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Research Article

Urban Quality of Life from the Perspective of Industrial Migration: Bursa Inegol Huzur Neighbourhood

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ABSTRACT

Aside from its numerous beneficial impacts, the Industrial Revolution has also resulted in environmental issues and the unchecked expansion of urban populations. The allure of enhanced employment prospects, educational opportunities, and improved access to healthcare facilities, particularly in urban areas, has emerged as a compelling incentive for individuals residing in rural regions, prompting a surge in migration towards cities. The influx of people moving to metropolitan areas has resulted in the unchecked expansion of cities and the emergence of detrimental urban settings. Slums and haphazard urbanization are tangible illustrations of detrimental urban environments. Urban planners, architects, and researchers in related fields are studying the urban quality of life to address the problems caused by migration and unplanned urbanization. They aim to identify and improve these issues, as well as to prepare for potential future threats. The study's objective is to assess the urban quality of life in the Huzur Neighborhood. This area has experienced distorted urbanization due to migration in the outskirts of the Inegöl district of Bursa. The neighbourhood has developed primarily due to the furniture industry. The evaluation will be based on the opinions of residents living in the Huzur Neighborhood and on-site observations of the physical environment. Physical environment observation pertains to examining the living environment and public amenities in the local community. The in-depth interview consisted of 18 questions categorized under demographic structure, accessibility and transportation, satisfaction and feeling of belonging, security, expectation, and environment.

1. Introduction

Founded in the 18th century in England, the Industrial Revolution laid the foundations of an economic, social and political transformation, especially in developing countries. With industrialisation, a dissolution occurred in the social structure and this situation triggered population mobility from rural to urban, from agriculture to industry and from less developed regions to more developed regions [1]. Different lines of work in cities, together with advanced education and health services, have become attractive factors in terms of employment opportunities for individuals in rural or deprived regions [2]. The migration movement from rural to urban areas has affected both the people and urban life in the city and the migrant population. The inability of the mass migrating to the city to adapt to urban life has brought about the further interlocking of people who have migrated from the same region. In the cities, neighbourhoods where fellow citizens who migrated from nearby regions lived together were formed and individuals tried to meet their housing needs in a fast and practical way in the neighbourhoods they formed mostly on the periphery of the city. However, these practical solutions have led to the emergence of the concept of squatter settlements, which lack infrastructure and bring unhealthy housing conditions [3].

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In these settlements, housing structures with adjoining layouts, without ventilation and daylight, water puddles, etc., are some of the unhealthy living and environmental conditions. In addition, crowded households where 4-6 people live in one room make the use of interior space problematic. The interiors of dwellings where there is no or insufficient furniture, damp, dark and broken Windows, health and quality cannot be mentioned, and bring about lifestyles that lack comfort conditions [4]. It can be stated that the negative living conditions emphasised by Engels in the mid-19th century overlap with the environmental conditions in neighbourhoods with similar Dynamics in Turkey in the 21st century. Especially the intensive migration movement to industrialised cities in rural areas of the country leads to settlements far from healthy living conditions. The shanty settlements produced in parallel with the industrial migration for the solution of the need for shelter, which is the most basic right of the person, led to questioning the way of life in the neighbourhoods within the framework of urban quality of life.

In the literature, there are many studies on quality of life and improving urban quality of life in studies with different topics carried out at different environmental scales [5-8]. However, while there are urban quality of life studies conducted in slum settlements in cities [9-11], there are not many studies on the quality of urban life in slum neighbourhoods formed in regions receiving industrial migration. In this context, the study aims to discuss the concept of urban quality of life by associating it with migration from the perspective of industrialisation. In the evaluation of the relationship between industrial migration and urban quality of life, Bursa İnegöl district, which has an important potential in terms of furniture exports in Turkey and where blue-collar workers working in this sector migrate intensively, is taken into consideration. Huzur neighbourhood, which is located on the periphery of the region in the İnegöl district close to the city scale, is a shanty settlement area developed as a result of industrial migration, where the unhealthy infrastructure and housing conditions mentioned in the previous paragraphs are seen. In this framework, the main problem determined in the research is to determine the perception of urban quality of life in Huzur Neighbourhood, where blue-collar workers mainly working in the furniture sector migrate intensively, and the factors that are effective in shaping the perception.

In this context, the aim of the research is to evaluate the urban quality of life in the region with the opinions of the users living in İnegöl Huzur Neighbourhood, which is determined as the study area, and on-site examination of the physical environment. In line with this purpose, in-depth interview method was applied in order to determine the life styles of the users living in Huzur Neighbourhood and their perceptions and satisfaction levels regarding the living environment where unhealthy conditions are observed. Thus, in addition to the urban quality of life studies in the literature, it is aimed to contribute to the literature by addressing the issue from the perspective of industrial migration and to develop suggestions for areas with similar dynamics with the study area.

2. Individual, Social and Urban Quality of Life in Relation to the Environment

Today, regardless of where we live in the world, there is a continuous migration from rural to urban areas in many countries. According to the United Nations (UN) report, as of 2008, more than half of the world's population now lives in cities [12]. However, it is expected that one out of every three people born in the next 30 years will live in the city [5]. Despite the problems associated with increasing population growth, cities continue to receive migration rapidly as they offer higher education, healthcare and employment opportunities. While it is certain that the size of cities will grow it remains unclear how urban amenities will be distributed and how conditions, especially in large cities, and the quality of life of city dwellers will be affected. The current situation has led researchers interested in the subject to research on "urban quality of life", an area where the multidimensional nature of cities can be monitored [13]. Before discussing the concept of urban quality of life, the concept of quality of life, which includes many disciplines related to life, should be mentioned to create a background.

