RESIDENTIAL SATISFACTION AND THE FACTORS AFFECTING IT IN A SECOND-TIER CITY

DZĪVESVIETAS PIEVILCĪBA UN TO IEKTEMĒJOŠIE FAKTORI OTRĀ LĪMEŅA PILSĒTĀ

Liga Feldmane

Latvia University of Life Sciences and Technologies

liga.feldmane@llu.lv

Abstract

Studies of residential satisfaction can help to investigate and improve the emotional state of society and overall satisfaction with life, which is especially important in the wake of the Covid-19 pandemic. This research is based on the population survey in one of the second-tier cities of Latvia, Jelgava, with the aim of investigating the main factors that impact residential satisfaction in a second-tier city. Based on the characteristics of the residential satisfaction assessment of the urban environment in the study, the factors of the urban environment that affect the residential satisfaction assessment by the city's population are identified, of which the most important factor is the quality of the environment and personal safety. The study reveals that residential satisfaction is impacted by various demographic, socio-economic, housing and migration characteristics of the population.

Keywords: residential satisfaction, second-tier city, spatial differences

Introduction

One of the aspects influencing quality of life is place of residence. Its importance has been highlighted in particular in the wake of the Covid-19 pandemic, when people had limited travel opportunities and a large amount of time was spent at their place of residence. Several recent studies have already highlighted that the Covid-19 pandemic has influenced daily habits and subjective wellbeing (Krisjane et al. 2020; Berina et al. 2021). Therefore, studies of residential satisfaction can contribute in the field how to improve the emotional state of society and overall satisfaction with life. Residential satisfaction is a multidimensional construct due to the fact that its precise meaning depends on the time, place and purpose of the assessment, and on the value system of the assessor. In geography, residential satisfaction is associated with an assessment of an individual's place of residence and viewed as an accurate guide to what the respondents feel about their residence (Parkes et al. 2002).

Exploring residential satisfaction in urban environments is an interdisciplinary topic addressed from the second half of the 20th century onwards by researchers representing various specialisations. Previous studies have considered a wide range of

attributes shaping residential satisfaction, starting with a psychological assessment of the individual and ending with the geographical location of the place of residence (Amerigo and Aragones 1997). Although in general researchers are mainly interested in large cities because various social processes tend to be more visible there, second-tier cities are also becoming increasingly prominent in research (Hanak et al., 2015; Barreira et al., 2019).

According to initial research in this field (e.g. Galster, 1985), residential satisfaction is influenced simultaneously by a complex set of indicators: characteristics of both the area around the place of residence and the population. It is important to investigate the factors that affect residential satisfaction because it contributes to understanding the characteristics of the urban environment that should be improved to make it attractive. While research at the beginning of the 21st century (e.g., McCrea et al., 2005) primarily linked the attractiveness of urban space to economic factors such as job opportunities, living costs and urban services, currently researchers emphasise that the quality of the environment will in the future play an increasingly important role in the attractiveness of a residence (Kahrik et al., 2016).

Based on previous studies and the author's interest in this topic, the research questions are stated as follows:

1) What attributes and factors characterise residential satisfaction in second-tier cities?
2) How do different groups of residents assess residential satisfaction factors?

Data and methods

In order to study residential satisfaction in second-tier cities and to answer the abovementioned research questions, the fourth-biggest city in Latvia, Jelgava, was chosen as a research area. In the city, the quantitative survey, a population questionnaire, was carried out in the period from June 2018 to December 2018. As a result, using the five-point Likert scale system, a total of 961 respondents expressed their assessment of different urban space attributes, such as public transport, healthcare, sports facilities, cultural facilities, condition of streets and buildings, public places (e.g. markets, squares, pedestrian areas), green areas, availability of retail stores, educational institutions, air quality, noise levels, orderliness, safety and job opportunities. In order to establish which factors of urban space influence Jelgava residents' residential satisfaction assessment, factor analysis was primarily chosen, using the principal component analysis, while the Varimax rotation was used for more complete interpretation of factors. In the process, using regression analysis, it was discovered that the inclusion of certain urban space attributes – retail shops, educational institutions, condition of streets and buildings, as well as job opportunities

– was not expedient, as they did not sufficiently explain residential satisfaction regarding Jelgava, and they were therefore excluded from the set of factors. To ascertain the statistical difference of residential satisfaction assessment (factors characterising residential satisfaction) data between four different groups of indicators – demographic indicators, socio-economic indicators, indicators pertaining to migration experience, as well as housing and place attachment – characterising the respondents, the Kruskal-Wallis H Test was applied.

