
COMPETITIVENESS OF THE VISEGRAD FOUR IN THE INTERPRETATION OF THE IMAGE OF HEALTH

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Received: 02. May 2022

Reviewed: 19. June 2022

Accepted: 30. June 2022

Abstract

The Visegrád countries have many similarities due to their similar historical past, cultural similarities and territorial proximity. Poland, the Czech Republic, Hungary and Slovakia are the countries of the Visegrad Four, which follow different development paths. The foundations of the cooperation of the Visegrad Four present the goals in which they can jointly increase their economic and social competitiveness in the European Union. Health and its determinants are an outstanding area of society, which also affects the economy, and plays a prominent role in global competitiveness. The theory of the study points to these standard directions, the development indicators of the V4s, which determine their current positions. The aim of the research is to present the health picture of V4 large and medium-sized cities in comparison to a medium-sized city in the Visegrad cities, thereby establishing a ranking between them. The methodology of the study is, on the one hand, secondary data analysis of the statistical central database of large cities, and on the other hand, primary research on the assessment of the health picture of the central city level. The results of the study indicate which of the V4 cities are at the top, and what ranking can be established in the Visegrad Four cities in terms of health status. In terms of health competitiveness, none of the big cities reaches the level of the developed member states of the European Union, but the ranking of the V4 cities among themselves can be demonstrated based on the health indicators.

Keywords: V4 countries, image of health, healthy city, Visegrad Four, competitiveness

JEL Classification: I15; I38; A13.

Introduction and theoretical background

The importance of the cities is increasing globally, thanks to the economic and social centralization of the infrastructure. Due to the concentrated industrial and economic services, the growing population is gaining an expanding role. One

motivation for those moving to cities is a higher quality of life by taking advantage of the opportunities. Quality of life can be measured using socio-economic indicators such as income, health status, technological infrastructure, education system, public safety or the approach to ecological problems. From this approach, cities achieve a high level compared to smaller settlements. In the study, among the factors affecting the quality of life, we deal with the field of health and health infrastructure, which is a determining factor in determining society's standard of living. (Majerová, 2019) The development of the socio-economics is an integrated process, as it affects other sectors as well. (Christian et al., 1977)

WHO (2016) expressed that the material capital invested in healthcare positively affects the economic processes. The key to the socio-economic development of cities is the quality of health. There is a close connection between economic development and the population's health status. (Semyonov et al., 2013) Health, like education, is the foundation of human capital and determines economic development. (Bloom, Canning, 2003) Socio-economic development always involves changes, and new challenges arise, including the growing population, economic challenges, and following international trends. Smart city concepts, resilient reactions, sustainability and a healthy lifestyle, appear in the responses to emerging needs. The economic competitiveness of the Visegrád 4 has already been examined with several indicators, which included more hard economic indicators, the social and health situation as a factor of competitiveness was presented less. (Molendowski, E. & Folfas, P. 2019)

The literature base of the study presents the political background of the Visegrad Four to make visible the historical and cultural background that makes the cities of these countries comparable. The socio-demographic data of the countries and cities of the V4 are exhibited, and then the importance of the role of the cities and their development paths and methods are also presented. Scientists have already set up many models of the development of cities, and they are being investigated in different directions. We have to examine the development dynamism of cities in a complex way since all innovative methods affect the socio-economic environment. The society's state of health shows the social and economic conditions; we can infer the development trends. The health behavior and the health image of the inhabitants of the cities also show the quality of life; therefore, our study is a guideline for the socio-economic indicators of the region.

The political background of the Visegrad Four

Visegrad Declaration began its more than 30-year history on February 15. 1991, with the participation of Poland, the Czech Republic, Hungary, and later Slovakia. The similar regional features and economic situation predestined the development of common goals. The advancement of the market economy, the assertion of European political interests, and the striving to catch up with Western Europe also played a role in regional cooperation. With the states' accession to the European Union, the designation of the development path was directed in the direction of the regional community of interests, contributing to the development of economic relations and cross-border cooperation. With cooperation covering all economic, political and social levels, the Visegrád Four group wanted to become a defining and stabilizing player in the Central European region. The geographical-historical-cohesion cooperation is also called the Central European pole (Márky, 2018), which also appears as a brand name in political life, representing similar positions, such as migration. (Juhász, 2018) Within the framework of European integration, the role of the V4 is decisive, both because

of its territorial location and in terms of the territorial expansion of the European Union. (Figure 1)

Figure 1. V4 countries



Source: airportal.hu

The countries of the Central European region, the common objectives of the European Union, appear as an essential development pole in following the unified European directives, in which it is in the interest of the V4 to act together within the framework of European integration in the areas that are important to them for the sake of democratic development, the Central European strengthening the stability of the region. (visegradgroup.eu, 2022)

The cooperation of the Visegrád Group is characterized by the joint representation of its economic, diplomatic and political interests and the coordination of its possible actions. The V4 countries have territorially similar characteristics, but their territorial size and population are different; despite this, the similar past and cultural identity increase the concentration of power in the Central European region. (Figure 2)

Figure 2.
Demographic data of V4 countries

Country	territory	population	the length of the external state border/ km	national currency
	distribution, %			
Czech Republic	14,8	16,6	1279	CZK
Slovakia	9,2	8,5	204	EUR
Poland	58,2	59,5	2174	PLN
Hungary	17,5	15,4	1567	HUF