The concept of quality of life is used worldwide to describe the well-being of societies and people [13]. The concept covers the conditions of the environment in which people live (air and water pollution or poor housing) or some qualities of people themselves and their lives (health, educational achievement, etc.) [8]. It is accepted that the concept of quality of life, which is related to individuals' perception of their position in life in the context of the culture and value systems in which they live, including both environmental and psychological components, depends on internal and external factors [14, 6]. However, quality of life, which expresses the judgement made by the individual, is a whole that is also shaped by society [15].

Quality of life has many dimensions, including family, work life, economic situation and most importantly health. In the case of the environment, the different environmental scales at which we live have an important role to play in characterising quality of life. From individual dwellings to the local neighbourhood scale, to the city, to the wider region and even to the national scale, the effects of where people live on their quality of life are at the centre of research. In the literature, there are different studieson residential environment, neighbourhood relations and quality of life. For example, Greenberg (1999), focusing on the relationship between neighbourhood units and various characteristics of residents, found that crime, physical obsolescence and distrust of government are higher in settlements with low levels of living [16].

Lovejoy et al. (2010), who compared the satisfaction levels of those living in traditional settlements and suburbs, stated that the satisfaction levels of those living in suburbs were lower [17]. Türkoğlu (1997), who investigated the satisfaction of people living in different residential areas in Istanbul, found that the of physical comfort, building quality, housing plan, size of the housing and proximity to the city centre interacted with the satisfaction levels of the users [18]. However, the basic assumption underlying many planning, design and research approaches is that spaces can be designed to improve people's quality of life [5]. As stated in the previous statements, it is predicted that the current volume of cities will increase further in the future and more people will live in cities and metropolitan areas. The relationship between urban areas and the quality of life of urban dwellers and the researches focussing on urban quality of life always maintains its relevance and importance with the changing times and life style.

Urban quality of life is a concept formed by all the factors that make a city a city, together with physical and intangible (belonging, spirit of place, justice, equality, etc.) factors. Therefore, in terms of social, economic and spatial elements, urban infrastructure; facilities such as communication, transport, housing are above the standards determined in proportion to the dynamics of the country, and the individuals living in the city can also be defined as the state of benefiting equally from these facilities and opportunities offered by the city [19]. In other words, urban quality of life is the complete fulfilment of the urban needs of city dwellers, the conformity of urban services to certain criteria, the objective positive development of living conditions and accordingly the complete well-being and prosperity of city dwellers [20]. Urban quality of life is directly related to the provision of environmental standards and the equal provision of urban rights to everyone [21].

Drawing on work on human ecosystems and sustainable communities, Shafer et al. (2000) developed a model in an attempt to describe the fundamental relationships between the components of a place: physical, social and economic (Figure 1) [22]. The model also shows that quality of life is generated by an ongoing interaction between community, environmental and economic attributes.

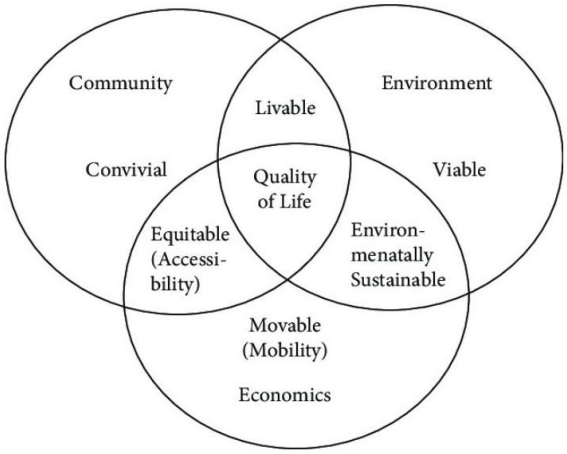

Figure 1. Quality of life components [22]

Veenhoven (2000), who analysed quality of life researches through individual life, stated that the concept of quality of life affects the quality of society in some conditions, while in some cases it expresses the happiness of the community [23]. As can be seen in Schafer's model (Figure 1), another important component considered together with the concept of community is the environment. Human being, who is a whole with the environment, is affected by the conditions of the environment while changing and transforming the environment [24].

Over time, the positive or negative reflections of this interaction are observed within the society. With this situation, measuring and evaluating the quality of urban life and investigating its effects on human behaviour are becoming increasingly important in social sciences. Research on the concept of urban quality of life is important not only because it affects people's behaviour, but also because it affects their lives, living standards and happiness. In order to understand the quality of life in a particular environment, such as urban settlements, it is necessary to measure the conditions in that area with the help of indicators [5].

When we look at the research on measuring urban quality of life, Marans' studies stand out in the literature for being comprehensive and adaptable to different fields. In his research, Marans argues that model frameworks should be used to make sense of different dimensions of quality of life and data should be collected to make these frameworks functional in a specific context. According to the research model he developed, Marans' approaches;

a) The first is objective, in the form of monitoring of Quality of Life / Quality of Urban Life through a set of indicators derived from aggregated spatial data using official sources such as census. (household income, crime rates, pollution levels, housing costs, etc.).

b) The second involves modelling relationships based on subjective, evaluative measures of the characteristics of the urban environment and people's satisfaction with life. This approach typically involves data collected through survey research methods and analysed using techniques such as regression analysis or structural equation models [25].