Results

Factor analysis revealed that residential satisfaction assessment in the case of Jelgava is determined by three factors, whose determining attributes explain 59.1% of the information (Table 1).

Table 1. **Factors impacting residential satisfaction** (author's elaboration)

Factor	Explained information, %	Determining attributes	Factor weight of attribute
1. Environmental quality and personal safety	37.8	Noise level	0.834
		Air quality	0.774
		Safety	0.608
		Orderliness	0.609
2. Infrastructure	11.1	Public spaces	0.738
		Green areas	0.702
		Cultural facilities	0.662
		Sports facilities	0.609
3. Healthcare and transport	10.2	Public transport	0.773
		Healthcare	0.731

Notes: Analysis of the main components, Varimax rotation

Jelgava residents consider the quality of environment to be the most important factor influencing residential satisfaction. The results are in line with the trend reported in the literature, where it is noted that in residential satisfaction assessments, society is gradually moving from economic to environmental quality indicators. Such results can be explained by the fact that, in contrast to large cities, the availability of infrastructure and services is generally better in second-tier cities, and therefore the quality of the environment in the perception of the inhabitants of these cities pushes the importance of infrastructure availability into the background. Although in the opinion of Jelgava residents, the provision of infrastructure affects overall residential satisfaction to a lesser extent than the quality of the environment and personal safety, such attributes as the availability of cultural and sports facilities have an impact on satisfaction with urban space. In addition, the availability and quality of public transport, similar to the findings of studies on other European cities (Hanak et al. 2015) also has an impact on individuals' satisfaction, but it is relatively small. The

reason for it could be the specifics of a second-tier city – shorter distances in the city and a more compact morphological structure – and therefore the use of public transport is relevant for only a small part of the city's population.

The three previously detected factors were analysed by different groups characterising the population. The rating of the first factor – **environmental quality and personal safety** – in the city of Jelgava is moderately high, because the average rating given by respondents is 3.69 out of 5. As demonstrated by the Table 2, the demographic indicators characterising the respondents are not decisive in the assessment of this factor, due to the fact that only the age of the respondents has a statistically significant impact.

Among the socio-economic indicators characterising the respondents, occupation, satisfaction with the financial situation and satisfaction with life in general have an impact on the assessment of the quality of the environment and personal safety. This factor was rated significantly higher by persons who were employed, expressed satisfaction with their financial situation and were satisfied with life in general. The results confirms the relationship (Fleuret & Prugneau 2015) that overall subjective satisfaction with life affects satisfaction with different areas of life, including place of residence, as people who are generally satisfied with life tend less frequently to assign negative traits to various spheres of life.

The survey data also shows that residents who have lived in their place of residence for a long time assess the quality of the environment and their personal safety higher than people who have come to their place of residence relatively recently, and this can be explained by an increase in place attachment and acceptance of the environment (Inch & Florek 2010), as well as by the loss of comparative criteria for assessing the residential satisfaction after long-term residence in the same place. Furthermore, the survey indicates a close connection between the future intentions of migration and the assessment of the quality of the environment and personal safety in this city.

The results of the study points out that the indicators characterising housing also have an impact on the assessment of the quality of the environment and personal safety in the city. There is a statistically significantly lower assessment of environmental quality and personal safety among residents living in dormitories. A lower rating was also received from respondents who are tenants compared to those who are owners of their housing, confirming the tendency found in previous studies (Balestra & Sultan 2013) that ownership encourages greater involvement in improving the place of residence, which is thus closely linked to a higher assessment of the environment.

