

Article

Housing Satisfaction: A Comparison between Post-Second World War Large Housing Estates and Post-Socialist Multifamily Residential Neighbourhoods in Slovenia

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Abstract: As a reaction to the critical writings of urban sociologists regarding the quality of post-Second World War large housing estates (monotonous architectural design, cheap/poor quality building materials, high building density, minimum dwelling sizes, overcrowding, etc.), fewer problematic types of mass housing neighbourhoods started to emerge, first in Western European countries in the 1970s, and later in Eastern European countries after they abandoned the planned economy system of the communist era and adopted the market economy system. One of the major concerns often raised in this regard is that, due to a variety of negative aspects associated with post-WWII housing estates, these neighbourhoods may eventually end up as concentrations of low-income households, after the more affluent residents relocate to the more attractive, less problematic residential neighbourhoods. Such developments are, understandably, undesirable. This concern inherently assumes that the inhabitants of post-WWII housing estates are not satisfied with their housing and are, as a result, expected to move away, as soon as they can. This hypothesis presents the focus of discussion in this paper. We examine its validity with the help of the findings of a comparative study between post-WWII large housing estates and post-socialist multifamily residential neighbourhoods that was conducted in Slovenia in 2021. Contrary to the hypothetical assumptions, our analyses of the research results reveal that the inhabitants of post-WWII large housing estates are (a) generally quite satisfied with their dwellings and residential neighbourhood and that (b) a large majority of them have no intention to move. Understanding people's satisfaction with their housing circumstances requires a complex analysis of their attitudes that goes beyond surface-level observations and encompasses a broader range of psychological and social influences on housing choices, suggesting the need to incorporate these aspects into future research. The consideration of these aspects is essential in order to ensure the longer-term sustainability of post-WWII large housing estates.

Keywords: housing satisfaction; post-WWII large housing estates; post-socialist residential neighbourhoods; housing mobility; sustainability of post-war large housing estates; Slovenia



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1. Introduction

1.1. General Background

Large housing estates, extensively built across Europe in the years after the Second World War (in continuation WWII), have been and are likely to continue to be a recurrent subject of academic discourse for a long time yet. At the time they were constructed, these mass residential neighbourhoods were seen and appraised as the optimum solution to the housing needs of urban populations after the devastation of the war. However, within a decade or so, urban sociologists, see for example, [1–5], began to observe several problems that had emerged in them, these relating especially to the socio-economic conditions of the residents, structural inadequacies of the multifamily residential buildings and the

physical characteristics of the neighbourhoods generally. Andráško et al. [6] have reported that Václav Havel (a former president of the Czech Republic) once described post-WWII large housing estates as ‘concrete jungles’ and ‘rabbit hutches’. In some cases, these neighbourhoods started to degrade, which gradually led to the decline of their reputation and their consequent stigmatisation [7–14]. During the 1970s, these neighbourhoods were increasingly being considered as unhealthy environments for the residents and fears started to emerge that they would gradually develop into high-density ghetto enclaves of low-income households [15]. As a reaction to these concerns, housing scholars and politicians [16,17] endeavoured to search for possible solutions that would avert these potential dangers. One of the most frequently proposed solutions centred around the idea of ensuring a social mix of residents in the large housing estates [18–22]. The 1990 CECODHAS meeting [5] of European Union representatives focused mainly on the discussion of the social exclusion of peripheral housing estates. It was argued that the maintenance of a mix of housing types and tenure types (housing mix) would facilitate the creation of a mix of households of various socioeconomic status and thus ensure a social mix which, in turn, would prevent the development of socially and economically segregated residential neighbourhoods [23]. On the other hand, other studies, for example [24], have cast doubt on the promotion of social mix as a universal panacea for the prevention of the decline of post-WWII large housing estates, while Gorczyca’s [25] study established a risk of the exodus of younger residents from large housing estates in spite of a well-maintained social structure. Other than social cohesion, both Gorczyca [25] and Kabisch and Grossmann [26] specify demographic change as a more serious problem, due to the ageing of the initial residents of the large housing estates.

Meanwhile, there have been some best-practice examples of approaches that have positively contributed to the improvement of the quality of post-war housing neighbourhoods. These have, in particular, involved the mobilisation and facilitation of the active participation of the residents in activities to improve their living environment [27–30]. There have also been successful renewal projects that have involved a partial demolition of the housing estate and an upgrade of the quality of construction, for example [31].

It is important to recognise that the post-WWII large housing estates still continue to be a very important housing type in many large cities and will continue to play a major role in the provision of housing for large urban populations worldwide [11,32,33] and particularly in Central and Eastern European countries [29,30,34–36]. There are, indeed, examples of post-WWII large housing estates that have been found to have important historical and social attributes such that they have been declared of unique cultural value and listed as or considered to be cultural heritage [37–40]. A recent worthwhile contribution in this area are the studies conducted within the framework of the European Middle Class Mass Housing COST Action (MCMH-EU). One such study [41] adopts a bottom-up approach that usefully mobilises the knowledge of the older population regarding declining housing estates in the development and adoption of heritage regeneration actions. Particularly active institutions in the conservation of large housing estates include the UNESCO World Heritage Committee, the International Council on Monuments and Sites (ICOMOS) and the Documentation and Conservation of Buildings, Sites, and neighbourhoods of the Modern Movement (DOCOMOMO). The discussion in this paper draws partly on Musterd and van Kempen’s [12] enlightening study conducted on the subject, which identified three main categories of residents of large housing estates: (a) those who find them attractive places to live in and are happy to live there, (b) those who would leave but are effectively trapped in these neighbourhoods due to a lack of alternative opportunities and (c) those who want to and will leave as soon as they can. Various studies, for example [42,43], have established that all three categories exist in some form in almost all post-WWII large housing estates. This paper focuses on the investigation of the aspects that relate to the last category of residents (c) who, due to a variety of reasons, are anxious to leave these neighbourhoods. We are interested in establishing, through empirical findings, whether these fears of mass migration from post-WWII estates to the newer estates are warranted and how much

outward migration from these neighbourhoods may be realistically expected to occur in the near future.

