerns future generations of the family. Less than half of the residents chose Ekaterinburg as the place of residence of their future grandchildren.

**Table 1. Satisfaction of Ekaterinburg residents with the quality
of the urban environment**

Elements of the urban environment	Mean	Std. Dev.	Median	Mode
Markets and shopping centers	3.70	1.292	4	5
Transport accessibility (developed transport network, convenient routes, speed of getting to the city center)	3.68	1.248	4	5
Provision of household services (dry cleaners, repair shops, etc.)	3.64	1.171	4	4
Parks, green areas, recreation spots	3.60	1.261	4	5
Housing and communal services (uninterrupted supply of energy, hot and cold water, major repairs of houses, garbage collection, etc.)	3.43	1.140	4	4
Infrastructure for sports (stadiums, playgrounds, skating rinks, classes)	3.39	1.273	4	4
Safety	3.36	1.106	4	4
Food service (cafes, restaurants)	3.25	1.305	3	4
Cultural and leisure centers for children (classes, development centers)	3.24	1.186	3	3
City improvement (street lighting, playgrounds, pedestrian zones, etc.)	3.19	1.217	3	3
The city appearance (streets, roads, houses)	3.18	1.164	3	3
Ecological situation	3.16	1.177	3	3
Healthcare (quality of work in clinics, level of medical care)	3.02	1.124	3	3
Entertainment industry (cinemas, bowling, clubs, etc.)	2.90	1.383	3	3
Car parks	2.51	1.182	2	3
Overall satisfaction	3.28	0.746	3.33	2.93

(*Source:* the authors' own contribution)

Table 2. Assessment of changes in the urban infrastructure

Assessment	%
A lot has changed for the better	20.0
Something has changed for the better, something - for the worse	43.4
The changes that have occurred are mostly negative	6.9
Nothing has changed	29.7
Total	**100**

(*Source:* the authors' own contribution)

Table 3. Descriptive statistics of personal well-being
(in general and by elements)

	Mean	Std Dev	Mode	Median
Self-assessment of material well-being	3.065	.812	3.000	3.000
Self-assessment of housing conditions	3.840	.894	4.000	4.000
Self-assessment of personal well-being	3.451	.661	3.500	3.500

(*Source:* the authors' own contribution)

Table 4. The connection of personal and family future with Ekaterinburg
(% of respondents)

In the future, would you like...	Yes	No	I don't know	Total
to live in Ekaterinburg	76.6	4.3	19.1	100
your children to live in Ekaterinburg	58.8	11.2	30.0	100
your grandchildren to live in Ekaterinburg	45.6	13.3	41.1	100

(*Source:* the authors' own contribution)

5) The integral index of city resident well-being has the following characteristics (Table 5). The values of the integral index of city resident well-being are associated with several objective socio-demographic variables: occupation, age and marital status (Table 6). The results show that the highest values of the well-being index are observed in the residents who: are employed; are aged 30-39; and are married. We recorded the lowest well-being index in the following population groups: high-school students; people under 20; widowed and single people.

6) We identified the strongest relationship of individual group variables that form the integral well-being index of a city resident with objective socio-demographic indicators that demonstrated a relationship with the integral index. The strongest relationships are as follows:

– Assessment of personal well-being and the age of respondents (see Figure 1). We recorded a downward trend in this assessment as resident age increases.

– The connection of personal and family future with the city and respondent occupation. It should be noted that the strength of this relationship is somewhat reduced when the issue of intergenerational habitation in the city is considered (see Table 7). Table 7 shows that retirees are most keen on connecting

their own future, as well as the futures of their children and grandchildren, with Ekaterinburg. Employed people are less certain about this. The vast majority of university students and (especially) high-school students do not connect the future of their families with Ekaterinburg: less than a third of university students and just over a sixth of high-school students would like their grandchildren to live in this city.