Table 2. **Assessment of environmental quality and personal safety (Factor 1) according to the indicators characterising respondents and households** (author's elaboration)

		Average value	Kruskal-Wallis value H	df	p
Demographic profile					
Gender	Male	3.71	0.419	1	0.518
	Female	3.68			
Age	18–34	3.65	8.184	2	0.017*
	35–64	3.70			
	65 and above	3.86			
Nationality	Latvian	3.68	0.275	1	0.600
	other	3.71			
Marital status	lives alone	3.70	0.347	1	0.556
	married or in cohabitation	3.67			
Children living in household	yes	3.71	1.169	1	0.280
	no	3.67			
Socio-economic profile					
Education	basic	3.64	3.370	1	0.338
	general secondary	3.63			
	professional secondary education or vocational education	3.67			
	higher	3.74			
Occupational status	employed	3.76	15.234	3	0.002*
	unemployed	3.68			
	studying	3.53			
	employed and studying	3.69			
Satisfaction with financial situation	satisfied	3.84	60.220	1	0.000*
	others	3.44			
Overall satisfaction with life	satisfied	3.75	23.387	1	0.000*
	others	3.40			
Migration experience					
Duration of living at the place of residence	recently migrated	3.58	19.446	1	0.000*
	long-term residents	3.77			
Plans regarding migration	plan to move	3.50	16.910	1	0.000*
	others	3.74			
Housing and place attachment					
Type of housing	apartment	3.70	15.056	2	0.001*
	detached house, terraced house	3.76			
	dormitories	3.52			
Tenure	owned	3.73	9.629	1	0.002*
	rented	3.61			
Place attachment	attached	3.80	67.142	1	0.000*
	others	3.38			

* – statistically significant difference (p<0.05)

The results show that the average rating of Factor 2 – **infrastructure provision** – in Jelgava is 3.83 out of 5, which is the highest rating of any factor. Analysing the assessment of infrastructure provision in terms of respondents' demographic indicators, the results revealed that it is influenced by nationality and the presence of a child in the household. Latvian respondents are more satisfied with the provision of infrastructure in Jelgava, while non-Latvians are more critical of it. The infrastructure of the city is assessed lower by people with a child living in the household, who, compared to childless respondents, give a statistically significantly lower rating to the accessibility of cultural facilities and public spaces. These results are consistent with previous studies (e.g. Balestra & Sultan, 2013) showing that a child's presence in the family increases the demands for certain infrastructural amenities, and for entertainment and recreational opportunities, thus creating a more critical view of urban infrastructure.

Amongst the socio-economic indicators, the assessment of urban infrastructure is influenced by respondents' subjective satisfaction with the financial situation of the household and overall satisfaction with life. Respondents who expressed satisfaction with the financial situation of their household also rated the provision of infrastructure in the city statistically significantly higher. This means that people with higher incomes also have more extensive recreational opportunities in the city, and the results confirms the trend in empirical studies (Boschman 2018; Dekker et al. 2011) that households with a better financial situation and higher income tend to be more satisfied with their place of residence compared to households with a less satisfactory financial situation.

Respondents who stated that they are generally satisfied with life also indicated a higher assessment of the provision of infrastructure in the city, compared to those who were less satisfied with life. Among the group of indicators characterising housing, the only indicator influencing the assessment of Factor 2 is place attachment to Jelgava, because respondents who feel attached to Jelgava assess the infrastructure in the city more highly than those who do not feel a place attachment to it.

According to the results, the residential satisfaction assessment is influenced by the factor of healthcare and transport provision, although less than by the other factors. The respondents' assessment of Factor 3 – **healthcare and transport provision** – was average, and the respondents rated it with an average of 3.12 out of 5. The results did not reveal a correlation in the assessment of Factor 3 between different social groups regarding demographic indicators. Of the socio-economic indicators, subjective satisfaction with the household's financial situation and satisfaction with life in general influence the overall assessment of this factor, confirming the close correlation of these indicators with the assessment of the place of residence and confirming the

previously mentioned observation that overall attitude towards life affects perceptions of different areas of quality of life. Among the set of indicators characterising the migration experience of the respondents, only the respondents' plans to move affected the assessment of Factor 3 – statistically significant differences in the assessment of this factor were observed between respondents who plan to move to another place in the next few years and those who do not plan this or have not yet decided, as the former assessed healthcare and transport provision significantly lower.

Conclusion

The study reveals that residential satisfaction in second-tier cities is determined by a set of urban space attributes and factors such as (1) environmental quality and personal safety, (2) infrastructure (3) healthcare and transport. The research confirms that in Jelgava, similar to current trends in other cities, the most important factor characterising residential satisfaction is the quality of the environment and personal safety.