1.2. Research Design

This investigation is performed with the help of a case study that was conducted in Slovenia on the transformations that have occurred in the area of mass housing over the past few decades [36]. The study included a comparative analysis between the post-WWII large housing estates (high-rise, high-density, monotonous architectural designs) and the new types of mass housing (low-rise, low-density) that emerged after the country adopted a market economy in 1991. For the sake of easier differentiation, we, in continuation, refer to post-WWII large housing estates as ‘socialist’ housing estates, in contrast with ‘post-socialist’ multifamily residential neighbourhoods. The comparative analysis revealed several noticeable changes that have occurred, which may have unfavourable impacts on the attitudes of the residents of the socialist large housing estates. One of the most obvious observations made in the study is that post-socialist multifamily housing neighbourhoods are relatively smaller with respect to the built-up space, density of construction and building height (low-rise as opposed to the characteristic socialist high-rise construction). Another noticeable difference is that new multi-family housing types are mostly built as free-standing, detached buildings that are not part of an extensive system of connected residential buildings, as was the case with socialist large housing estates [34,36]. This means that new multifamily residential neighbourhoods are less densely built up and, consequently, less densely populated. The newer post-socialist multi-family residential buildings also present a significant change in visual appearance compared to the socialist facade designs, which were often described as monotonous and boring [8,9,31,44–46]. It has also been found that while socialist housing estate construction is known to have utilised mostly cheaper and, in some cases, hazardous materials [14,35,45,47], post-socialist multifamily housing is normally constructed with better quality building materials, also taking into consideration energy conservation objectives.

It may thus be deduced that post-socialist housing neighbourhoods generally offer a comparatively better housing standard and may be more pleasant to live in. Emerging from this assumption, we are tempted to propose the thesis that there is a high likelihood that the residents of high-density, lower-standard socialist housing estates consider themselves disadvantaged in comparison with the residents of the newer, lower-density, higher-standard post-socialist multifamily residential neighbourhoods. Expanding on this thesis, we suggest that the post-socialist mass housing types may have triggered changes in the attitudes of residents of socialist large housing estates with regard to their expectations and levels of satisfaction with their living environment. This line of thinking follows Trumbull’s [48] observation that the rapid adaptation of post-socialist cities to the external economic forces of the global market has led to a shift in values and a significant rise in urban residents’ expectations of what are desirable, and acceptable, residential living conditions. The proposition here is that the transition from a planned to a market economy system may have led to changes in values and attitudes, which may be also reflected in residents’ housing preferences and, especially, in the levels of satisfaction with their residential environment. It is thus purported that the changed socio-economic circumstances that led to the emergence of comparatively better multifamily housing types may have stimulated new expectations among residents and rendered the socialist housing estates less attractive to live in. As has been alluded to by some authors [49,50], it may be further assumed that the negative perceptions that have emerged as a result inevitably translate into the dissatisfaction of the residents with their housing and residential neighbourhood; this, consequently, leads to the departure of the more affluent who can afford to move to an alternative, more desirable housing and residential environment. This assumption defined the research hypothesis and is the focus of discussion in this article. The major concern behind this hypothesis is that such events would accelerate the development of low-income enclaves and the potential negative consequences associated with such neighbourhoods [10,51].

The key question that we seek to examine in detail in this contribution is as follows: are there noticeable indications that those that are able to will increasingly leave the socialist housing estates in favour of more attractive housing and residential alternatives? And should that be the case, what needs to be done to prevent post-WWII large housing estates from eventually developing into segregated low-income and low social-status housing enclaves? For this investigation, we have adopted a rare analytical approach [52] which, rather than extensively discussing social-mix, focuses instead on examining the specific aspects of housing and residential neighbourhood quality and characteristics, and how these have an impact on the residents' overall satisfaction with the housing and the neighbourhood, and the potential for contemplating relocation. This paper thus sets out to investigate how much the assumed negative perceptions of the residents of socialist housing estates effectively influence their level of satisfaction or dissatisfaction with their dwelling and residential environment, and what role all this plays in people's intentions to move house.

2. Theoretical Background

It has been often argued that housing satisfaction and satisfaction with the residential environment are important criteria in describing the quality of life of the inhabitants of a particular residential environment. In these discussions, satisfaction with the housing and satisfaction with the general appearance of the neighbourhood are closely associated with the general satisfaction with the residential neighbourhood [53]. It thus follows that satisfaction or dissatisfaction are considered strong triggers of contemplating changing one's residence [54]. As such, studies on residential mobility and its consequences normally use housing and residential satisfaction as a predictor of residents' potential to move house [55,56].

By definition, housing satisfaction refers to the amount of contentment experienced by an individual or family relative to their current housing situation [57]. Satisfaction can be defined as a state in which a person's housing expectations are met. This may mean that the resident is satisfied with the size of the dwelling and the quality of its amenities. Satisfaction with the residential neighbourhood may mean that the resident is satisfied with the neighbours, the physical state of the housing estate or its location within the wider urban area [49]. According to Bonaiuto et al. [58], residential satisfaction is the experience of pleasure or gratification deriving from living in a specific place. In other words, residential satisfaction occurs when the residential situation matches the individual's desired residential needs and aspirations [59–61]. In relation to housing in particular, Abidin et al. [62] have defined residential satisfaction as the feeling of contentment when one has or achieves what one needs or desires in a house. Speare [54], on the other hand, specifies the key characteristics that determine residential satisfaction, which include the aspirations of the household, location, the social bonds between household members and other people, and residents' attachment to the residential environment.

Amérigo and Aragonés [55] have provided a conceptual framework that can be usefully applied to examine how an individual interacts with their residential environment and how this interaction may result in satisfaction or dissatisfaction. This approach is premised on investigating an individual's housing experiences and preferences, as well as the specific physical characteristics of the residential environment. These are the objective factors that are believed to influence how an individual evaluates the appropriateness of a residential environment. According to Gibler and Tyvimaa [63], these objective attributes are then translated into subjective interpretations that determine the personal degree of housing and residential satisfaction. Satisfaction is, in this case, understood to indicate agreement between the actual and desired housing attributes. Given the specific circumstances, households select residential environments that most suitably match their residential aspirations. Those with more opportunities on the housing market are likely to have better opportunities to select a residential environment that offers them the required residential satisfaction [55].

Another conceptual model discussed by Sirgy and Cornwell [64] suggests that satisfaction with the neighbourhood features (social, economic, and physical) impacts neighbourhood satisfaction, which in turn affects housing satisfaction. Residential neighbourhoods thus play a major role in determining the quality of life of their inhabitants. Neighbourhoods that are unable to adequately satisfy the needs of their residents may be susceptible to the migration of their inhabitants to alternative residential areas that better satisfy their perceived or required needs [65]. As such, various studies have found that there is a strong correlation between satisfaction with specific neighbourhood attributes and overall neighbourhood satisfaction [53,66,67].