Monitoring the indicators over time generates data on the increase or decrease in people's quality of life and provides feedback to urban policies. In addition, survey data can provide information on individual and social perceptions, behaviours, subjective evaluations and satisfaction levels regarding various aspects of urban life [25]. However, it is within the scope of the discussions on the subject that indicators constitute a limited data source and are helpful. Even if residents are asked to rank the list of data on quality of life in order of importance, the information obtained in this way may not be sufficient to estimate the proportion of satisfaction level explained by any factor.

It is, therefore, important to analyse data and develop research models to test hypotheses about these links, using methods to identify the relative importance of different aspects of urban life in improving the quality of life of various user groups [5]. Marans and Rodgers (1975) developed a broad conceptual model of environment-based quality of life in which objective factors related to the environment and subjective perception related to them are addressed within the conceptual framework (Figure 2) [26].

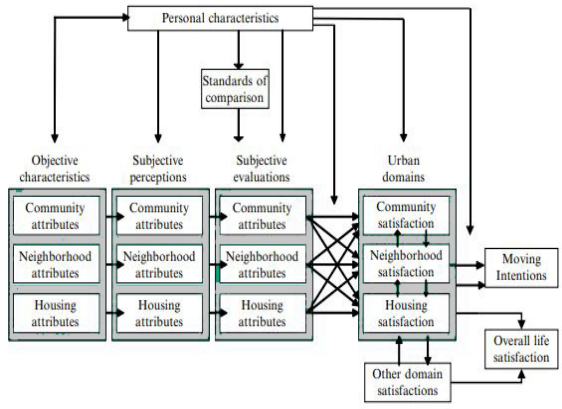

Figure 2. Model of determinants of satisfaction around housing [26, 27]

The model is basically based on four principles: individuals' experiences emerge from interactions with their environment, subjective experiences are different from the objective environment, individuals react to their experiences with the environment, and the level of satisfaction in various life domains contributes to the overall quality of life. It is suggested that the approach model put forward by Campbell, Converse, Rodgers, and Marans can be evaluated for different living spaces in life satisfaction research. For example, satisfaction with the environment can be examined at different levels such as satisfaction with housing, satisfaction with the neighbourhood, satisfaction with wider communities or satisfaction with wider regions.

This model has contributed to the analysis of the relationships between various quality of life domains and geographical levels of the urban scale [27]. In the model, it is seen that arrows extending in one direction express causal relationships, and double-sided arrows express an association. To the model, objective characteristics of the environment and subjective evaluations of the urban environment directly affect life satisfaction. For example, heavy traffic perceived by a user through senses is subjectively evaluated as noisy. Through a series of subjective evaluations of a user's neighbourhood, satisfaction in that urban area (neighbourhood satisfaction) is estimated, as well as satisfaction in other urban areas (such as housing and community satisfaction). With the satisfaction scale in these three urban areas, overall life satisfaction is also predicted (employment, relationships, health, etc.).

Neighbourhood satisfaction in an urban area also predicts mobility intentions and subjective quality of life can be associated with broader implications for regions as well as the objective urban environment [28]. In quality of life research, objective indicators are generally used to estimate objective quality of life data, while subjective measures are used to estimate quality of life in relation to perceptual variables. Thus, quality of life is determined with two separate sets of indicators, objective and subjective measurements [29]. While objective quality of life studies in urban areas generally focus on objectively ranking different places in urban quality of life, quality of life studies aim to reveal the importance of various subjective evaluations of the urban environment in determining the subjective urban quality of life.

Urban quality of life studies may focus only on objective or subjective indicators for specific purposes. When both objective and subjective indicators are included in a study, they are conceptualised as separate indicators of objective and subjective urban quality of life, respectively. The evaluation of the two indicator models separately at independent levels has been identified as a research gap in the literatüre (Figure 3) [28].

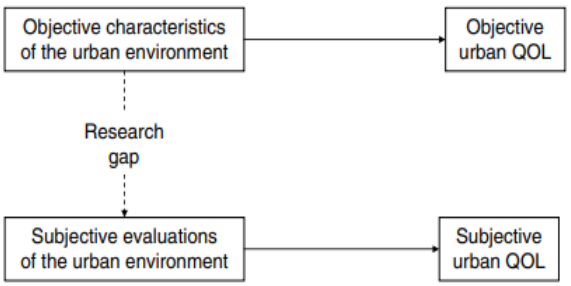

Figure 3. Literature gap model in urban quality of life research

In social indicator research, much of which has focussed on objective or subjective measures, one type of indicator has contributed to the interpretation of another [26, 27]. Many factors, including personal and social characteristics such as age, income and education, stand between the objective world and the individual's perception of it. Individual perceptions translate what is initially seen as a universal objective situation into a personal interpretation of behaviour. Individual experience is also an important factor that will influence the perception of a particular

domain. For example, the experience of being a victim of crime, regardless of the level of crime measured by objective indices, has a profound and lasting effect on the individual's perception of security in his/her home or neighbourhood.