Source: KSH, 2018

The Central European spirit also reflects the intellectual and cultural harmony of the Visegrad Four, in which the V4 countries chose cooperation and the path of conflict mitigation instead of previous war situations and conflicts. (Martonyi, 2017) With the accession to the European Union (2004), the future orientation of the Visegrad Four was transformed since the states could not make independent decisions within the union. Nevertheless, this V4 created a strong common spirit-based representation of interests, which works with its system of ideas, referred to as the “*Visegrad idea*”. (Kiss, 2020) The essential point of view of the V4 states is that the member states also represent a specific policy, in which the assertion of their interests is highlighted. Their opinions may differ, and convergence is facilitated by summit meetings, where differences of opinion are mitigated. (Bauerová, 2018) Flexibility, Visegrad identity and diversity are decisive in characterizing the Visegrad Four group. The pandemic has once again transformed the V4’s target system, and the dynamism of development is seen not only in the enforcement of regional interests but also in broader economic and social goals, such as economic and financial cooperation, energy and climate policy, space research cooperation, start-up’s support, sustainability, environmental protection. (Szabó Szakálné, 2021) Based on economic indicators of competitiveness the economic performance indicators, Hungary’s GDP per capita (based on purchasing power parity) of the V4 countries is 37,128 US dollars, that of the Czech Republic is 43,837 US dollars, that of Poland is 37,786 US dollars, that of Slovakia is 35,463 US dollars, while the GDP per capita of the European Union is 48,750 US dollars. Bulgaria has the lowest value in Europe, 25,914 US dollars, while Luxembourg leads with the highest GDP, 131,875 US dollars. (World Economic Outlook, 2022) Based on the data, the Visegrad Four are in the center field.

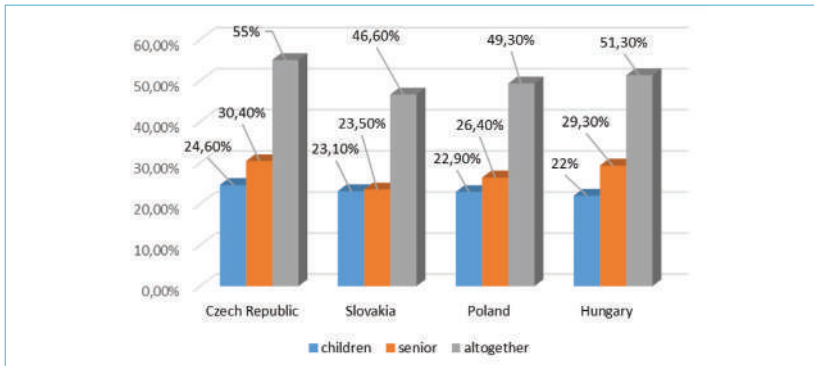
The health determinants of the Visegrad Four

For the health situation of the V4 countries, we took the most critical population and popular movement characteristics as a basis. The total population of V4s in 2020 was 63.9 million people. Poland leads the population with 38 million people, followed by the Czech Republic with 10.7 million inhabitants, Hungary with 9.8 million people and Slovakia with 5.5 million people. The indicators of population decline are higher in Hungary and Poland, while the Czech Republic and Slovakia achieved growth in population. Hungary’s death rate is the highest among the four countries, and natural lessening is also the most significant. The balance of international immigration in each country has positive indicators, which shows the difference between those arriving and leaving the country. The age composition of the population reflects the historical past of the V4 countries. A similar political history is also reflected in the population. The regime change and the following periods followed the same path in the four countries. These historical threads appear in the core of the population, which have the same form.

The age group 40 appears most strongly, then the age group 60-64 follows and the proportion of children follows a downward trend. The median age supports the data for the V4 countries, based on which the median age of the population of the V4 countries is lower than the EU27 average. The proportion of people of active age is lower compared to the elderly, but compared to the proportion of the age group under 15, the number of elderly is also higher. In this case, these indicators of the inactive population are negative since fewer people represent the active age group. In this ranking, the Czech Republic ranks higher, followed by Slovakia. The numbers of Hungary and Poland are less oriented towards the positive phase. In Slovakia, there is almost the same number of children and older people per 100 active-age

residents, which means that Slovakia has a population with a balanced age composition. (Figure 3)

Figure 3 Dependency rates



Source: KSH, 2019

Hungary also has the leading role in the ageing index, as there are 133 elderly persons per 100 children, while in the Czech Republic, there are 123, in Poland, 115, and in Slovakia, 102 elderly persons. These numbers clearly show the lack of population supply. Regarding gender differences, an excess of women is typical among the elderly. The death rates show an upward trend in all four countries. One of the reasons for this is the age composition of the population, which indicates a higher proportion of older people. According to life expectancy at birth, the Czech Republic leads with 79.1 years, followed by Poland with 77.7 years, Slovakia with 77.4 years and Hungary with 76.2 years. The indicator of each country is significantly lower than the EU27 average. (KSH, 2020)

The cities of V4 in the competitiveness

As the proportion of the urban population increases, the role of cities becomes more remarkable due to economic and social concentration. Cities also play an increasingly significant role in the contribution to GDP, which in 2018 was more than 80%. (World Bank, 2018) The importance of cities is illustrated by the characteristics highlighted by the World Economic Forum, which are as follows. They own 2% of the land area, but about 50% of the population lives in cities, and cities are responsible for 75% of the world's energy consumption and 80% of CO₂ emissions. (WEF, 2016) For these reasons, they significantly influence industry, communication networks, and infrastructure. Due to the economic and industrial concentration of the cities, the residential population and services appear in a large proportion, in which the development mechanisms and the dynamics of development can be easily examined.