Dissatisfaction, on the other hand, results from a divergence between the individual's housing and residential neighbourhood aspirations and the actual situation. It has been suggested that residential dissatisfaction is an important factor that triggers the desire to move [54]. However, Lu [59] has argued that objective measures alone are not the major determinants of housing satisfaction or dissatisfaction. While residential dissatisfaction is considered to be the key trigger of residential mobility, Boschman [61] has suggested that caution is required regarding the need to recognise that neighbourhood characteristics that affect satisfaction/dissatisfaction may be perceived differently by different individuals or households. Different households have different housing needs and therefore different perceptions of the housing quality and quality of the residential environment. As such, different households will react differently to similar residential situations [68]. It is the individual's perceptions that determine satisfaction, rather than the actual residential conditions. People may be satisfied with their housing and still intend to move, while others may be dissatisfied and not intend to move [69]. As has been established by some studies [55,59], residents can be satisfied with their neighbourhood even in neighbourhoods with a poor reputation.

In this article, we examine the relationship between housing satisfaction and intention to move among the residents of socialist housing estates and post-socialist multifamily neighbourhoods in Slovenia. This approach uses residential satisfaction as a criterion of residential quality [56], which may then be used to investigate housing mobility intention. The principle aim of the paper is to test the validity of the research hypothesis, which predicts the gradual outward migration of the more affluent households from the socialist housing estates, a process that would eventually lead to the creation of undesirable disadvantaged low-income residential enclaves.

3. Research Method

The article is based on an empirical study that applied a quantitative research method to investigate various aspects of the quality of life, satisfaction, wishes, and needs of the residents of post-WWII large housing estates and post-socialist residential neighbourhoods. For these purposes, a questionnaire consisting of 94 questions was designed, which we used to measure the residents' attitudes, perceptions, norms, values, and degree of satisfaction with the quality of their housing and living environment. The sampling data on housing estates were obtained from the Real Estate Register [70] and the Central Population Register [71]. A professional institution for conducting public opinion polls was hired for conducting the telephone survey. Due to space limitations, this article only presents results for some selected questions or part of them.

3.1. Questionnaire

It has been established that it is the residents' perceptions and evaluations that crucially determine their level of satisfaction or dissatisfaction with their housing and residential environment [69]. In order to examine these subjective perceptions, we identified several variables, which we used for the evaluation of the level of satisfaction and eventual intention to move. The research variables were defined in relation to four major indicators of residential satisfaction:

1. Dwelling unit: comfort, maintenance, size, flat layout, number of rooms, general satisfaction;
2. Multifamily building: quality of construction, maintenance, energy efficiency, external appearance, internal public space, general satisfaction;
3. Residential neighbourhood: upkeep, building density, feeling of safety, peacefulness, cleanliness, green areas, children's playgrounds, other public areas, traffic and path arrangements (transport connections with other parts of city; traffic density, parking spaces, walking paths, bicycle paths, sidewalk);
4. Accessibility of services: public transport, schools, kindergartens, pharmacies, post offices, banks, grocery stores, health centres, dental clinics, restaurant/buffets, personal care (e.g., hairdressing), culture (e.g., theatre, cinema), library, leisure (e.g., gym), general satisfaction.

The respondents were asked to rate their level of satisfaction for each of the variables on a five-point Likert scale ranging from 1—'very dissatisfied' to 5—'very satisfied'. It is important to explain here that this particular questionnaire structure was intended to capture, as much as possible, the fundamental differences in the opinions and attitudes of the residents of the two types of housing estate regarding their key characteristics. This multiscale approach emerges from the findings of the first part of the same research project that established some significant differences between the two types of housing estates with respect to neighbourhood planning, the quality of construction, the quality of design and the level of provision of community and commercial services.

In addition to these, the respondents were asked to indicate how much the living conditions in the neighbourhood generally suited their needs. A similar Likert scale method ranging from 1—'totally disagree' to 5—'fully agree' was applied to evaluate the validity of these statements:

- The neighbourhood meets all my criteria for a pleasant residential environment;
- There are sufficient green areas in the neighbourhood;
- The neighbourhood is suitable for all age groups.

The questionnaire also included a separate question specifically aimed at investigating potential residential mobility. We asked the respondents to state whether they had recently contemplated moving to a different residence due to dissatisfaction with the current residence. With this question, we wanted to establish whether the variables related to residential satisfaction are also related to intention to move. In this way, the intention to move would be understood as a consequence of dissatisfaction due to a variety of negative attributes of the housing estate. In order to examine the mobility preferences more concretely, we included a follow-up question for those respondents that indicated an intention to move, asking them to state their preferred residential alternative were they to actually move. The choices offered to them were as follows:

- same neighbourhood but different dwelling;
- another housing estate built during the socialist period (before 1991);
- another housing estate built during the post-socialist period (after 1991);
- a new multifamily housing neighbourhood built during the past 5 years;
- house ownership.

This question was specifically intended to explore whether the inhabitants of socialist housing estates noticeably desire to move to the newer, post-socialist multifamily residential neighbourhoods.

In the presentation and discussion of the research results, reference is made also to other questions relevant to this study that constituted part of the questionnaire, i.e.,

- neighbourly relations;
- attachment to the neighbourhood;
- household income;
- level of education.

3.2. Sampling Method

For the purposes of the survey, data on housing estates (building construction and their residents) were obtained from the Real Estate Register and the Central Population Register, as of 2022. Quota sampling was used for the construction period of housing estates and for the two selected largest cities, i.e., Ljubljana and Maribor. Other than being the largest, these cities were selected for the survey because they also have the highest number of housing estates (both post-WWII and post-socialist) and the largest housing estates in terms of size (built-up area and number of residents). Other cities in Slovenia barely have any residential neighbourhoods that would be normally categorised as large housing estates. Within both categories of housing estate in the selected cities, the construction year of each multifamily apartment building was examined separately. Housing estates whose construction started during the socialist period and ended during the post-socialist period were excluded. All buildings that were built in 1991, which is the dividing line between the socialist and post-socialist administrations, were also excluded. Based on this, the quota for conducting the survey consisted of 54,985 apartments in buildings from the socialist period and 5585 apartments in buildings built during the post-socialist period.

3.3. Survey Sample

The data were gathered through a Computer-Assisted Telephone Interviewing method telephone (CATI), which was carried out between May and June 2022 in housing estates in the two largest Slovenian cities: Ljubljana and Maribor. The survey was carried out by a professional company that specialises in conducting research surveys. The interviewers called 27,401 telephone numbers listed in the latest telephone directory for Slovenia. The response to phone calls was 2.55%. Excluding calls that went unanswered or were made to wrong phone numbers, the response rate was 3.7%. The final number of surveys completed was 700, which constitutes the sample of apartments and residents living in socialist and post-socialist housing estates. The sample represents 1.2% of all dwellings designated for sampling. Depending on the construction period of the housing estates, the sample includes 613 respondents (87.6%) that live in buildings from the socialist period and 87 respondents (12.4%) that live in buildings from the post-socialist period (Table 1). The percentage ratio between socialist and post-socialist housing construction in the entire housing stock in the selected cities is approximately the same (89.2% vs. 10.8%), which was already considered when preparing the sample. In total, 524 surveys (74.8%) were completed in Ljubljana and 176 (25.2%) were completed in Maribor. This percentage ratio is also present in the entire housing stock of the two selected cities, which was taken into account while sampling.