Another factor that may be important in the objective-subjective relationship is the level of desire or expectations of the individual. This helps to understand a statement in which objective data are weak but which has a high satisfaction value according to the individual [30]. The concept of adaptation to the environment is another variable that can affect the relationship between objective and subjective conditions. This helps to explain why, in a fixed situation, an individual's satisfaction with a situation can increase over time with adaptation to that situation, and why people who are semi-permanently trapped in poor objective conditions express higher levels of satisfaction in their own conditions.

Other factors that intervene between objective and subjective assessments of quality of life include the cultural background of the individual producing the standard of comparison against which objective conditions are measured. This factor, which is of obvious importance on an international scale, can also affect different ethnic or social groups within a city [30]. Another factor to be considered is scale mismatch. Accordingly, when collecting objective social indicators for well-defined territorial units, it is recognised that the territorial base of an individual's perception is unlikely to coincide exactly with the boundaries of the administrative unit used to collect the objective data. Scale mismatch can affect all aspects of perceived well-being that include a territorial component, including notions of overall neighbourhood satisfaction [30].

Urban environment is a relative term related to urban liveability, time, purpose and the value system of the user, as opposed to the objective definition of quality that is evoked in the mind. This view suggests that quality is not an attribute specific to the environment, but a behavioural function of the interaction of environmental and personal characteristics. In this case, both objective and subjective data should be used in order to understand urban environmental quality correctly. In other words, the city on the ground and the city in the mind should be considered together [30]. With reference to the research argument, Pacione (2003) proposed a five-dimensional framework that combines the various dimensions of quality of life research through a set of key concepts: objective, subjective, time, site specificity, geographical scale and social group dimensions (Figure 4)[30].

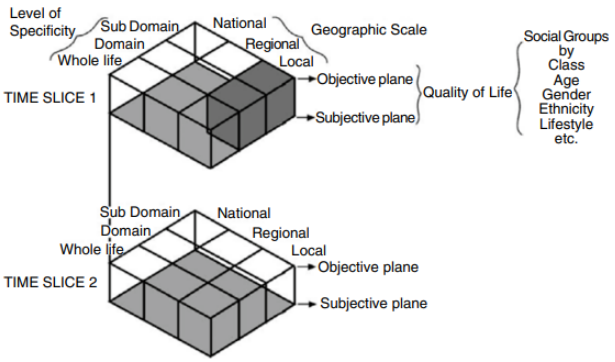

Figure 4. Five-dimensional model on quality of life research

The level of specificity defined in the framework refers to which areas of quality of life are the subject of research. These can range from the whole-life view of well-being to individual domains and sub-domains. The first contribution in the framework was the introduction of a spatial dimension to strengthen the previous two-dimensional assessments of social conditions over time. At the second level, just as individual quality of life can be assessed at different levels, society can be assessed at different geographical scales, from the individual to the group or local, city, regional, etc. scale.

The third plane represents the type of quality of life indicator used. It states that any definition of quality of life should include two basic elements and that two different types of social indicators are appropriate for measuring social and individual well-being. The first are objective indicators that describe the environments in which people live and work, while the second are subjective indicators that aim to describe the ways in which people perceive and evaluate the conditions around them. The fourth plane of the framework is used to measure quality of life at different times and to track the impact of policies designed to improve quality of life for specific

people and places. The fifth dimension reflects the socio-spatial structure of the city and refers to the need to measure the quality of life of individual social communities in the city, which differ along various dimensions such as class, lifestyle, ethnicity, gender and age [8].

In summary, under the title of quality of life, it has been tried to define the subject with the findings of researchers who have made significant contributions to the literature on urban quality of life. In addition to the indicators that are important in defining urban quality of life, different research models have been analysed. In general, it is understood that a research model that will blend the common data of two disciplines together, rather than the distinction between objective and subjective indicators, is one of the healthiest methods to reach accurate data. The results of the observations and surveys carried out in Huzur District will be thoroughly explained below, taking into account the theoretical framework that was previously reviewed.

3. Workspace

The area examined within the scope of this study is Huzur Neighbourhood in İnegöl district of Bursa, which is one of the largest provinces of trade and industry volume of the Marmara Region, which hosts Turkey's significant volume in terms of industry. In the examination of the study area where industrial migration is addressed in order to associate with urban quality of life, firstly, the geographical and strategic location of İnegöl and its industrial volume should be mentioned. İnegöl district is located on a fertile plain within the borders of Bursa, between Mezit Bogaz in the east and Ümitalan in the west. In the west of İnegöl, there is Kestel district of Bursa, Yenişehir district in the north and Keles district in the southwest [31]. (Figure 5). İnegöl is an area bounded by Domaniç district of Kütahya from the south and Pazaryeri and Merkez districts of Bilecik province from the east [32].

Surrounded by Uludağ and its extensions Domaniç and Ahi Mountains, İnegöl has a large forest cover and the people living in the region have provided their livelihood from these forests throughout history [33]. The district stands out with its proximity to raw materials and furniture making activities [34].

Figure 5. Location of İnegöl in relation to Bursa province

Furniture production, which started in small workshops, has grown over time and with the effect of industrialisation and has created different employment branches in the city. In particular, İnegöl Organised Industrial Zone, the first of which was established with the state incentive in 1977, attracted many investors to the city, accelerated mass production and triggered the emergence of more need for labour in the district [35]. In the following years, the Inegol furniture industry, where chipboard material started to be used, started to switch from traditional workshop type production to fabricated production [36]. With the increasing technological developments, advertising activities and the search for new markets, especially in Istanbul, have rapidly increased furniture production.