Table 5. Descriptive statistics of the integral index of urban well-being for city residents

| Indicator	Mean	Std Dev	Lower quartile	Median	Upper quartile
Integral index of well-being of city residents	.6023	.16035	.4937	.6126	.7168

(*Source:* the authors' own contribution)

Table 6. The Kruskal-Wallis test

Groups of respondents	Integral index of well-being of city residents (medians)	Chi-Square	df	Asymp.Sig
Occupation				
High-school students	.5043			
University students	.5780			
Employed	.6208	69.900	4	.000
Unemployed	.5708			
Retirees	.5948			
Age				
Under 20	.5303			
20-29	.6062			
30-39	.6293			
40-49	.6105	52.581	5	.000
50-59	.5980			
60 and older	.6166			
Marital status				
Married	.6249			
Never married	.6021			
Divorced	.6074	22.692	3	.000
Widowed	.5917			

(*Sourse:* the authors' own contribution)

Figure 1. Personal well-being assessment by respondent age groups
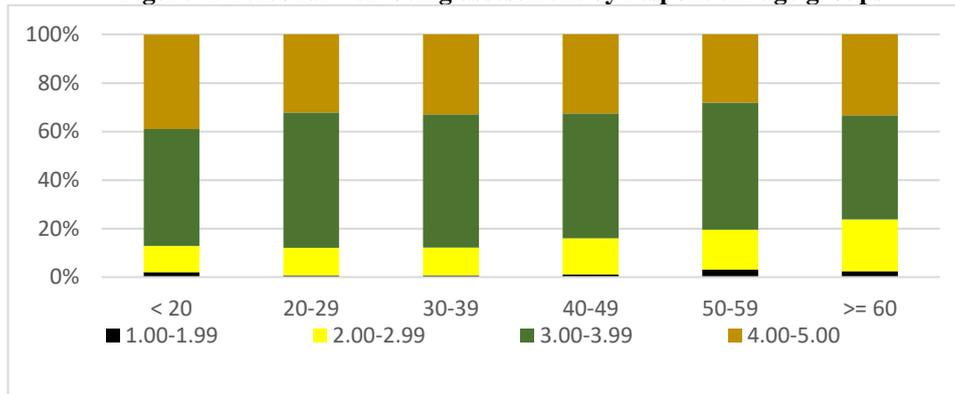
(*Source:* the authors' own contribution)

Table 7. Distribution of answers to questions about personal and family future in Ekaterinburg among respondent groups with different occupations (% in groups of respondents with different occupations)

	Occupation					All respon-dents
	High-school students	University, college students	Employed	Un-employed	Retirees	
Do you connect your future with Ekaterinburg?						
Yes	25.8	62.2	80.3	70.1	87.2	76.6
No	24.2	11.3	2.8	2.8	3.5	4.3
I don't know	50.0	26.5	16.9	27.1	9.3	19.1
Would you like your children to live in Ekaterinburg?						
Yes	25.2	46.7	61.3	54.9	69.9	58.8
No	21.3	14.5	10.3	12.0	15.7	11.2
I don't know	53.5	38.8	28.4	33.1	14.5	30.0
Would you like your grandchildren to live in Ekaterinburg?						
Yes	15.2	29.5	48.6	39.4	57.7	45.6
No	30.4	15.5	12.0	16.8	16.7	13.3
I don't know	54.5	55.0	39.5	43.8	25.6	41.1

(*Source:* the authors' own contribution)

3. Discussion

Our study showed that the well-being of megapolis residents can be examined not only through indicators of personal well-being, but also through indicators "tied" to the specifics of the urban environment. The urban environment is an integral component of assessing the well-being of city residents as it provides opportunities to realize their diverse needs and practices (daily, routine, consumer, cultural, entertainment, recreational, aesthetic, contemplative, etc.) (Vysokovsky, 2014). The methodology for studying resident well-being in the urban

environment, which was developed and tested during the study, is open for discussion and adjustments. The set of indicators is not exhaustive, and it largely reflects the current development tasks of a particular megapolis, which were identified during expert discussions with representatives of the city authorities.

On the one hand, the results of the study identified the positive trends in the movement towards development in the city. On the other, the results revealed problems in urban development that require close attention from the authorities. The positive trends are evidenced by a significant share of citizens (50.4%) with index values above the average. The negative facts of urban development are evidenced by a low assessment of individual elements of urban infrastructure. The lower well-being of youth, compared to other population groups, is an alarming symptom for the prospects of urban development. For example, high-school students have the lowest well-being index. University students are in 3rd place on the well-being scale, after employed residents and retirees. In addition, high-school and university students are less likely to connect their personal future (and especially the futures of their children and grandchildren) with the city than other population groups. Of course, it is necessary to consider the socio-psychological characteristics of youth (often unformed positions or unrealistic assessment of their own prospects) and the remoteness of future situations (especially in relation to children and grandchildren who have not yet born) when interpreting these negative intentions. However, we revealed a similar situation in the other population groups: most of the city's residents connect only their own futures with Ekaterinburg; predictions of the futures of their children and grandchildren reduce the number of positive responses. Preventive social policy to retain youth and to form "attachment" and a sense of belonging to the city should be aimed at increasing urban attractiveness and informing young people about the opportunities for self-realization and professional and creative achievements in the urban space.