Table 1. Survey sample according to type of housing estate and selected cities.

City	Socialist	Post-Socialist	Total
Ljubljana	452	72	524 (74.8%)
Maribor	161	15	176 (25.2%)
Total	613 (87.6%)	87 (12.4%)	700 (100%)

The sample includes respondents from 110 housing estates, which is 88.7% of all housing estates in the sample. Eighty-seven (90.6%) of them were built during the post-WWII period and 23 (82.1%) were built during the post-socialist period. The buildings in the socialist housing estates that respondents live in were built between 1946 and 1989, and the buildings in the post-socialist housing estates were built between 1992 and 2021. The largest housing estate from the post-WWII period that the respondents live in has 1408 dwellings and 10,870 residents. The largest housing estate from the post-socialist period has 594 dwellings and 1825 residents. On average, the socialist housing estates studied have 4237 dwellings and 3279 residents, and the post-socialist housing estates have 258 dwellings and 647 residents (Table 2).

Table 2. Descriptive statistics of housing estates in the sample.

Variable	Socialist	Post-Socialist
Share according to all housing estates	90.6	82.1
Period of construction	1946–1989	1992–2021
Number of dwellings in largest housing estate	1408	594
Number of respondents in largest housing estate	10,870	1825

Note: Unanswered questions (missing values) and “I do not know” are not included. Source: [70,71].

4. Results

4.1. Survey Sample Characteristics

Slovenia is a country with a very high share of the homeownership tenure, where this accounts for 91% of the total housing stock at the national level; see [72]. This high share of homeownership was similarly reflected in the survey sample within the socialist housing estates (91%), while the post-socialist homeownership share was somewhat lower (78%). The higher share of homeownership in the socialist housing estates may be understood to be the result of the transformation into private ownership of the previous public housing stock, which took place following the adoption of a market economy system at the beginning of the 1990s. It is important to note here that within the post-socialist housing estate sample, the rental tenure accounted for 19%, which is a surprisingly positive finding given that the rental tenure at the national level (according to official statistical data) accounts for only 9% of the total housing stock; see [72]. As would be expected, the survey results revealed a longer average period of residence in the socialist estates (35.1 years) and a comparatively shorter period of residence in the post-socialist estates (18.5). The gender ratio of the survey sample in both housing estate types was two-thirds female (66%) and one-third male (34%), maintaining the dominance of female respondents, a phenomenon that has been widely found to be characteristic of such studies [73]. The ratios are more or less the same according to the housing estate type. The average age of respondents was slightly higher in the socialist compared to the post-socialist housing estates (68.2 years and 64.8 years, respectively).

The survey revealed a quite noticeable difference regarding the average monthly household income, which was calculated as being just below EUR 1900 for residents living in socialist and EUR 2500 for residents in post-socialist estates. The explanation for such a difference may indeed be found in the fact that the socialist estates continue to house a considerable proportion of lower income residents that acquired homeownership through the give-away public housing privatisation process. In addition, the apartments in the newer post-socialist housing estates are comparatively more expensive, which means that those who can afford them ought to have correspondingly higher incomes. Likewise, it may also not be surprising that the survey found the respondents living in post-socialist housing estates to be generally more highly educated (75.6% college or university education) than those in socialist estates (45.7% for the same level of education). The key characteristics of the survey sample described above are presented in Table 3.

4.2. Satisfaction with the Dwelling and Multifamily Residential Building

As has been previously observed in similar surveys [74–76], the respondents were generally quite satisfied with the various aspects of their dwelling unit, with an identical score of 4.42 for general satisfaction with the dwelling for both types of housing estate (Table 4). As for the residential buildings, the results showed a slightly higher level of satisfaction among post-socialist respondents (4.15) compared to that of the residents of socialist housing estates (4.06).

Table 3. Characteristics of respondents in the sample.

Variable	Socialist	Post-Socialist
Housing status (%)		
Owner/co-owner	91.0	77.9
Tenant	7.2	18.6
Other	1.8	3.5
Sex (%)		
Male	34.4	31.4
Female	65.6	68.6
Education (%)		
Primary school	5.1	1.2
Specialised high school	7.3	1.2
High school	41.9	22.1
College or university	45.7	75.6
Average number of household members	1.9	2.2
Average years of residence	35.1	18.5
Average age of respondents (years)	68.2	64.8
Average income (euros)	1876.59	2507.49

Note: Unanswered questions (missing values) and "I do not know" answers are not included.

Table 4. Satisfaction with dwelling and multifamily residential building (mean) *.

	Socialist	Post-Socialist	Cronbach's Alpha
Apartment			
Comfort	4.38	4.40	
Maintenance	4.30	4.35	
Size	4.42	4.44	0.832 ***
Layout of rooms	4.37	4.31	
Number of rooms	4.17	4.12	
General satisfaction with apartment	4.42	4.42	
Multifamily apartment building			
Construction quality	3.91	3.84	
Maintenance	3.99	4.06	
Energy performance	3.84	3.83	0.848 ***
External appearance	4.07	4.13	
Internal appearance (stairways, corridor, elevator, etc.) **	3.85	4.19	
General satisfaction with building	4.06	4.15	

Notes: * Scale 1–5 (1 = not satisfied at all, 5 = very satisfied); unanswered questions (missing values) and "I do not know" answers are not included; ** significant independent samples *t*-test of socialist versus post-socialist housing estate difference ($p \leq 0.05$); *** Cronbach's alpha value indicates that the response values for each participant across a set of questions are consistent/reliable.

Although the survey did not reveal any major differences in satisfaction between the two estate types in this connection, there are three aspects that need to be particularly noted here. First, it was found that the average size of apartments in housing estates from the post-socialist period is greater (74 m²) than that of apartments in housing estates from the socialist period (63.6 m²). It is, nonetheless, interesting to observe that despite this difference, the level of satisfaction in both types of estate is almost the same, i.e., 4.42 for socialist and 4.44 for post-socialist housing estate respondents. The second aspect relates to the most important difference in the levels of satisfaction, which is also statistically significant. The residents of post-socialist housing estates rated the internal appearance of their multifamily residential building lower (3.85) than the respondents from post-socialist housing estates did (4.19). Thirdly, it is also interesting to note that the responses revealed a slightly higher level of satisfaction with the quality of construction among residents of

the older socialist housing estates (3.91) compared to that of the residents of post-socialist estates (3.84). This is surprising and difficult to understand. It may, however, be an indication that the quality of the construction of the newer multifamily housing estates may not be as high as one would have expected, in view of the technological innovations and building material advancements that have occurred in this area in the last few decades.

