



Determination of the Current Situation of Konya Ihlamur Park According to the Physical Activity and Social Interaction Actions of Elderly Individuals, which are the Reasons for Park Use

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ARTICLE INFO

ABSTRACT

Research Article

Received : 11.11.2024

Accepted : 27.12.2024

Keywords:

Physical Activity

Elderly

Landscape design

Urban parks

Ihlamur park

Parks and public open green spaces are open spaces for all segments of the society. These places, which are important recreation areas, enable the elderly to renew themselves, to breathe a little in the open air, to be alone with nature even in the city. These opportunities provided by parks are utilised by elderly users. Today, the population of elderly individuals is increasing day by day due to the slowdown in population growth rate. In this study, it is aimed to determine the park usage purposes of the elderly and important park features that encourage physical activity and social interaction. Within the scope of the research, 96 elderly individuals were interviewed with 96 elderly individuals within the scope of face-to-face survey study by going to the park at random times on weekdays and weekends on a voluntary basis by using the questionnaire form prepared for revealing the user profile of individuals aged 40 and over in Ihlamur Park in Selçuklu District, determining the preference times of the park, determining the duration and times of park use, determining the reasons for park preference and selection, and evaluating park user satisfaction and expectations. The findings show that parks are an important social area for elderly people in the same age group with their seating areas, walking paths, simple fitness equipment, as they create a gathering area for elderly people in the same age group, and therefore, parks require careful planning and implementation in the design, management and use of parks and should contain a large amount of space for socialization. In line with these findings, it will be possible for elderly people to benefit more from parks and have a more enjoyable time with landscape designs that provide socialization opportunities for elderly users. Thus, elderly individuals will be able to develop a sense of belonging for the park.

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Introduction

The concept of open space is one of the important basic elements of urban fabric and is defined as openings or empty spaces outside architectural structures and transport areas (Gül et al. 2020).

Public open green spaces: parks and other recreational areas are considered as basic community resources that provide an environment for leisure time physical activities, benefit social and ecological functions, contribute to psychological well-being and community welfare in terms of various communities, and can improve quality of life and health at the same time (Alp and Ekşi, 2021).

In other words, it is perceived as areas where there is no construction for any purpose on the outdoor space and there is a potential opportunity for any recreational use. For example, water surfaces, squares with no or very limited number of vegetation elements and transport areas are defined as open spaces (Gül et al. 2020).

Urban parks are public service areas that undertake very important and various functions in the reconstruction of the disconnected nature-human relationship that develops due to urbanization within the complex urban organization. At the same time, they are usually centrally located in urban settlements and are visually part of the city. These areas are located in places that people can easily access in daily use and provide opportunities for individual or group activities such as walking, jogging, sitting outdoors, picnicking, playing games, etc. (Aykal et al. 2017).

In the development process of a city, the physical structure of the city emerges as a result of the multidirectional relations and interaction of basic components such as architectural structures, open and green areas and transport. In particular, green areas in the urban area and its periphery are a basic component that

integrates and balances the city as a result of organic connections with all land uses of the city, and are public and privately owned physical spaces covered with plants that provide multifaceted services and contributions to the ecosystem of the city, form the city identity, and include active and passive recreational activities. Urban open and green areas can be divided into three groups as public (city and neighbourhood parks, national gardens, recreational areas, sports and playgrounds, etc.), semi-private (schools, public institutions and organisations gardens, etc.) and private (residential or collective housing gardens, etc.) (Türker and Gül 2022).

Today, due to the increase in the number of elderly populations, the policies developed for the elderly are unfortunately insufficient. Our cities and parks in our cities cannot serve the elderly individuals sufficiently. (Yılmaz et al. 2016).

According to many landscape planners, urban open spaces are defined as areas on which we do not build on one side and on the other side as areas with any potential for recreational use. Although open and green areas vary according to different meanings, types and even functions for some planners, generally open areas include squares, intersections, playgrounds, playgrounds and sports areas, parks, botanical and zoological gardens and entertainment centers (Özdamar, 2006).

According to Özkan (2020), the Latin equivalent of the word 'elderly' is the word 'geron'. The concept called gerontology derived from this word and emerged as 'the branch of science that studies the elderly'. The term was first used by Metchnikoff, a Russian biologist, in 1908. According to the World Health Organization, the term elderly is defined for individuals over the age of 65. However, Gerontology states that the aging process consists of complex processes that cannot be easily said that this person is old. According to Özkan (2020), old age is only a social design, and designs can change according to the situation and needs (Özkan, 2020).