This trend can also be in reverse proportion; the more people live in a settlement, the wider the market spaces, so we can count on more functions and the appearance of organizations and institutions embodying them. (Rechnitzer, 2019) In territorial competition, cities face each other regarding investors, professionals, and infrastructure development. (Kézai, 2021) In this competitiveness, the development indicators and the place occupied by the cities in them are decisive in the territorial

competitiveness positions. The success of a city is determined by the innovation appearing in the area, the members of the creative class, the standard of living, and the economic development. The basis of the development of cities is the alleviation of inequalities, which requires social structural, complex interventions. (Szirmai & Fábíán, 2021)

Competitiveness indexes of V4 cities

The development of cities is examined in the literature using several indicators. These include methods for measuring economic, social and innovation levels, whose indicator components include measures of health, economic and sustainability levels. Among the indices showing the development of the V4 cities, the resilience and the smart city index are presented below. The resilience index consists of three defining parts. The 1st is social resilience, which is the change in the number of the population, the ratio of people aged 0-14 compared to the total population, the ratio of the elderly population (over 65), and population density per person/km². Its second component is economic resilience, which is determined by the number of hospital beds, GDP per capita, Euro/capita, the number of students participating in higher education compared to the total population, cap/1,000, and the employment rate. The third indicator of the resilience index is environmental resilience, which means the number of days when the ozone concentration exceeds 120 µg/m³, the built-up area per capita (m²/capita), and the size of green infrastructure per capita (m²/capita). (Banica, Muntele, 2017) The measurement and determination of the indicators of the smart city (smart index) can be found in the databases of the Urban Audit (74 indicators) and the Urban Audit Perception Survey (278 indicators). The definition of indicators appears in 74 indicators (Giffinger, 2007); some define the smart index based on 28 indicators (Cohen, 2014), or Lados (2011), who considered 278 indicators important for determining the level of a smart city.

Summary based on the assessment of the smart index and the resilience indices, the following characteristics apply to the V4 cities.

Prague: It typically rests on a solid social pillar. It can be said that the city has a robust internal migration; one of the reasons for this may be that it is easy to find a job. (European Commission Report, 2015)

Bratislava is in fourth place in the overall indicators. The decreasing population can be said about the city. The employment rate is typically high, and the educational situation is outstanding compared to other cities. A dominant number of residents with higher education have adequate language skills. Large companies prefer it as an investment destination, making it easy to find a job. (European Commission Report, 2015)

Warsaw reached fifth place on the development scale in European countries. The city is densely populated, and they are vital in terms of the environmental component (e.g. low ozone concentration).

Budapest is at the bottom of the ranking. Based on the employment rate of recent graduates, it ranks 2nd among the V4 countries in the labor market assessment, with Prague and Bratislava in the first place. The proportion of people over 65 is typically high.

In the economic component, cities play a leading role in V4 settlements, which is contributed to by centralization. However, this does not mean a high value in terms of adaptability. (Figure 4)

Figure 4. Resilience and smart index values of V4 capitals and their position in the ranking

	Bratislava	Praha	Warsawa	Budapest
social resilience component	0,14 (4)	2,24 (2)	-0,64 (6)	-2,49 (10)
economic resilience component	5,66 (1)	2,58 (2)	0,27 (5)	1,17 (3)
environmental resilience component	-1,38 (8)	-1,82 (10)	0,37 (5)	-0,94 (7)
resilience index	1,47 (1)	1 (2)	0 (6)	-0,75 (8)
economic component	3,8	4,86	3,81	2,21
people component	5,18	3,39	2,44	-1,04
government component	-1,24	2,26	-2,71	4
mobility component	-2,89	4,4	2,1	-0,11
environment component	-4,55	1,15	-0,4	-0,56
quality of life component	6,29	2,66	-2,23	0,68
smart index	-1 (9)	2,37 (1)	0,5 (3)	0,86 (2)

Source: Author's editing based on Nagy et al., 2018

Material and methods

The main aim of the research is to assess the health picture of the four Visegrad cities in comparison with a medium-sized city, which establishes an order among the V4 cities. As a sub-goal, the research shows what differences can be discovered in comparison with a health-conscious city center. The survey examines the health awareness of the residents of V4 cities, their health and infrastructural opportunities in metropolitan and mid-city environments, which affects their health, standard of living, and quality of life. The research covers the health situation of cities, the quality of schools and health services.

The quality of life and the available organizational background influence the residents' lifestyle, but this also appears the other way around, since quality services increase the standard of living, and the health factor increases workplace productivity, contributing to the development of the economy.

In the researching the health picture of the Visegrad Four cities - Warsaw, Prague, Budapest and Bratislava - we used the Eurostat database, the latest statistical results of which are available for the year 2019, the member states according to the harmonized methodology for the European Union and the Eurozone, from which we filtered out the V4 cities and obtained the statistical data on the health picture.

The other direction of the research is the results of the primary health image research conducted in Győr, in the middle-sized city, which was prepared for the 2021 Health Strategy of the Hungarian organization of the WHO and the City of Győr County. The number of the primary research is 1803, which includes the health behavior of the people of Győr and the assessment of the health situation. The research methodology is an online questionnaire survey, which was evaluated with the SPSS statistical program. For this reason, Győr was also included in the survey of V4 cities as a medium-sized city and served as a basis for comparing large cities.