4.3. Satisfaction with the Residential Neighbourhood

The responses to this question of the survey similarly revealed a high level of satisfaction with the examined elements of the residential neighbourhood. The satisfaction ratings are generally remarkably similar between the two types of housing estate (Table 5). There were, nonetheless, some aspects that showed statistically significant differences in the levels of satisfaction, i.e., general upkeep (3.90 vs. 4.18), parking space (2.61 vs. 3.28) and sidewalks (3.94 vs. 4.36), with higher levels of satisfaction in post-socialist housing estates. While parking space, in particular, is a major problem in socialist housing estates, since this was not an important consideration in their planning, it is somewhat surprising to see that this was the aspect also rated lowest in the newer, post-socialist housing estates. Another surprising survey finding concerns the comparative levels of satisfaction with aspects relating to open spaces. Considering the fact that socialist housing estates were designed (and constructed mostly on greenfield land) with provisions for expansive open spaces and green areas, the differences in the levels of satisfaction between the two types are surprisingly minimal regarding green areas (4.29 vs. 4.21) and playgrounds (3.91 vs. 3.67), with the levels of satisfaction only slightly higher in the older socialist estates. More surprisingly, ‘other outdoor public spaces’ were rated higher by post-socialist respondents and not the reverse, as would have been normally expected. A similarly surprising finding is that socialist estate residents are more satisfied with the density of construction in their neighbourhood (3.87) compared to the lower satisfaction level (3.77) of post-socialist respondents. There are also no major differences in the levels of satisfaction with the image (4.00 vs. 4.08), safety (4.22 vs. 4.28), peacefulness (4.04 vs. 4.10) and cleanliness (3.98 vs. 4.11) of the estate, respectively, for socialist and post-socialist respondents.

Table 5. Satisfaction with particular aspects of the residential neighbourhood (mean) *.

	Socialist	Post-Socialist	Cronbach's Alpha
General characteristics			
General upkeep **	3.90	4.18	
Construction density	3.87	3.77	
Image	4.00	4.08	0.871 ***
Safety	4.22	4.28	
Peacefulness	4.04	4.10	
Cleanliness	3.98	4.11	
Green areas	4.29	4.21	
Playgrounds	3.91	3.67	
Other outdoor public spaces	3.80	3.94	
Traffic and path arrangement			
Transport connections with other parts of city	4.49	4.45	
Traffic density	3.50	3.56	0.764 ***
Parking space **	2.61	3.28	
Path arrangement			
Walking paths	4.12	4.26	
Bicycle paths	3.61	3.79	
Sidewalks **	3.94	4.36	

Notes: * Scale 1–5 (1 = not satisfied at all, 5 = very satisfied); unanswered questions (missing values) and “I do not know” answers are not included; ** significant independent-samples *t*-test of socialist versus post-socialist housing estate difference ($p \leq 0.05$); *** Cronbach's alpha value indicates that the response values for each participant across a set of questions are consistent/reliable.

4.4. Satisfaction with Accessibility of Services

The survey results revealed minimum differences in the levels of satisfaction between both types of estate also regarding the accessibility of services (Table 6). On average, the residents of socialist housing estates expressed higher levels of satisfaction with the accessibility of services (4.09 vs. 4.01). As many as eleven of the fifteen elements evaluated were rated higher by socialist estate residents than they were by post-socialist housing estate residents. Most notably, the levels of satisfaction were statistically significant in connection with schools (4.59 vs. 4.33), kindergartens (4.64 vs. 4.29) and grocery stores (4.52 vs. 4.01), with the latter comparison reflecting the greatest difference in the levels of satisfaction. On the other hand, the elements for which the post-socialist estate respondents expressed comparatively higher levels of satisfaction were pharmacies (4.54 vs. 4.45), health centres (4.01 vs. 3.89) and dental clinics (3.66 vs. 3.57), and satisfaction with services overall. These results are, once again, difficult to understand. As was explained above in the case of open space, socialist housing estates were designed (almost always) to include, within the specific neighbourhood, a pharmacy, health centre, and a dental clinic (in addition to a school, kindergarten and other basic community services). On the contrary, the newer post-socialist housing estates are rarely designed, if at all, to include any of these services, since they are not obliged to. The only interpretation of these findings that we may think of is that post-socialist estate residents do not care whether these services are located within the neighbourhood or not, even though they were specifically requested to assess only the services within the neighbourhood. It appears that residents are satisfied with their accessibility, wherever these are located. This seems to be another negation of the popular assumption (or contention) that the provision of basic community services within the boundaries of the housing estate is a necessity when planning such neighbourhoods.

Table 6. Satisfaction with the accessibility of services (mean) *.

	Socialist	Post-Socialist	Cronbach's Alpha
Public transport	4.33	4.23	
School **	4.59	4.33	
Kindergarten **	4.64	4.29	
Pharmacy	4.45	4.54	
Post office	4.08	4.01	
Bank	3.91	3.89	
Grocery store **	4.52	4.01	
Health centre	3.89	4.01	
Dental clinic	3.57	3.66	0.888 ***
Food services (e.g., restaurant, café)	4.06	4.01	
Personal care services (e.g., hairdresser)	4.32	4.28	
Cultural services (e.g., cinema, theatre)	2.90	2.91	
Library	4.03	3.77	
Church/place of worship	4.08	4.02	
Leisure activities (e.g., gym, education)	3.90	3.79	
Overall satisfaction with housing estate	4.20	4.33	

Notes: * Scale 1–5 (1 = not satisfied at all, 5 = very satisfied); unanswered questions (missing values) and “I do not know” answers are not included; ** significant independent-samples *t*-test of socialist versus post-socialist housing estate difference ($p \leq 0.05$); *** Cronbach's alpha value indicates that the response values for each participant across a set of questions are consistent/reliable.