Other studies confirm a number of social and economic determinants of well-being which were identified in our study. This indicates the existence of certain general patterns in people's satisfaction with their lives. For example, it was proved that marital status influences the subjective feeling of well-being and happiness: single people are less happy and less satisfied with their lives (Frey & Stutzer, 2002). The results of our study clearly demonstrate this relationship: the highest well-being index is observed in married people, followed by divorced, never married, and widowed. We also found that the well-being index for unemployed citizens is much lower than for the employed ones. Many researchers who have studied the effects of unemployment on well-being have noted a strong negative correlation between these two variables. Being unemployed negatively affects the subjective feeling of well-being and satisfaction with life, and this effect cannot be explained only in terms of loss of income: significant non-material effects are suggested (Clark, 2003). The extremely negative effect of unemployment on life satisfaction is manifested in its long-term consequences: even when people start working again, their satisfaction with life often does not return to its previous level (Clark *et al.,* 2001). In addition, there is evidence that

income loss affects well-being significantly more than income growth (Boyce *et al.*, 2013). In this context, our findings are consistent with studies that discuss the influence of income and wealth on subjective well-being. The fact that financial security contributes to higher subjective well-being (Stevenson & Wolfers, 2013) is obvious and understandable. Material well-being allows people to improve their quality of life by acquiring the best medical care, education, recreation, and other life benefits. Although, in fairness, it is worth noting that there are several studies that dispute the direct positive effect of income and wealth on subjective well-being. Discussions about the Easterlin Paradox (economic growth in a country does not always lead to increased happiness) have led to a search for the indirect explanatory factors of this situation. For example, S. Oishi and S. Kesebir, who compared different countries, found that an increase in GDP per capita leads to an increase in happiness only if it is not accompanied by an increase in income inequality (Oishi & Kesebir, 2015). Moreover, there is a significant influence of hedonistic adaptation to better living standards, as well as the effect of social comparison, i.e. the comparison of one's own income with the incomes of reference groups (Easterlin, 2003; Ferreri-i-Carbonell, 2005).

The influence of demographic variables such as age and gender has received considerable attention in discussions about the well-being determinants. In both early and later studies, it is often argued that age and well-being/happiness are *U*-shaped dependent - that is, people feel happier and more prosperous when they are younger and when they are older (Blanchflower & Oswald, 2008; Beja, 2018). However, our study does not confirm a *U*-shaped dependency. The highest well-being index is observed among residents aged 30-39. This is the age of the highest professional and social activity, career achievements, and earnings growth. These groups of people are active users of all facilities and services of the urban space, including those which must be paid for. In our opinion, the active use of the megapolis' benefits and the ability to pay for them largely explain the high well-being of middle-aged citizens. Several researchers have found that subjective well-being linearly decreases with age in many countries, while the *U*-shaped curve is confirmed only in wealthy western countries (Steptoe *et al.,* 2015). But some researchers have not found a *U*-shaped curve even in these countries (for example, Baird *et al.,* 2010). Apparently, conflicting results regarding age-related patterns can be explained in terms of the well-being measurement dominants: whether the studies focus on the rational cognitive aspects of assessment (life satisfaction) or emotional well-being (happiness) (Hellevik, 2017). It is also necessary to consider regional characteristics and the conditions of the physical living environment in age-related patterns.

During the analysis, we did not find any significant gender differences in the well-being of citizens. As Diener with co-authors rightly pointed out in their review of research on subjective well-being, gender differences are not universal. These differences are usually small, and they depend on cultural values and conditions of gender equality/inequality in societies (Diener *et al.,* 2018: 13).

4. Conclusions

A megapolis, a concentration zone of all types of resources (industrial, technological, informational, etc.), has an ambiguous influence on the quality of life and well-being of its residents. It is obvious that converting the "wealth" accumulated by the megapolis into an attractive living environment is becoming the primary management task for municipal and federal authorities. An effective solution to this problem requires the development of measurement indicators and methods for conducting urban wellbeing studies suitable for modern urban realities. The results of such studies are of practical importance for making informed management decisions in urban restructuring planning, urban infrastructure upgrades, and the development of social policy measures aimed at improving the quality of life and well-being of citizens. In our further research on the well-being of megapolis residents, we intend to expand the range of assessment indicators and unify measurement procedures, include in-depth study of individual socio-demographic groups in order to clarify the elements of urban infrastructure that are most important for each group, and conduct a detailed analysis of the reasons for resident dissatisfaction with certain aspects of life.