In the 2000s, furniture enterprises that increased and accelerated their production volume started to give importance to design and branding. In the same year, with the Furniture Decoration Fair (MODEF) organised for the first time in İnegöl, İnegöl furniture started to gain a place in the world market [35]. In the following years, with the expanding market network, proximity to raw materials, logistical advantages and export potential, industrialisation in İnegöl increased rapidly, and new industrial sites were established in the city. According to the 2021 Furniture Sector Report data, İnegöl, which ranks third after Istanbul and Kayseri in the distribution of Turkey's furniture exports by region [37], has become a preferred place to migrate with its developed industry and business lines.

Especially since the beginning of the 2000s, the migration movement to İnegöl and the population increase in the city have been observed in a remarkable way. In order to develop the city in a planned way, a housing area implemented by TOKİ was established in 2007 in the north of Bursa-İnegöl highway [35]. The buffer zone between the TOKİ zoning area outside the city centre and the city centre has been inhabited by immigrant families who could not afford the houses whose prices increased in the city over time.

The houses in the area where many houses were built illegally were included in the zoning plan in time. The buffer zone named Huzur Neighbourhood is far from healthy living conditions with adverse housing conditions, security problems, lack of recreation and social areas and has the characteristics of "unplanned urbanisation" and "shanty settlement" which are widely used today. The neighbourhood is located outside of İnegöl city centre, close to İnegöl entrance on Bursa highway (Figure 6-7).

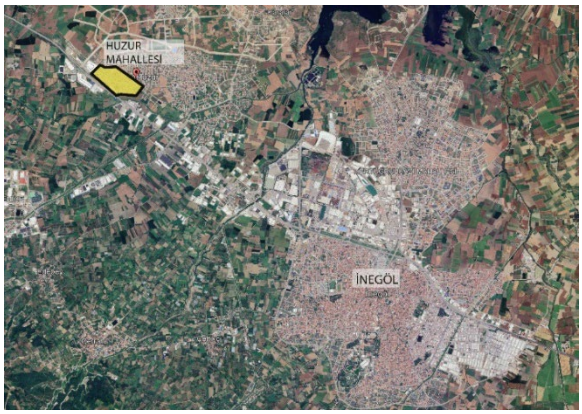

Figure 6. Location of Huzur Neighbourhood on aerial photograph

In line with the defined problem and the determined location, the aims and objectives of this study are, to evaluate the urban quality of life of the users in Huzur Neighbourhood within the scope of interviews with the residents and observations in the field to determine the determinant factors in the quality of urban life, to create preliminary data for future urban quality of life researches through the results obtained, and to develop suggestions to improve the quality of urban life for areas with similar problems related to industrial migration.

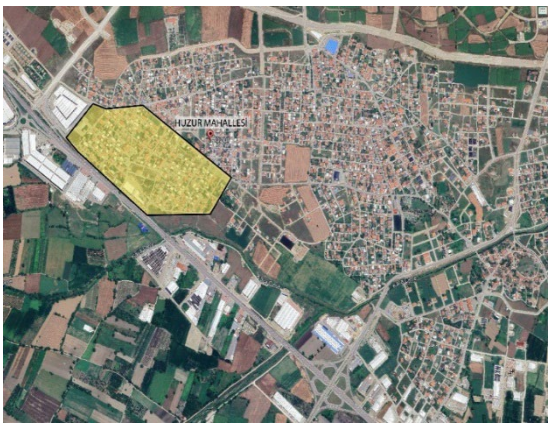

Figure 7. Aerial photograph of Huzur Neighbourhood and its surroundings

4. Methodology

Within the scope of the objective, in-depth interview methods are utilised together with on-site observations and questionnaires conducted in the physical environment to investigate the quality of urban life. Residents' satisfaction and perceptions about the environment are questioned through survey questions measuring different parameters, observations and in-depth interviews focusing on the casual relationship of survey data. The observation of the physical environment concerns the investigation of existing residential buildings, services and circulation elements in the neighbourhood. These are categorised according to diversity, architectural features, accessibility and landscape characteristics.

The results obtained in this pilot study, which was conducted in preparation for future studies, are discussed through visuals expressing the physical characteristics of the neighbourhood. In the in-depth interview, data on the perception and satisfaction levels of the users of the neighbourhood are obtained through 18 semi-structured questions created under the headings of demographic structure, accessibility and transportation, satisfaction and feeling of belonging, security, expectation and environment.

5. Results and Discussion

The research was carried out in the form of a questionnaire and in-depth interviews with 20 different people residing in the region, aged between 18 and 53, belonging to different

occupational groups, not working or students, together with on-site observations made in, Huzur Neighbourhood. The combination of questionnaire and in-depth interviews provides a better explanation of the interaction of individuals' perceptions of life.

When the number of individuals living in the household was questioned in relation to demographic factors, 30% of the participants stated that there were six people living in the dwelling, 40% stated that there were five people, 25% stated that there were four people and 5% stated that there were three people. In line with factors such as crowded households, inability to provide personal privacy and hygiene, and lack of sufficient space for people to perform their activities, as stated by Clark and Onaka (1983), the quality of life and housing satisfaction in Huzur Neighbourhood are negatively affected, thus is a factor that reduces the quality of life [38].