WHO The Healthy Cities program operates in 5-year cycles, it was launched in 1986, and for the first time 11 European cities joined the initiative in which

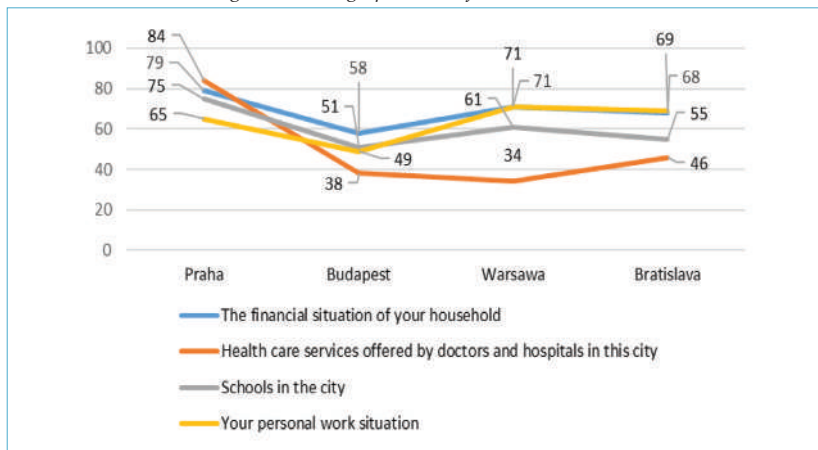
the urban sports concept is developed based on strategic goals. At the local government level, Győr is one of the prominent players in the program based on the local public administration system. Today, 1,500 European cities participate in the Health for All strategy.

Results and discussion

Results of the research

The research data provide insight into the quality of life and the factors determining the quality of life. In the Prague, Budapest, Warsaw, and Bratislava questions and the later health image research in Győr, the standard of living and the image of health are shown in cities based on similar territorial conditions. The presentation of the demographic data of the V4 cities is essential for comparison data. (Figure 5) Győr, as a central city, is included in the list, supplementing the capital cities and at the same time comparing it with a central city health picture, in which the similarities and differences in terms of quality of life become visible.

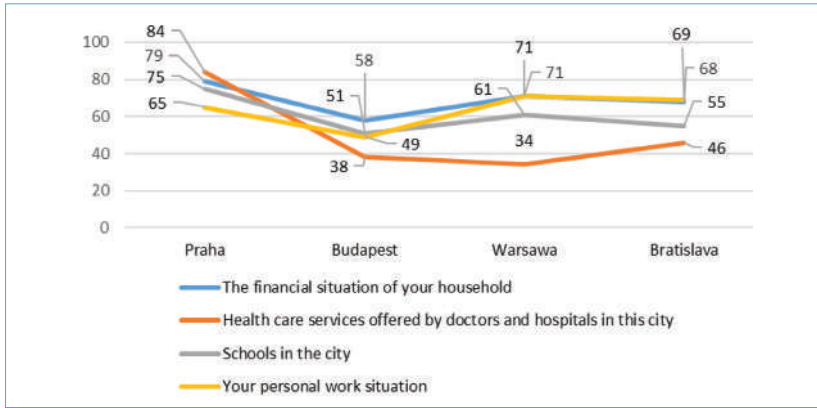
Figure 5. Demographic data of V4 cities (2021)



Source: Author's editing based on sts.gov.pl, slovak.statistics.sk, ksh.hu, hu.db-city.com

The determinants of the standard of living are the services, training, and working conditions that significantly influence the quality of life. That is why the financial situation of households, health services, schools and the workplace were examined. In V4 cities, residents were more dissatisfied with healthcare services than in Prague, while they were the most satisfied with the workplace environment. (Figure 6)

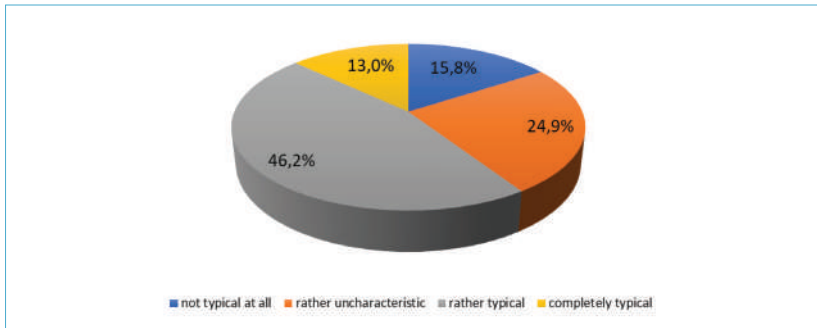
Figure 6. Satisfaction with the financial situation, services of doctors and hospitals, schools, and workplace (%)



Source: Author's editing based on Eurostat, 2019

Győr's health image survey (2021) examined the workplace environment, in which 46,2% of the city centre residents found a calm atmosphere at work as a determining factor in their quality of life. (Figure 7)

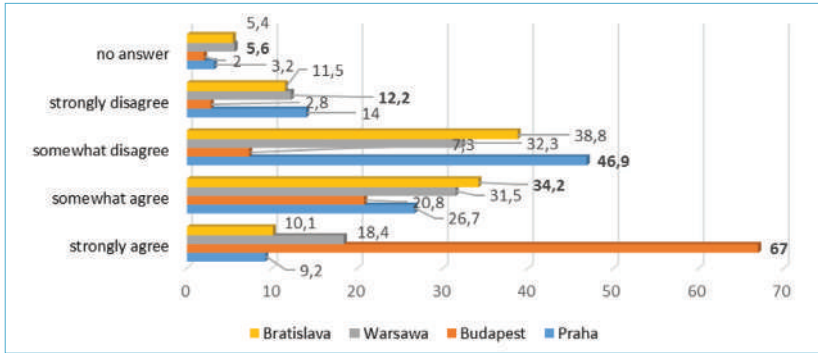
Figure 7. Workplace calm atmosphere



Source: Author's editing based on Győr health image survey 2021

Among the cities of the V4, Budapest showed an exceptionally high rate of poverty in the city, which also affects the living conditions of the residents; if they encounter much poverty, it also negatively affects their mental health and social care. Prague and Bratislava indicated fewer problems in the city, where poverty is not felt to the same extent as in Budapest or Warsaw. (Figure 8)