Authors Contributions

The authors listed have made a substantial, direct and intellectual contribution to the work, and approved it for publication.

Conflict of Interest Statement

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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References

Androniceanu, A. (2019). The social sustainability of smart cities: urban technological innovation, big data management, and the cognitive internet of things. *Geopolitics, History, and International Relations* 11(1), 110–115. Doi:10.22381/GHIR11120197
Androniceanu, A. (2017). Improving citizens' satisfaction concerning the social welfare services at urban level. *Theoretical and Empirical Researches in Urban Management,* 12(4), 67-82.

Baird, B. M., Lucas, R. E., Donnellan, M. B. (2010). Life Satisfaction Across the Lifespan: Findings from Two Nationally Representative Panel Studies, *Social Indicators Research,* 99(2), 183-203, https://doi.org/10.1007/s11205-010-9584-9(2010).

Ballas, D. (2013). What Makes a 'Happy City'?, *Cities,* 32(SI), 39-50, https://doi.org/10.1016/j.cities.2013.04.009(2013).

Bayar, Y., Remeikiene, R., Androniceanu, A., Gaspareniene, L., & Jucevicius, R. (2020). The shadow economy, human development and foreign direct investment inflows. *Journal of Competitiveness*, 12(1), 5–21. Doi: https://doi.org/10.7441/joc.2020.01.01

Beja, E.L. (2018). The U-shaped Relationship between Happiness and Age: Evidence Using World Values Survey Data, *Quality & Quantity,* 52(4), 1817-1829, https://doi.org/10.1007/s11135-017-0570-z(2018).

Blanchflower, D. G., Oswald, A. J. (2008). Is Well-being U-shaped over the Life Cycle?, *Social Science & Medicine,* 66(8), 1733-1749, https://doi.org/10.1016/j.socscimed.2008.01.030(2003)

Borocki, J., Radisic, M., Sroka, W., Greblikaite, J. & Androniceanu, A. (2019). Methodology for strategic posture determination of SMEs - the case from a developing country. *Inžinerinė Ekonomika-Engineering Economics,* 30(3), 265-277.

Boyce, C. J., Wood, A. M., Banks, J., Clark, A. E. & Brown, G. D. A. (2013). Money, well-being and loss aversion: does an income loss have a greater effect on well-being than an equivalent income gain?. *Psychological Science,* 24(12), 2557-2562, https://doi.org/10.1177/0956797613496436(2013).

Ciobanu, A, Androniceanu, A & Lazaroiu, G. (2019). An integrated psycho-sociological perspective on public employees' motivation and performance. *Frontiers in Psychology*, 10; Article number: 36. Doi: 10.3389/fpsyg.2019.00036

Ciobanu A., Androniceanu A. (2018). Integrated human resources activities - the solution for performance improvement in Romanian public sector institutions, *Management Research and Practice*, 10(3), September, 60-79.

Clark, A. E., Georgellis, Y., Sanfey, P. (2001). Scarring: the psychological impact of past unemployment, *Economica*, 68(270), 221–241, https://doi.org/10.1111/1468-0335.00243(2001)

Clark, A.E. (2003). Unemployment as a social norm: psychological evidence from panel data. *Journal of Labor Economics,* 21(2), 323-351, https://doi.org/10.1086/345560

David, S., Boniwell, I. Conley, A. (2013). *The Oxford handbook of happiness*. Oxford: Oxford University Press.

Diener, E., Lucas, R. E. & Oishi, S. (2018). Advances and open questions in the science of subjective well-being. *Collabra: Psychology*, 4(1), 15, https://doi.org/10.1525/collabra.115(2018).

Easterlin, R.A. (2003). Building a better theory of well-being, *IZA Discussion,* Paper No. 742, available at: https://ssrn.com/abstract=392043 (August 10, 2019).

Ferrer-i-Carbonell, A. (2005). Income and well-being: an empirical analysis of the comparison income effect. *Journal of Public Economics,* 89(5-6), 997-1019, https://doi.org/10.1016/j.jpubeco.2004.06.003(2005).