Accordingly, the fact that the rate of households consisting of five or more people in the neighbourhood is 70% is interpreted as a factor that can directly affect the urban quality of life of the neighbourhood residents. When the length of residence of the research group in the neighbourhood was questioned, it was learnt that four people have been living in the neighbourhood since they were born, while the others have lived in the neighbourhood for at least 11 years and at most 33 years. The sense of belonging to a place is shaped by the interactions with the people in the place as well as the emotional and social relationships that take place in the place over time [39].

In Crete, where Potter et al. (2005) investigated the effects of migration on small cities, it was concluded that the satisfaction level of immigrants living in the region for a long time decreased, while the conditions were perceived better for new immigrants shows that life expectancy also changes the perception for immigrants, supporting the findings obtained in the research [40]. Within the quality of life studies, the belonging factor has an important place as a life component that is shaped by time as well as the physical and emotional conditions in which immigrants are. In this framework, in a comprehensive urban quality of life research to be carried out in the future for Huzur Neighbourhood, the sense of belonging and the concept of time should be addressed and the satisfaction levels of people with their environment should be addressed.

When the accessibility factor is evaluated, it should be taken into consideration that access to İnegöl is provided by various road routes. The first of the road networks connecting the city to the surrounding provinces and districts is the state highways network; Bursa-İnegöl-Ankara TCK State Highways, İnegöl-Yenişehir-İznik TCK State Highways and İnegöl-Tahtaköprü and Domaniç TCK State Highways. The second is the network of provincial and village roads; Inegol-Hasanpaşa-Kursunlu-Pazarcık roads, Inegol-Gündüzlü-Oylat roads and Inegol-Tekke village and Bilecik road. The last one is stated as three different transport routes, including roads with different characteristics (levelling, raw and village roads) [41].

Urban transport in İnegöl is provided by the personal vehicles of the users and by buses, which are public transport vehicles. Huzur Quarter, which is approximately 10 kilometres outside the city centre, can be reached by personal vehicle or public transport. When 20 people living in the region and participating in the survey study were asked how they evaluated the access and transportation opportunities to the neighbourhood, 15 of them stated that they could reach the neighbourhood easily. It was noted that these people do not need to use public transport much in daily life and generally try to solve their long-distance work with their personal vehicles.

On the other hand, 5 interviewees described the access to the neighbourhood as inadequate, difficult and a waste of time. It should be emphasised that the people who expressed negative opinions generally have to use public transport. In order to directly experience the access opportunities to the region, the authors reached the region by both personal vehicle and public transport and determined how long it took to reach the region by different methods. While it takes approximately 15 minutes to reach Huzur Quarter from the city centre by private car, this time varies between 1-1.5 hours on average by

public transport, depending on the bus waiting time. Due to its distance from the İnegöl city center, the Huzur neighborhood is situated in a spatially disadvantaged area when viewed through the lens of the spatial dimension concept, which is one of the components of quality of life models, particularly those by Pacione and Marrans. [26, 27, 30].

The research data show that public transport facilities and services in İnegöl Huzur Neighbourhood, where transportation, which is accepted as one of the main components of quality of life [42] is provided by public transport, personal vehicles and taxis, are not sufficient and cause loss of time. The efficiency of public transport in terms of accessibility is an important criterion in terms of urban quality of life [43], and it can be stated that public transport in İnegöl is not efficient, which is compulsorily preferred by a small number of users and has a negative impact on urban quality of life.

The intention was to get empirical data through neighborhood observations, while subjective data was gathered via surveys, as illustrated by Marans and Rodgers' Environment-Based Quality of Life Model, which integrates both objective and subjective components. Observational data from the region concerning transportation and accessibility indicate insufficient green spaces and recreational facilities, as well as inadequate sidewalks for safe pedestrian movement. This circumstance presents a possible hazard for people sharing the roadway with automobiles. Furthermore, there are no appropriate alternative choices for transportation vehicles, such as bicycles or seagulls. In the survey study assessing the region's walkability, 15 individuals deemed the neighborhood unsuitable for walking, whilst 5 individuals asserted that it was walkable. Individuals who deemed the area unwalkable cited the shared use of the roadway by walkers and vehicles, leading to hazardous conditions and the absence of sidewalks. The responses provided by the users align with empirical observations.

Walkability is an important criterion in terms of livability and urban quality of life [44, 45] and the lack of safe and pleasant walking opportunities has a negative impact on the urban quality of life of the users living in Huzur Neighbourhood. When the accessibility to units such as health centres and pharmacies that should be easliy and quickly accessible for daily needs was questioned, everyone interviewed stated that these units are located in easily accessible areas. As stated by Dumbaugh (2005), easy accessibility to daily needs has a positive effect on urban quality of life [46]. In this context, it can be stated that Huzur Neighbourhood is not attractive in terms of walkability or recreational activities and this aspect is negative in terms of urban quality of life, but the QOUL is supported in terms of easy accessibility to daily necessities.

Another topic that covers the physical environmental features where objective and subjective data are evaluated together is the houses and the environment they are located in. The observational study revealed that the buildings have a minimum of one storey and a maximum of four floors, based on their structural characteristics. It was observed that most of the buildings do not comply with the regulations as required by the building standards, as well as the high density of idle buildings. It was even found that the columns and rebar of the last floor of many buildings were left open against the possibility of building the next floor. In most of the buildings built in reinforced concrete, the brick walls, which are generally used as building material, are visible, and the buildings are left without exterior insulation and exterior cladding during the application phase.