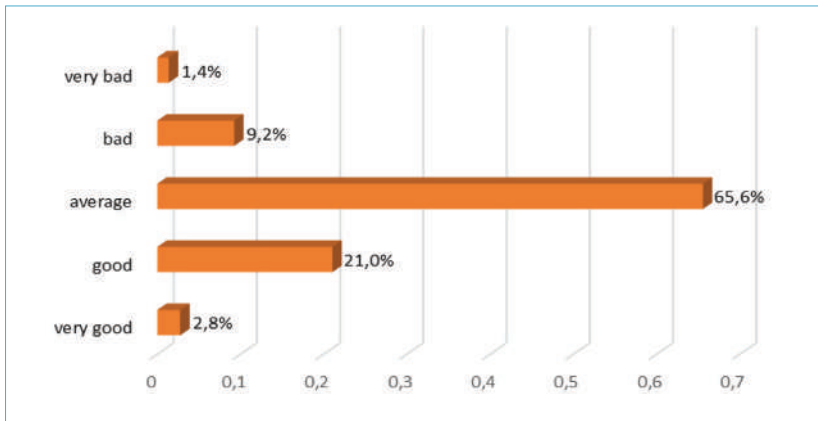
Figure 8. Poverty is a problem in the city (%)



Source: Author's editing based on Eurostat, 2019

In the Győr 2021 health image survey, based on the responses to their financial situation, the residents consider themselves to have an average (65,6%) financial level, which is slightly lower than in the big city. (Figure 9)

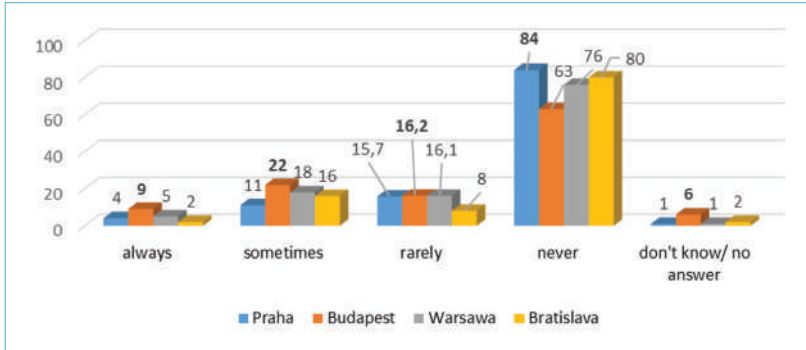
Figure 9. Assessment of the subjective financial situation



Source: Author's editing based on Győr health image survey 2021

In the context of the problem of poverty, the financial situation of households is also a critical attitude. City dwellers do not lack this. Regular payment of bills is not a problem in their standard of living. (Figure 10)

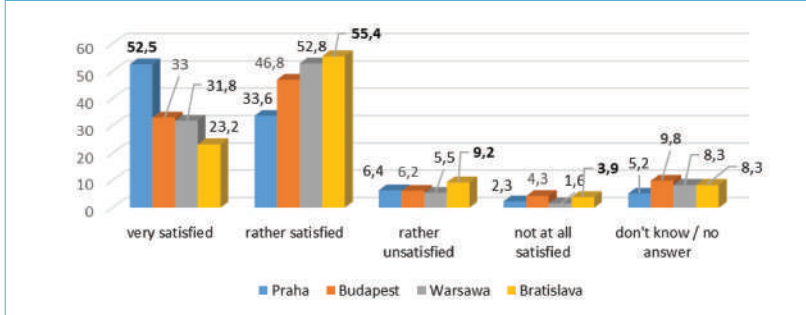
Figure 10. Difficulty paying bills at the end of the month (%)



Source: Author's editing based on Eurostat, 2019

Culture determines the social life of the population, the quality of which also affects living conditions and education. Prague (52,5%) and Bratislava (55,4%) indicated high satisfaction in this area. Both Budapest and Warsaw showed a high satisfaction rate in the field of culture. (Figure 11)

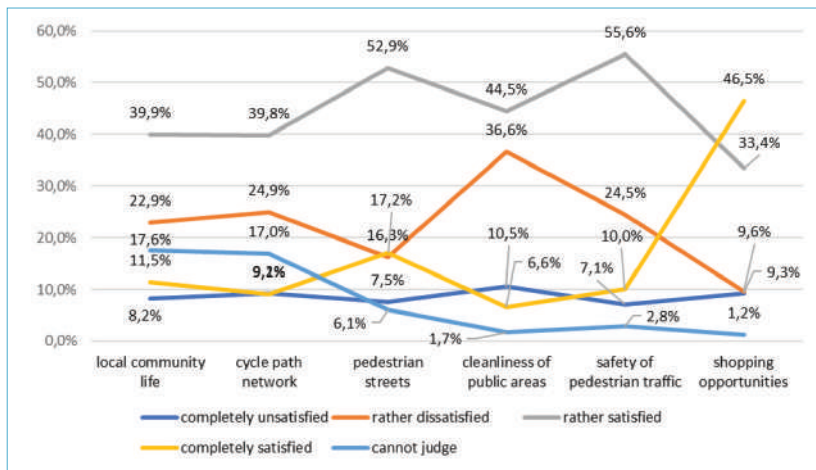
Figure 11. Cultural facilities, e.g. concert halls, theaters, museums, and libraries in the city (%)



Source: Author's editing based on Eurostat, 2019

In Győr's health image assessment, social and community values and social capital represent the development path. Added to this is the infrastructure that provides the environment. The living environment, its services, infrastructure, and the possibility of leisure activities improve living conditions and quality. In Győr, residents are satisfied with social life (39,9%), safety (55,6%), and the number and quality of pedestrian streets (52,9%). (Figure 12)