4.5. Suitability of Neighbourhood and Inter-Neighbourly Relations

The residents' attitudes about the suitability of the neighbourhood and neighbourhood relations were investigated with statements that required a five-point Likert scale rating ranging from 1—‘totally disagree’ to 5—‘fully agree’. The responses to these statements, once again, show high levels of agreement on the statement that ‘the neighbourhood meets all my criteria for a pleasant living’ (4.10 vs. 4.17, respectively) for socialist and post-socialist estates (Table 7). A slightly larger difference in agreement between the two types of estate was observed regarding ‘suitability for all age groups’ (4.24 vs. 4.38). Also, in this case,

the results surprisingly reveal an almost identical level of agreement with the statement ‘there are sufficient green areas’ (4.29 vs. 4.28). Such a high level of satisfaction on the part of the post-socialist estates respondents was not expected since most of them do not have any green areas and those that do only have them in minimal quantities, depending on the availability of spare space.

Table 7. Suitability of neighbourhood and inter-neighbourly relations (mean) *.

	Socialist	Post-Socialist	Cronbach’s Alpha
Residing			
Meets all my criteria for pleasant living	4.10	4.17	
There are sufficient green spaces	4.29	4.28	0.748 ***
Suitable for all age groups	4.24	4.38	
Inter-neighbourly relations			
Residents are good neighbours (willing to help, friendly, etc.)	3.81	3.95	
Residents are connected with each other	3.21	3.18	0.861 ***
Residents share the same values	3.02	3.11	
Residents share a similar socioeconomic status	2.98	3.08	
Social diversity encourages contacts among residents	3.02	2.97	

Notes: * Scale 1–5 (1 = do not agree at all, 5 = strongly agree); unanswered questions (missing values) and ‘I do not know’ answers are not included; *** Cronbach’s alpha value indicates that the response values for each participant across a set of questions are consistent/reliable.

The ratings of all statements regarding inter-neighbourly relations were also at comparatively similar levels, though generally lower than the ratings regarding the suitability of the neighbourhood (Table 5). Concretely, the respondents from socialist estates are less convinced (2.98) concerning the statement ‘residents share a similar socioeconomic status’, while the residents of post-socialist estates are slightly more positive (3.08) on this aspect. On the other hand, post-socialist housing estate residents were comparatively less enthusiastic (2.97 vs. 3.02) in their responses to the statement ‘social diversity encourages contact among residents’. The respondents from socialist estates agree more (3.21 vs. 3.18) that ‘residents are connected with each other’, while the residents of post-socialist estates agree more (3.11 vs. 3.02) with the statement that ‘residents share the same values’. The latter would seem to indicate a preference for social-economic homogeneity in the case of post-socialist residential neighbourhoods. Generally, however, it may be observed that there were no statistically significant differences between the two types of estate in their ratings regarding the suitability of the neighbourhood and inter-neighbourly relations.

4.6. Residential Attachment

The residents of both types of housing estate also expressed a high level of housing attachment, with the respondents from socialist estates indicating slightly higher levels (Table 8): dwelling (4.45 vs. 4.37); multifamily residential building (4.03 vs. 3.86) and housing estate (4.16 vs. 3.97). The higher degree of attachment of socialist residents is, of course, a logical finding given that these estates are older, i.e., people have lived there for longer periods (35.1 average years of residence) than their counterparts in post-socialist estates (18.5 average years of residence). It is, however, worth noting that the post-socialist residents are quite highly attached to their dwellings too, despite having lived in them for only half the time of the residents of the socialist estates.

Overall, the differences in the average ratings between the two types of housing estate regarding residential attachment were not statistically significant.

Table 8. Neighbourhood attachment (mean) *.

Attachment to:	Socialist	Post-Socialist	Cronbach's Alpha
Dwelling	4.45	4.37	0.880 ***
Multifamily residential building	4.03	3.86	
Housing estate	4.16	3.97	

Notes: * Scale 1–5 (1 = not attached at all, 5 = very attached); unanswered questions (missing values) and “I do not know” answers are not included; *** Cronbach's alpha value indicates that the response values for each participant across a set of questions are consistent/reliable

4.7. Consideration to Relocate Due to Dissatisfaction with Various Aspects of the Neighbourhood

The survey also included a question with which we wanted to explore the intentions of the respondents regarding their future residential plans. We asked the respondents to inform us as to whether they had considered moving in recent years due to dissatisfaction with the dwelling, multifamily building or neighbourhood. Those that gave a positive response to this question were asked to respond to a follow-up question that sought to establish their alternative housing/residential choice, should they effectively move.

The survey results revealed that, overall, an average of 80% of the respondents of both types of housing estate had not considered moving. Among those that responded positively to the question, dissatisfaction with the dwelling (11.35% socialist vs. 11.6% post-socialist) was shown to be the main reason for considering moving (Table 9). It is interesting to note that the post-socialist estate respondents equally (11.6%) specified dissatisfaction with the housing estate as an important reason for considering relocation, revealing a relatively higher degree of dissatisfaction regarding this aspect compared to the socialist estate residents (8.3%). On the other hand, socialist estate respondents specified dissatisfaction with the multifamily apartment building (10.8% vs. 9.3% for post-socialist) as the second reason they considered moving.

Table 9. Consideration of relocation in recent years due to dissatisfaction with various aspects of the neighbourhood (%)*.

Dissatisfaction with:	Socialist	Post-Socialist
Apartment	11.24	11.63
Multifamily apartment building	10.75	9.30
Housing estate	8.31	11.63

Notes: * Combined share of ratings 4 and 5 from a scale of 1–5 (1 = not considered at all, 4 = considered, 5 = considered intensively); unanswered questions (missing values) and “I do not know” answers are not included.

The follow-up question offered five alternative choices (same estate but different dwelling; other socialist housing estate; other post-socialist housing estate; newly built (within the last five years) residential neighbourhood or own house), for which the respondents were asked to indicate their preference with the help of a 1–5 Likert scale rating ranging from 1—‘would not at all choose’ to 5—‘would certainly choose’. The responses (Table 10) revealed that, among those that considered moving, the majority in both housing estate types would prefer to change the dwelling but stay in the same housing estate (25.2% socialist vs. 34.9% post-socialist). As per each type of housing estate, the socialist respondents would, as a second choice, move to their own house (21.7%), followed by a newly built housing estate (19.4%), a post-socialist housing estate built after 1991 (16.8%) and another socialist housing estate built before 1991 (15.3%). As for the respondents from the post-socialist estates, their second choice would be a newly built residential neighbourhood (30.2%) followed by house ownership (24.4%), another post-socialist housing estate built after 1991 (18.6%) and a socialist housing estate built before 1991 (10.5%).

Table 10. Alternative choice of residence in case of actual relocation (%) *.