The fact that the buildings in Huzur Neighbourhood are constructed without the basic insulation materials required for the winter months has been determined as a factor that negatively affects the quality of life directly, as it negatively affects the comfort conditions and may lead to various health problems. Provision of comfort conditions and construction quality are highly effective on quality of life [47-49].

In a research study where similar conditions were observed in the Manila region within the borders of the Philippines, which has similar qualities in terms of illegal construction and environmental infrastructure with some deprivations with the research area, it was mentioned that the slum

settlements built with low-quality construction materials were damaged by natural disasters and high number of casualties [50]. Uncontrolled urbanisation, unhealthy construction, negligence and failure to take necessary precautions, especially in rapidly growing urban areas such as İnegöl, not only reduce the quality of urban life of people in possible disaster scenarios but also endanger their lives. The continuation of the construction of unhealthy buildings that preserve their current existence negatively affects not only the quality of life of the people living in the area but also the environmental quality of the neighbourhood and the quality of urban life of all urbanites who are in a visual or physical relationship with the environment.

In the questionnaire study conducted within the scope of satisfaction with the dwelling and its surroundings (Figure 8) together with the observations, 12 people stated that they were not satisfied with the physical characteristics of the dwelling and its surroundings, while eight people stated that they were satisfied with the dwelling and its surroundings. When the data obtained as a result of the questionnaire and in-depth interviews were questioned as to why the respondents were dissatisfied, the lack of asphalt roads in some regions and damage to vehicle tyres due to this reason, the lack of sufficient garbage collection areas in the vicinity, environmental pollution, disorder, unhealthy living conditions came to the fore as the reasons that triggered dissatisfaction.

In line with the model of Marans and Rodgers, deficiencies in building quality and data obtained regarding the building environment reduced both objective and subjective satisfaction. When the participants' attitude towards municipal services is analysed, half of the users are satisfied, and half are not. Compared to other neighbourhoods the delay in services in Huzur Neighbourhood is at the top of the disturbances stated by those who are not satisfied with municipal services.

The lack of sufficient parking space for vehicles in the neighbourhood is also observed as a different problem in the other housing environment. Users who cannot find a defined parking area for their vehicles park their vehicles directly on the road, in front of their houses or on idle lands in front of their houses. The idle plots and lands in the area are also used as areas where garbage and rubble are accumulated. In this context, it should be noted that the poorly maintained physical environment is also an environmental factor that negatively affects the quality of life of the users.

Figure 8. Visuals from the residential neighbourhood in Huzur Neighbourhood

The existence of green areas around the neighbourhood has been identified, but it has been observed that they are not used for their intended purpose. As a result of the satisfaction survey on environmental cleanliness and green areas, feedback was received that 18 people were not satisfied with this situation. When the dissatisfied people were asked about the reasons for their dissatisfaction, they stated that there are not enough garbage containers around, people throw their garbage haphazardly at the base of trees or in vacant lots, and that this creates serious cleanliness and health problems in the neighbourhood as well as visual pollution.

As stated in the Declaration of European Urban Rights in the European Urban Charter adopted by the Council of Europe in 1992, the right to live in an unpolluted and healthy environment is one of the fundamental rights of urban residents living in European settlements [51]. When it was questioned whether the green areas in the neighbourhood were sufficient, 18 users stated that they found them insufficient in terms of quantity and quality. The presence of green and recreational areas such as parks and gardens in cities helps to protect urban ecology and contributes to the improvement of physical and mental health [52]. The residential environment, which is described as the part of the space that directs the life experience, emotions and thoughts in the city the most, together with the observations and user opinions, is an important

factor that reduces the quality of urban life by not adequately meeting and satisfying the need of its users to live in a clean, healthy and green environment [53].

Similar to the parking areas, the fact that playgrounds are not spatially defined is another negative situation observed in the neighbourhood. In Huzur Neighbourhood, where the houses are located along the street axis in adjacent or separated order, the existence of defined playgrounds built by the municipality for children was observed only in one area. Young children usually play in front of their houses on roads that are vehicle routes. Although this situation is stated as safe by some users in terms of being at a distance where the child can be seen from the window, it is among the conditions stated as very dangerous and unhealthy by many users.

When asked whether the area is safe for raising children, seven people stated that the environment and neighbours generally know each other and that it is safe, while the other thirteen people expressed negative opinions. Within the scope of the problems defined as insecurity, comments such as the aggressive behaviour of stray animals and wandering around, the fact that the areas where children want to play are also vehicle routes and the presence of unknown people in the area were encountered.

When a separate security assessment was made for day and night, all participants in the research stated that free movement during the day is not a problem for people, but they do not prefer to stay out after a certain hour in the neighbourhood at night because they find it unsafe. As accepted and observed by most of the users interviewed in the region, the title of security within the components of quality of life has been noted as a factor that negatively affects the urban quality of life in Huzur neighbourhood, which is unsuitable for raising children, has a stray dog problem and fear of attack, has dangerous children's playgrounds, and unsafe environments at night.
It has been observed that the areas where people can spend time for sportive and social activities are not numerous in the neighbourhood, as well as being at distances that are not easily accessible to every residence. When the users of the neighbourhood were asked whether these areas are sufficient or not, all of the users stated that they found the areas inadequate and inefficient and that the existing areas, which are not efficient, have become environments that pose a security risk by being used for purposes other than their purpose. The lack of safe and clean social facilities where families and children can spend time together and where friends can meet was also emphasised.