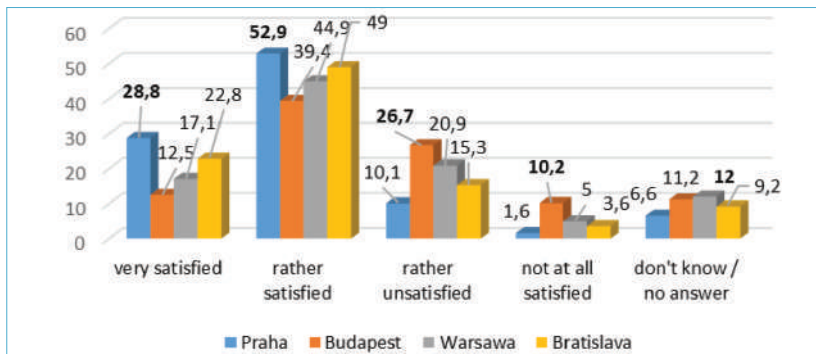
Figure 12. Residential environment, safety, community life, satisfaction with the cycle path network



Source: Author's editing based on Győr health image survey, 2021

The wealth of leisure opportunities shows the residents' healthy lifestyles and cultured leisure time. The basis for this is the availability of high-level infrastructure and specialists. Among the V4 cities, Prague indicated the highest satisfaction with leisure opportunities, but Bratislava was also 49% satisfied. Budapest is the most dissatisfied in this area, which is reflected in the percentages of the four cities. (Figure 13)

Figure 13. Outdoor recreation outside/around the city, e.g. walking, cycling or picnicking (%)

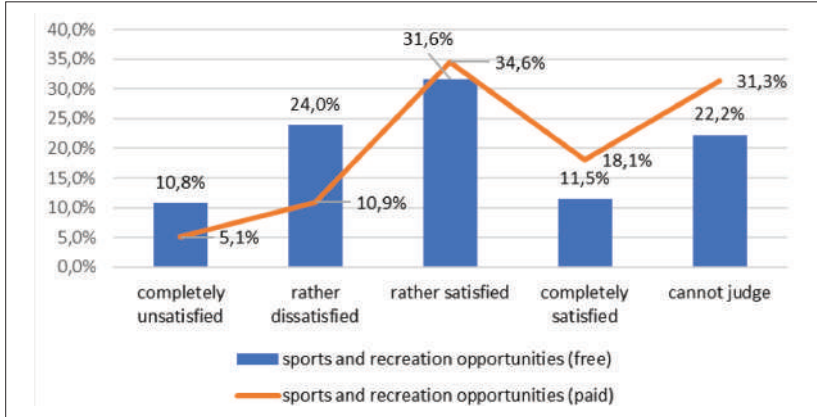


Source: Author's editing based on Eurostat, 2019

The sports infrastructure developments in Győr are outstanding at the national level. Despite this, the majority of residents (34,6-31,6%) expressed their satisfaction, but a large proportion of dissatisfied residents still exist. Public support

for this issue achieved greater satisfaction in the big cities. In the Győr survey, the availability of paid and accessible sports facilities is separated, in which the paid services slightly achieved higher satisfaction (Figure 14)

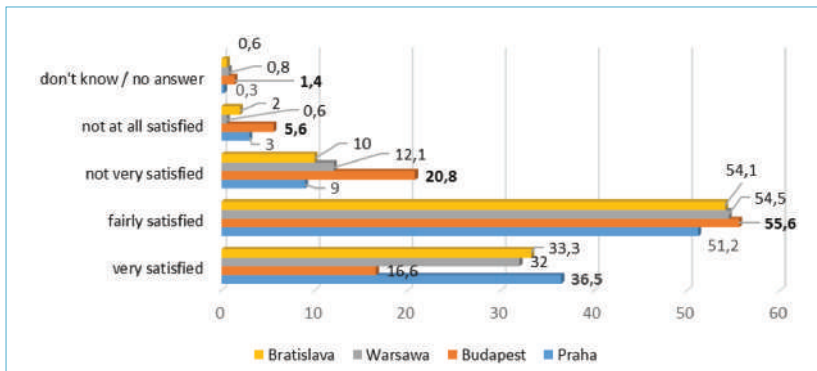
Figure 14. Sports and recreation opportunities



Source: Author's editing based on Győr health image survey, 2021

Budapest's lagging behind other cities is counterbalanced by the issue of satisfaction with lifestyle, where 56,6% of Budapest residents are satisfied. The other cities also indicated high indicators of a high standard of living. (Figure 15)

Figure 15. Lifestyle (%)



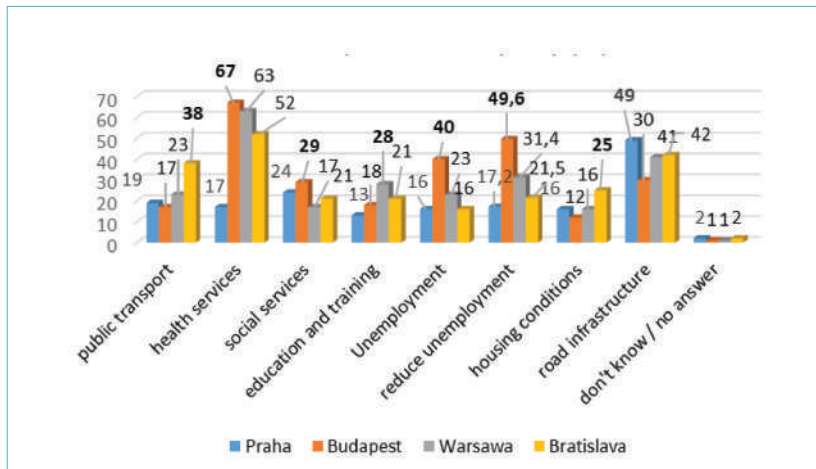
Source: Author's editing based on Eurostat, 2019