Differences in the residential satisfaction assessment are significantly influenced by the various indicators characterising individuals or their households, of which the financial situation of the household, overall satisfaction with life, and place attachment were closely correlated to all the factors influencing residential satisfaction. This leads to the conclusion that individuals who are generally more satisfied with life, who have a more favourable household financial situation and who feel attached to the city value the urban environment higher and feel more satisfied with it than those who have a more critical outlook on life, who are in a poor financial situation and do not feel attached to the city.

Taking into account that this population survey was carried out before the Covid-19 pandemic, which could have influenced some aspects of the perception of residence, further expanding the research in the field of residential satisfaction and its impacting factors in second-tier cities in Latvia would be desirable.

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Dzīvesvietas pievilcības pētījumi var palīdzēt noskaidrot un uzlabot sabiedrības emocionālo stāvokli un vispārējo apmierinātību ar dzīvi, kas ir īpaši svarīgi Covid-19 pandēmijas apstākļos. Pētījuma pamatā ir iedzīvotāju aptauja vienā no Latvijas otrā līmeņa pilsētām – Jelgavā, noskaidrotu galvenos faktorus, kas

ietekmē apmierinātību ar dzīvesvietu šāda līmeņa pilsētā. Pētījumā, ņemot vērā rādītājus, kas nosaka dzīvesvietas pievilcību, tiek identificēti pilsētvides faktori, kas ietekmē pilsētas iedzīvotāju dzīvesvietas pievilcības novērtējumu, no kuriem svarīgākais faktors ir vides kvalitāte un personiskā drošība. Pētījums atklāj, ka apmierinātību ar dzīvesvietu ietekmē dažādas iedzīvotāju demogrāfiskās, sociāli ekonomiskās, mājokļu un migrācijas aspektus raksturojošas pazīmes.

References

Amerigo, M. and Aragones, J. (1997). A Theoretical and Methodological Approach to the Study of Residential Satisfaction. *Journal of Environmental Psychology,* 17, 47–57.

Balestra, C. and Sultan, J. (2013). *Home Sweet Home: The Determinants of Residential Satisfaction and its Relation with Well-being*. OECD Statistics Working Papers.

Barreira, A. P., Agapito, D., Panagopoulos, T. And Guimarães, H. (2017). Exploring residential satisfaction in shrinking cities: a decision-tree approach. *Urban Research & Practice*, 10:2, 156–177.

Berina, E. A., Burgmanis, G., Skadins, T., Feldmane, L. and Krisjane, Z. (2021). Regional Differences and Challenges of Subjective Well-Being in Latvia During the Covid-19 Pancemic First Wave. *New Challenges in Economic and Business Development–2021: Post-Crisis Economy*, 28.

Boschmann, S. (2018). Individual differences in the neighbourhood level determinants of residential satisfaction. *Housing Studies,* 33(7), 1127–1143.

Dekker, K., de Vos, S., Musterd, S. and van Kempen R. (2011). Residential Satisfaction in Housing Estates in European Cities: A Multi-level Research Approach. *Housing Studies*, 26(04), 479–499.

Fleuret, S. and Prugneau, J. (2015). Assessing students' wellbeing in a spatial dimension. *The Geographical Journal*, 181(2), 110–120.

Galster, G. C. (1987). Identifying the Correlates of Dwelling Satisfaction: An Empirical Critique. *Environment and Behavior*, 19(5), 539–568.

Hanak, T., Marovic, I. and Aigel, P. (2015). Perception of Residential Environment in Cities: a Comparative Study. *Procedia Engineering,* 117, 495–501.

Insch, A. and Florek, M. (2010). Place Satisfaction of City Residents: Findings and Implications for City Branding. In Ashworth, G. and Kavaratzis, M. (eds.), *Towards effective place brand management: Branding European Cities and Regions*, 191–204.

Kahrik, A., Temelova, J., Kadarik, K. and Kubes, J. (2016). What attracts people to inner city areas? The cases of two post-socialist cities in Estonia and the Czech Republic. *Urban Studies*, 53(2), 355–372.

Krisjane, Z., Apsite-Berina, E., Burgmanis, G., Berzins, M. and Skadins, T. (2020). Work-life balance during the COVID-19 outbreak: the case of Latvia. *Baltic Region,* 12(4), 39-60.

Parkes, A., Kearns, A. and Atkinson, R. (2002). What Makes People Dissatisfied with their Neighbourhoods? *Urban Studies*, 39(13), 2413–2438.