	Socialist	Post-Socialist
Same housing estate but different dwelling	25.24	34.88
Other socialist housing estate (built before 1991)	15.31	10.47
Other post-socialist housing estate (built after 1991)	16.78	18.60
Newly built multifamily residential neighbourhood (built in last five years)	19.38	30.23
Own house	21.66	24.42

Notes: * Combined share of ratings 4 and 5 from a scale of 1–5 (1 = would not choose at all, 4 = would choose, 5 = would choose definitely); unanswered questions (missing values) and “I do not know” answers are not included.

5. Discussion

It may be generally observed that the research revealed several surprising findings mostly in contrast to what our two hypotheses suggested. While we had expected to obtain numerous complaints from the residents of socialist housing estates regarding the quality of their dwellings and residential buildings, their responses contrastingly show a very high level of satisfaction. The differences in the levels of satisfaction/dissatisfaction between the residents of socialist housing estates and post-socialist multifamily residential neighbourhoods are, almost in all instances, negligible.

General satisfaction with the apartment was rated 4.38 vs. 4.40 by the respondents of the socialist and post-socialist housing estates, respectively. Similarly, for the multifamily apartment building, the 5-point Likert scale ratings were 4.06 vs. 4.15. The socialist housing estate respondents were found to be equally satisfied with the size of their dwelling, although these were, on average, found to be 10 m² smaller than those of the post-socialist neighbourhoods. Perhaps the most surprising finding in this regard is that the responses regarding the external appearance of the building did not reveal any statistically significant difference in the levels of satisfaction (4.07 vs. 4.13). This finding is important bearing in mind that the external appearance of multifamily residential buildings has often been specified by various authors as one of the major shortcomings of socialist housing estates [9,31,42,44,45], with facades that have been generally described as characteristically monotonous and unpleasant to look at. The results of the survey show that the residents of these estates do not seem to be bothered by such characterisations.

The responses to the question pertaining to satisfaction with the residential neighbourhood are just as surprising. There were, though, some statistically significant differences in the levels of satisfaction regarding general upkeep (3.90 vs. 4.18) and sidewalks (3.94 vs. 4.36) in favour of post-socialist housing estates. And while it is not surprising that parking space was identified as the most important cause of dissatisfaction in socialist housing estates, as has been noted by other authors [25,47], the results of the survey surprisingly revealed this aspect to be one of the greatest causes of dissatisfaction also in post-socialist housing estates. Given that these have been constructed in the ‘age of the automobile’, and considering that most households have at least two cars, it would be expected that this requirement is adequately fulfilled in order to more easily sell the properties in the new housing estates. On the other hand, however, the finding that the residents of post-socialist housing neighbourhoods are almost equally satisfied with the availability of green areas (4.29 vs. 4.21) is equally surprising. Our comparative preliminary study on the design and development of the two types of housing estate [36] found that the socialist housing estates had been constructed mostly on greenfield land and, as such, had an incomparable richness of open spaces and green areas. The abundance of green areas has been described as one of the most valued characteristics of socialist large-scale housing estates [77]. On the contrary, the newer multifamily residential neighbourhoods are characteristically built on brownfield land on which, in the majority of cases, there is not much reserve for open space or large expanses of green area. As the results show, we were found to be wrong in our expectation that the insufficiency, or indeed absence, of green areas

would be an important cause of dissatisfaction on the part of the residents of post-socialist residential neighbourhoods.

Our preliminary comparative analysis [36] also found that socialist housing estates were planned to contain, within the neighbourhood, almost all the basic community and commercial services (kindergarten, primary school, healthcare centre, pharmacy, dental clinic, post office, library, bank and the like). Throughout the socialist period, these provisions were a requirement determined by official state policy and backed up by legislation in pursuance of the International Congress of Modern Architecture (CIAM; French: *Congrès internationaux d'architecture moderne*) principles for the design of large housing estates, enabling self-sufficiently equipped with both basic infrastructure and community services [14,78]. After the adoption of a market economy system in Slovenia, the provision of these services during the planning and construction of multifamily residential neighbourhoods ceased to be a legal requirement. Under these circumstances, it would have been reasonable to expect that the absence of these provisions in the new post-socialist residential neighbourhoods would be seen as a disadvantage and, thus, cause dissatisfaction among the residents of these neighbourhoods. Surprisingly, once again, the results of the survey show comparatively very similar (high) levels of satisfaction in this regard. The residents of the new multifamily residential neighbourhoods do not seem to miss much the services (especially the community ones) that are not available within their residential neighbourhood.

The levels of satisfaction with regard to the suitability of the neighbourhood and inter-neighbourly relations are also not much different between the two types of housing estate. Both types of respondents almost equally agree with the statement that the neighbourhood meets all their criteria for pleasant living. Both also almost equally agree that the residents in their estate are good neighbours. It must be noted here, though, that there is a marked difference in the question of 'sharing a similar economic status' (2.98 vs. 3.08, respectively, for socialist and post-socialist); however, again, this does not present a statistically significant difference. Another finding that needs to be mentioned here concerns the level of agreement with the statement that 'social diversity encourages contacts among residents', with which the residents of socialist housing estates agreed more compared to their counterparts in post-socialist neighbourhoods (3.02 vs. 2.97).

Regarding the question of residential attachment, the answers provided on this occasion do not reveal any surprising findings. For both types of housing estate, the respondents almost equally rate the degree of attachment to their dwelling (4.45 vs. 4.37). And given that the respondents from the socialist housing estates would have lived there longer compared to their counterparts in the post-socialist housing estates, it is not surprising that the latter are less attached to both the residential building and housing estate. Importantly, the question relating to the degree of attachment was that with which we wanted to find out whether, specifically, the residents of socialist housing estates had considered leaving to relocate to more suitable residential alternatives. Surprisingly, the survey results revealed that only 11.24% of the respondents from the socialist housing estates had contemplated leaving in recent years. It is worth noting here that the results of the survey revealed an even slightly higher percentage (11.6%) of respondents from post-socialist neighbourhoods that had considered leaving. Most surprisingly, a higher percentage of post-socialist respondents (11.6%) identified 'dissatisfaction with the housing estate' as the second important reason for having considered leaving. On the other hand, only 8.31% of the residents of socialist housing estates that had considered moving specified 'dissatisfaction with the housing estate' as the reason for that consideration. This, in fact, was the least important reason in their case, the most important reason being 'dissatisfaction with the multifamily apartment building'. In other words, among those that considered leaving, the residents of socialist housing estates appear to be more satisfied with their residential environment compared to those living in the newer post-socialist residential neighbourhoods. We do not have any reasonable explanation for such an intriguing finding.