In the central city survey in Győr, residents showed high satisfaction with their living standard, development, and living environment (8 on a scale of 10), which are significant values (Chi-square 0.000). (Figure 22)

The availability and quality of health services are essential factors in the quality of life of city residents (Budapest 67%, Warsaw 63%, Bratislava 52%)

except for Prague (17%). According to the survey, the road network in Prague (49%) significantly influences their living conditions. In Budapest, unemployment reduction (49,6%) was prioritized, while in Warsaw and Bratislava (42%), the residents considered the road network (41%) to be the most critical task. (Figure 16)

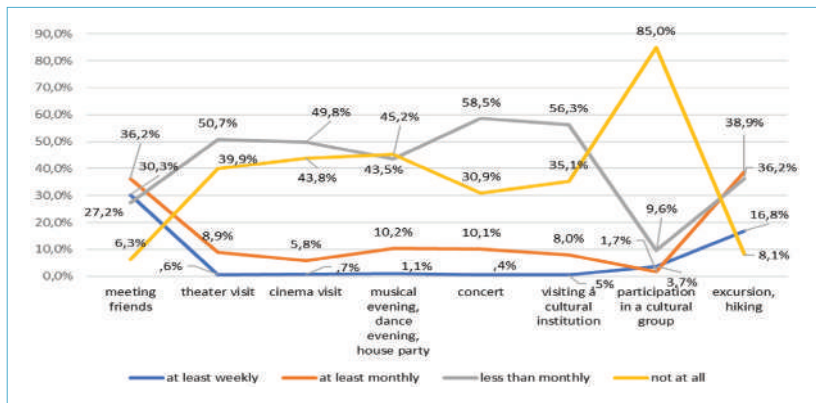
Figure 16. Most important in my city (%)



Source: Author's editing based on Eurostat, 2019

The standard of living is also reflected in cultured leisure time. Social life and participation in cultural life also appear as a factor in the identity of a local community. Among the residents of Győr, passive leisure is typical, which is also reflected in cultural life. Leisure and cultural activity is not intensive, as they participate in these programs less often than once a month (with an average of 50%) (Figure 17)

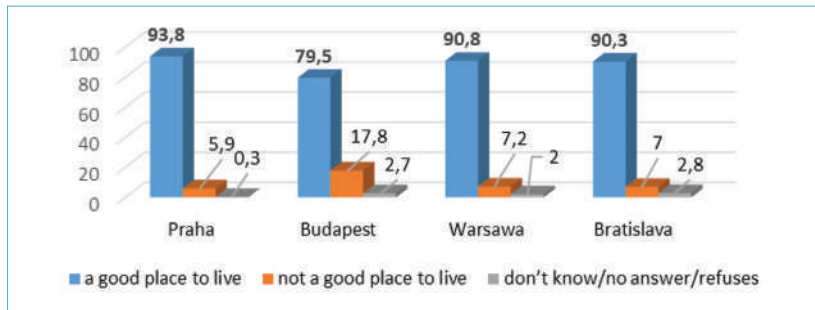
Figure 17. Leisure habits



Source: Author's editing based on Győr health image survey, 2021

The residents of the V4 cities love where they live and feel good. There are less visible differences in the opinions of the Visegrad Four, except for Budapest, where, although the rate is high (79,5%), it still lags behind the verdict of over 90% in the other three cities. (Figure 18)

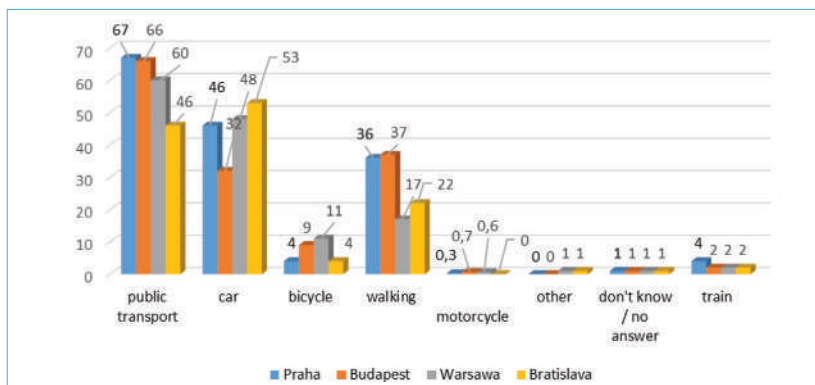
Figure 18. Residents' assessment of living conditions in the city (%)



Source: Author's editing based on Eurostat, 2019

Transportation and travel time to the workplace are also important issues in the quality of life. In the division of time, physiologically bound time (9-10 hour, sleeping, cleaning, eating), socially bound time (9-10 hour, studying, transport, family programs), free time, and transport is located in socially bound time, the measure of which also affects the length of free time. For commuters and people living in big cities, this can take several hours, which affects the quality of life. Public transport in big cities is generally favorable, but traveling by car is time-efficient. Even in big cities, real estate prices are an influencing factor, which also plays a prominent role in living conditions and distances to work. Residents of the Visegrád Four cities like and find public transport favorable, but it differs slightly from car transport. Pedestrian traffic also shows a high rate, in which further investigations suggest directions in the sample in the housing area. (Figure 19)