Frey, B. S., Stutzer, A. (2002). *Happiness and economics: how the economy and institutions affect human well-being*, Princeton: Princeton University Press.

Gallup–Healthways Well-being Index (2014). *State of global well-being. 2014 Country Well-Being Rankings* (Gallup–Healthways Publishing), available at: http://info.healthways.com/hubfs/Well-Being_Index/2014_Data/Gallup-Healthways_State_of_Global_Well-Being_2014_Country_Rankings.pdf (August 10, 2019).

Hagerty, M.R., Cummins, R.A., Ferriss, A.L., Land, K., Michalos, A.C., Peterson, M., Sharpe, A., Sirgy, J. & Vogel, J. (2001). Quality of life indexes for national policy: review and agenda for research, *Social Indicators Research,* 55(1), 1-96, https://doi.org/10.1023/A:1010811312332(2001).

Hellevik, O. (2017). The u-shaped age-happiness relationship: real or methodological artifact ?. *Quality & Quantity,* 51(1), 177-197, https://doi.org/10.1007/s11135-015-0300-3(2017).

Kinnunen, J., Androniceanu, A, Georgescu, I. (2019). The role of economic and political features in classification of countries in transition by Human Development Index. *Informatica Economică*, 23(4), 26-40.

Kislitsyna, O.A. (2016). *Measurement of the quality of life / well-being: international experience*. Moscow: Institute of Economics of the Russian Academy of Sciences.

Kroll, C. (2011). *Measuring Progress and Well-being: Achievements and Challenges of a New Global Movement*. Berlin, Friedrich-Ebert-Stiftung, available at: http://library.fes.de/pdf-files/id/ipa/08509.pdf (August 10, 2019).

Kyung, S. (2018). Searching for 'community' and 'community involvement' in urban policy. *International Journal of Urban Sciences*, 22(4), 473-485, https://doi.org/10.1080/12265934.2018.1455529(2018)

Oishi, S., Kesebir, S. (2015). Income inequality explains why economic growth does not always translate to an increase in happiness. *Psychological Science,* 26(10), 1630-1638, https://doi.org/10.1177/0956797615596713(2015).

Pauhofova, I., Stehlikova, B, Kljucnikov, A. & Androniceanu, A. (2018). Spatial and sectoral conditionality of the average monthly nominal wage in the Slovak Republic, *Transformations in Business & Economics*, 17(3), 155-168.

Seaford, C. (2013). The multiple uses of subjective well-being indicators. *Social Indicators Research,* 114(1), 29-43, https://doi.org/ 10.1007/s11205-013-0381-0(2013).

Searle, B.A. (2008). *Well-being: in search of a good* life?. Bristol, UK: The Policy Press University of Bristol.

Siekelova, A., Androniceanu, A., Durana, P. & Frajtova Michalikova, K. (2020). Earnings Management (EM), initiatives and company size: an empirical study. *Acta Polytechnica Hungarica*, 17(9), 41-56.

Smith, D.M. (1973). *The geography of social well-being in the United States: An Introduction to Territorial Social* Indicators. New York: McGraw-Hill.

Sobol, T.S. (2018). Modern level and the living quality of the Russian population. *Bulletin of Moscow University named after S.Yu. Witte. Series 1: Economics and Management,* 2(25), 7-14.

Steptoe, A., Deaton, A. & Stone, A. A. (2015). Subjective wellbeing, health, and aging. *LANCET,* 385(9968), 640-648, https://doi.org/10.1016/S0140-6736(13)61489-0(2015).

Stevenson, B., Wolfers, J. (2013). Subjective wellbeing and income: is there any evidence of satiation?. *The American Economic Review*, 103(3), 598-604, https://doi.org/10.1257/aer.103.3.598(2013).

Tamulevičienė, D., Androniceanu, A. (2020.) Selection of the indicators to measure an enterprise's value and its changes in the controlling system for medium-sized enterprises. *Entrepreneurship and Sustainability Issues, 7*(3), 1440-1458. Doi: https://doi.org/10.9770/jesi.2020.7.3(1)

United Nations (2019*). The Sustainable Development Goals Report 2019* (New York: United Nations), available at: https://unstats.un.org/sdgs/report/2019/The-Sustainable-Development-Goals-Report-2019.pdf

Vysokovsky, A. (Ed.) (2014). *The battle for the urban dweller: Human potential and the urban environment.* Moscow: Higher School of Urban Studies.