Another surprising finding in this regard concerns the responses provided pertaining to the alternative choice of residence should one eventually realise the decision to move. One-quarter (25.24%) of the socialist housing estate respondents that would actually move would choose the 'same housing estate but a different dwelling'. The same alternative was also the most favoured, with one-third (34.88%) of the post-socialist housing estate respondents indicating that they would relocate to a different dwelling within the same housing estate. To briefly summarise all this, the results of the survey indicate that the residents of socialist housing estates are not intending to leave these neighbourhoods in any significant numbers in the near future. The question that we are not able to answer at this moment is whether and how many of the respondents that have contemplated moving would effectively make that decision. This information could be obtained only through conducting a longitudinal study, which the nature of this survey (anonymity of participants) does not enable.

6. Conclusions

The presentation above shows that the survey results generally do not support the research hypothesis, which assumes that the socialist housing estates are unfavourable places to live in. Significant differences in satisfaction between the studied types of neighbourhood were observed mainly in the following areas: (a) internal appearance of multifamily apartment buildings, (b) general upkeep of residential neighbourhoods, (c) parking spaces and sidewalks in residential neighbourhoods, and (d) accessibility of certain services in residential neighbourhoods, such as schools, kindergartens, and grocery stores. There were no statistically significant differences observed in all other variables. The study also revealed that residents in neither of the two types of neighbourhoods contemplate relocation due to inadequacies in the housing estate. The findings therefore do not provide any proof that would, with confidence, validate the concerns expressed at the beginning of the paper, cautioning the potential development of segregated low-income residential areas that would emerge as a result of the outward migration of the more affluent households. It is, nonetheless, interesting to note that the percentage of those that had contemplated moving is slightly higher in post-socialist residential neighbourhoods compared to those in socialist housing estates. In this regard, it is, however, important to recognise an important study limitation. In order to be able to establish the exact level of movement within or out of the studied housing estates, a longitudinal survey would need to be conducted, say after a period of five years. When designing the survey, this option was regrettably not considered. One of the major obstacles to the realization of longitudinal studies is posed by the strict personal data protection regulations that make it very difficult to secure the personal details of survey participants. Previous experiences have shown that people are very reluctant (or entirely unwilling) to provide such personal details (concrete names of individuals, their addresses, telephone numbers, email addresses, etc).

The survey did, however, reveal significant differences in the average income levels between the two housing estate types (EUR 1877 for socialist vs. EUR 2507 for post-socialist). It is also important to note that the level of education was found to be comparatively much higher in the post-socialist estates (college or university, 76% vs. 46%, respectively). However, neither of these attributes were found to have any significant impact on the attitudes of the respondents in terms of their levels of satisfaction with the various housing and residential environment aspects that were examined in the survey. Also, while various studies have found people to be more satisfied in neighbourhoods with high incomes and better-quality dwelling characteristics [49,59,61,66,79], our study seems to reveal that neither income nor dwelling characteristics play any significant role in determining people's satisfaction or dissatisfaction.

What needs to be acknowledged here is that, while subjective attributes are defined by personal characteristics (social, economic, demographic), these are also, and to a high degree, defined by an individual's residential quality needs [56]. Residential quality needs are, in turn, determined by psycho-social aspects, which, among others, relate to

residents' degree of attachment to the residential environment and their relationships with neighbours. Furthermore, it is also important to recognise that people's attitudes and perceptions are strongly related to a variety of social and contextual factors. Social factors might include people's personal circumstances, work and home-based responsibilities, values, habits, social norms, lifestyle choices, as well as intentions, expectations and feelings of control [80]. Inter-neighbourly relations must also be taken into account, since these play an important role in developing attitudes towards one's residential environment. A study conducted by Hartman [81] on low-income neighbourhoods found that residents would rather remain where they are, even if it means continuing to live in dilapidated or run-down structures, than move to new units away from friends and the familiarity of their homes and neighbourhoods. As suitably explained by Adriaanse [56], "Over time, people develop a sense of 'dwelling' or 'being in place'. Their habitual routines build up a cognitive awareness of the residential environment to the point that a person becomes psychologically fused with it". In a similar vein, Andráško et al. [6] have cautioned against overstating the negative characteristics of socialist housing estates. Describing the situation in the former Czechoslovakia, the authors observed that "people who have lived for a long time (and grown up) in these estates normally do not say a bad word about them". They tend to be generally happy with their housing and neighbourhood, irrespective of any potential negative opinions held by external observers.

Altogether, these are complex issues that require deeper attitude analyses in order to better understand why people may be satisfied with situations that, on the surface, look unfavourable, and why they eventually make the decisions that they do. In the discourse on the problems and potential negative developments in socialist housing estates there is, therefore, a need to refrain from making simplistic, unproven speculative judgements. These discussions need to go beyond the easy common explanations of people's preferences and behaviours in order to capture a broader range of psychological and social influences on people's housing choices and behavioural actions [80,82]. Most importantly, it is vital to stress that people's attitudes regarding housing quality and their satisfaction (or dissatisfaction) with it is, to a large extent, influenced by their lifestyle preferences, acquired social norms, life values, habits and attitudes. The visible external characteristics of the housing estates are not necessarily the most important factors in people's decisions regarding whether to stay or move.

However, while the findings of our study do not currently point to any serious problems that would lead to the negative developments that were anticipated by the research hypothesis, there is still a need to pay close attention to the issues that have been identified, although by a minority of the residents, as causes for dissatisfaction. In the case of post-WWII large housing estates, there is an urgent need for the formulation and adoption of comprehensive rehabilitation strategies that will define the concrete actions that need to be taken in order to efficiently deal with the key problems of these neighbourhoods. This would include, among others, examining the structural integrity of, in particular, the older (60 years plus) multifamily residential buildings, also with respect to their capacity to withstand eventual seismic events. The appropriate rehabilitation of socialist housing estates must also include implementing measures that aim to improve the energy efficiency of the residential buildings. Of great importance too is the designing of efficient solutions that address the catastrophic shortage of adequate parking facilities, a problem that characteristically prevails in almost all post-WWII large housing estates. It is also crucially important that planning authorities adopt and implement regulations that strictly protect and keep intact existing green areas in post-WWII housing estates, as these constitute one of their most valuable assets. Regarding the post-socialist multifamily residential neighbourhoods, the planning authorities ought to ensure that, where possible (taking into consideration that these are mostly infill developments), new construction provides the necessary social infrastructure, as used to be the practice in the case of post-WWII mass housing developments. The growing densification of urban populations through these schemes is, inevitably, already putting a lot of pressure on the existing infrastructures.

If not accompanied by the provision of the necessary basic community services, these developments may result in the complete overload of public services such as schools and kindergartens. Addressing all these issues with appropriate policy measures is urgent in order to ensure the longer-term sustainability of these vitally important elements of the urban fabric.

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