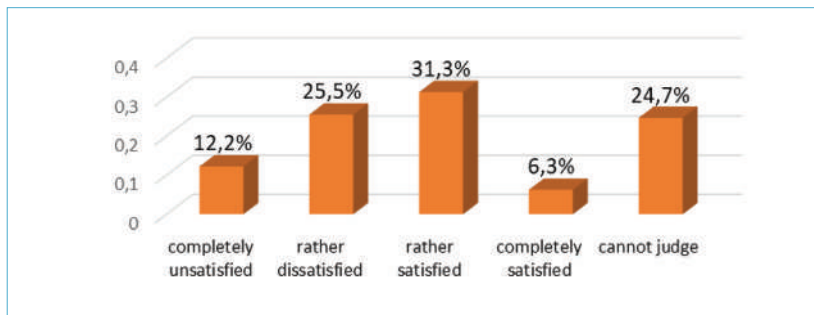
Figure 19. Means of transport to work/school (%)



Source: Author's editing based on Eurostat, 2019

Public transport also appears in the Győr health image survey (2021) as the most popular form of transport. However, the public satisfaction reflected in this shows a mixed picture. The quality of this form of transport in the city center reached a medium level of satisfaction. (Figure 20)

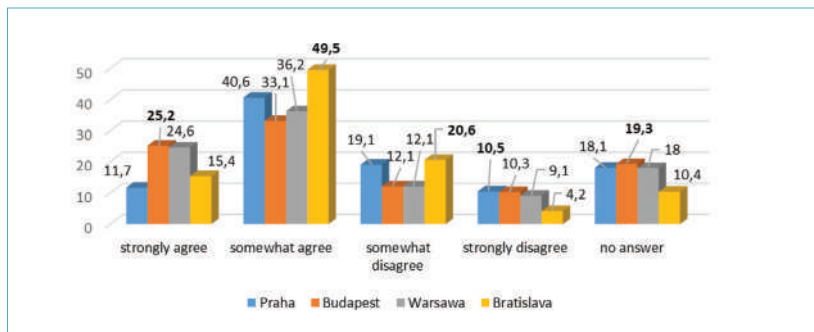
Figure 20. Satisfaction with public transport Győr



Source: Author's editing based on Győr health image survey, 2021

Urban identity appears in the plans of the population; they are optimistic about the future and somewhat agree that living in a city will provide a pleasant environment in the coming years. There are no significant differences between the four cities in this area. (Figure 21)

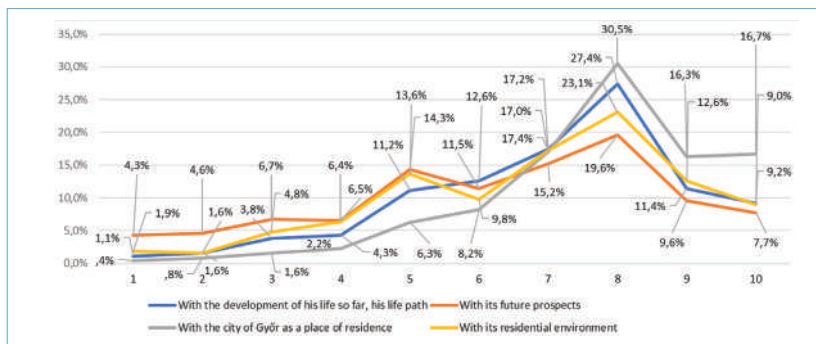
Figure 21. In the next five years, it will be more pleasant to live in this city (%)



Source: Author's editing based on Eurostat, 2019

Similar satisfaction with life in a big city can also be found in the middle-town level, as far as the vision of the future is concerned, since they are satisfied with the living environment (30,5%, the development of their lives (27,4%), living environment (23,1%), prospects (19,6 %) achieved a rating of 8 on a scale of 10. These indicators have better values in urban environments (Figure 22).

Figure 22. Satisfaction with the development of life, future prospects, and his living environment



Source: Author's editing based on Győr health image survey, 2021

Conclusion

A healthy lifestyle is of primary importance for cities in terms of economic and social development. To create healthy cities, to achieve sustainability and human capital productivity, the government's primary task is to embed this in a strategic goal system.

In the literary background of the study, the Visegrad Four and their historical and cultural similarities were presented, as well as the innovative factors of competitiveness, such as the smart index and the resilience index, which can be used to measure the economic and social development paths of these cities.

In the results of the research, the health picture examination defined in the research objective showed that in the "four competition" the cities are in order: Prague, Bratislava, Warsaw and Budapest, but based on the indicators, some countries provide outstanding performance in some areas. This result is the same as the descriptive analysis of the competitiveness of the Visegrád 4s. (Ivanova & Cepel, 2018) In V4 cities, residents are satisfied with their way of life, consider their health relatively good, and find favorable opportunities in the healthcare system. From the point of view of a healthy city, the more favourable results can be seen in the big cites of Prague and Warsaw, but the difference is not significant in the other cities either. From the point of view of Budapest alone, a lower value can be mentioned in several surveys, but the ratio is not exceptionally high.

In comparing the middle-sized city environment, which in this research is Győr, Hungary, the middletown received a less favorable opinion than the big city, even though the middletown sees health as a priority strategic goal. The availability of services and the size of the population influence the level of health care, but the priority strategic direction predestines the population's health image to create a higher quality of life. The limits of the study are given by the available data of the statistical database, in which it was possible to examine specific topics.

The indicators of economic development not only determine Central and Eastern Europe's competitiveness indicators, but as the literature analysis also pointed out, resilience, social and environmental development, and a healthy lifestyle, healthy

behavior and, with it, a health-conscious urban population also contributes. The specificity of the research was given by this health picture examination. The innovative development methods cover social values, and these indicators are becoming more and more potent since the economy can be increased by society and capital elements. Additional possibilities of the research include the creation of a validated questionnaire, in which the V4 large cities and the economically developed (western) large and medium-sized cities of the European Union could be assessed from the point of view of health behavior based on the same system of criteria.

Győr health image survey (2021) was prepared with the support of the WHO and the City of Győr.

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