Urban infrastructure elements, social facilities and sufficient green areas, which are among the physical components of urban quality of life, stand out as factors that directly affect the quality of life, productivity and efficiency of individuals [54]. In Huzur Neighbourhood, the fact that people cannot benefit from social facilities that are not adequate and efficient enough and the use of existing areas for purposes other than their purpose is noted as another factor that negatively affects the quality of urban life in the region.

Finally, the expectations of the interviewees for the region in general terms can be stated as improving the structures in terms of strength and aesthetics and creating more favourable environmental conditions, providing more qualified municipal services to the region, pouring asphalt for unpaved vehicle roads, defining vehicle and pedestrian roads separately from each other for certain areas, installing a camera tracking system for security, widening roads and creating suitable, safe walking route alternatives for pedestrians, improving environmental cleanliness and creating more green recreation areas.

6. Conclusion

Inegöl, one of the 17 districts of Bursa province, is a settlement that stands out with its developed furniture sector, which has grown and continues to grow thanks to various dynamics such as logistics, raw materials and industrial investments. Employment opportunities in parallel with the developing industry have made the region a settlement that receives continuous migration. The rapid migration towards the city as of the point the city has reached today has brought unhealthy living conditions and

unhealthy urbanisation problems together with the shanty settlements formed on the periphery of the city. Within the scope of this study, Huzur Neighbourhood, which is a shanty settlement area formed on the periphery of the city due to industrial migration, has been analysed from the perspective of urban quality of life.

As a result of the questionnaire survey, in-depth interviews with users and socio-physical observations, the data obtained on environmental parameters and user satisfaction and the problems identified are evaluated in detail in the discussion of the findings. To summarise the data in question; transportation, inadequate and delayed municipal services (lack of pavements, landscaping, inadequacy in parks and sports facilities, etc.), infrastructure deficiencies, idle building density and housing in unhealthy conditions, environmental pollution, inadequate car parking, undefined and unsafe playgrounds for children, conflicting pedestrian-vehicle circulations, neighbourhood-wide security problems and stray street animals are the prominent problems in the region.

Although the Huzur Neighbourhood and the slum settlements with similar conditions have different dynamics, they basically host people who are in search of better living conditions due to economic and social reasons. When the interaction of the built environment in Huzur Neighbourhood with the urban quality of life is evaluated, it is predicted that if the necessary measures are not taken and the deficiencies are not eliminated, the quality of life of the people living in the region will continue to negatively affect the quality of life in individual and social terms. Houses built with inadequate facilities and building materials through unhealthy zoning plans transform the need for shelter, which is the most fundamental right of people, into an unhealthy situation with economic, social and physical barriers.

These places that meet the need for shelter are not resistant to disasters such as earthquakes and floods that we have witnessed in recent years and may cause loss of life. In addition, crime rates in these regions may increase at the same rate as a result of rapidly increasing uncontrolled migration towards these regions over time. The increase in the need for a labour force in İnegöl is directly proportional to the increase in population and unhealthy buildings in the region. Unless measures are taken, unhealthy construction and uncontrolled growth have the capacity to negatively affect not only the quality of life of individuals but also the urban quality of life of the neighbourhood and the district.

The fact that the region is close to the entrance of İnegöl also creates a different negative impact on the region in terms of urban aesthetics. The city of İnegöl, which continues to receive rapid migration, is increasing its urban and housing development activities towards Bursa. Huzur neighbourhood, located in the direction of Bursa and at the exit of İnegöl, is surrounded by new settlements and state-built housing areas. These areas indicate how the Huzur neighbourhood may evolve in the future.

Although the Huzur neighbourhood, which is located in a rapidly changing and developing environment with insufficient opportunities, may be addressed within the scope of the Urban Transformation Project in the future, it is aimed that the urban life quality studies carried out now will help in creating projects that produce solutions for the demands and needs of the neighbourhood users. The livability and quality of life in cities must be considered, as numerous Turkish settlements have seen structural transformations due to industrial migration or external migration, similar to the Huzur neighborhood. It is essential to evaluate user interactions with their environments in different neighborhoods and to analyze the quality of life over time, considering the changes in user and administrative organizations.

Consequently, novel research domains and proposed solutions will emerge in the future as user requirements and environmental advancements are better comprehended within the framework of urban quality of life. As long as industrial structures remain unevenly dispersed, many cities in Turkey will experience population influxes due to their growing industries and the associated job prospects. Unplanned population migration to urban areas leads to slums and unregulated urbanization, resulting in issues related to urban quality of life.

Upon examining the enhancement studies conducted specifically for slum settlements in Turkey, it is evident that while there exists the potential to generate beneficial solutions through urban transformation that make these areas more habitable, there are also large-scale housing developments that prioritize rental income and fail to align with the identity, culture, and needs of the local populace. In analogous areas facing urban deprivation, the first objective should be to comprehensively comprehend the demands of the territory and its inhabitants, and to formulate solution options that are appropriate for the city and its surrounding socio-economic context. In this context, potential topics for future studies include the effects of internal and external migration on urban centers and peripheral settlements, the relationship between these settlements and their immediate environment, the quality of life for users and urban inhabitants, and the influence of fragmented transformations on overall urban cohesion and settlement integration.

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