Old age is a natural and compulsory age of life such as childhood and adulthood. It is all of the irreversible structural and functional changes that occur with the progression of time at the level of molecules, cells, tissues, organs and systems of the organism at the level of molecules, cells, tissues, organs and systems of the organism, which occur before death in the life process that begins with the birth of the human being and in which the person passes from independence to dependence, both physically and mentally. The World Health Organization (WHO) defines people aged 65 and over as elderly, and people aged 85 and over as very old. Gerontologists classify old age as young old age between 65-74 years of age, middle old age between 75-84 years of age and advanced old age (old age) over 85 years of age. Old age should be evaluated in terms of biological, psychological and social ageing as well as chronological ageing. While the basic measure of chronological ageing is the calendar age of the person, the basic unit of measurement of biological ageing is the vascular age of the person, i.e. cardiovascular ageing (Koldaş, 2017).

According to UNESCO, a person is old if he/she cannot get out of his/her comfort zone, constantly complains even if he/she has to, does not learn new things, is not surprised and thinks he/she knows most things, does not wonder,

does not explore, lives in the past, in his/her memories and constantly repeats the old.

Regarding the accessibility of parks, which constitute an important part of urban green areas, the characteristics and standards that a barrier-free park should have, the problems faced by disabled individuals in the city, the usability of the city by disabled individuals, the consideration of disabled individuals in park arrangements, and the accessibility features in urban green areas should be accurately revealed (Onay et al. 2022).

Hansen (1959) defined accessibility as 'the potential of opportunities for interaction', Dalvi and Martin (1976) defined accessibility as 'the ease of access from a particular location to a land use activity using a particular transport system', Burns (1979) defined accessibility as 'the freedom of individuals to take part in different activities' and Ben Akiva and Lerman (1979) defined accessibility as 'the benefits derived from transport and land use systems'. Accessibility criteria and components should be compatible with four basic perspectives in terms of social and economic evaluation. These can be summarized as theoreticality, applicability, interpretability/communicability, and usability in social and economic calculations (Cüce and Ortaçşme, 2020).

Accessible landscapes are areas designed to enable individuals to use their natural abilities under equal conditions, to perform all their activities without assistance, to move comfortably and to enjoy all activities (Özkan, 2020).

The accessibility of open-green areas is considered as the most important factor that enables these areas to be used more frequently and contributes to the welfare of the city people (Cüce and Ortaçşme, 2020).

Individuals who have been using nature for many different purposes for a healthy life since ancient times have used urban parks, which are almost a copy of nature, for rest and recreation (Gemici 2023a). As a result of the harmony between nature and man, the need for green areas has increased in cities with increasing population density (Gemici 2023b).

Parks and public open green spaces are open spaces for all segments of the society. These places, which are important recreation areas, enable the elderly to renew themselves, to breathe a little in the open air, to be alone with nature even in the city. These opportunities provided by parks are utilized by elderly users. Today, the population of elderly individuals is increasing day by day due to the slowdown in population growth rate. In this study, it is aimed to determine the park usage purposes of the elderly and important park features that encourage physical activity and social interaction.

Within the scope of the research, 96 elderly individuals were interviewed with 96 elderly individuals within the scope of face-to-face survey study by going to the park at random times on weekdays and weekends on a voluntary basis by using the questionnaire form prepared for revealing the user profile of individuals aged 40 and over in İhlamur Park in Selçuklu District, determining the preference times of the park, determining the duration and times of park use, determining the reasons for park preference and selection, and evaluating park user satisfaction and expectations.

The findings showed that parks are an important social space for elderly people and therefore require careful planning and implementation in the design, management and use of parks. With the landscape designs to be made in line with the findings, it will be possible for elderly individuals to benefit more from the parks and have a more enjoyable time.

Materials and Methods

In order to examine the behaviors and experiences of elderly individuals in Ihlamur Park in Yazır neighbourhood of Selçuklu district of Konya province, documents related to the park taken from Konya Metropolitan Municipality, on-site photography and observations were used as materials, and the method was developed according to Güngör (2019). Both quantitative and qualitative research techniques were used to determine the scope of our research and to analyze the data obtained. Konya city is in the Central Anatolia Region of Turkey. In this context, a questionnaire study was carried out on the time intervals of elderly people using the park, determination of satisfaction criteria, reasons for preferring the park, expectations from the park and types of transportation to the park. Within the scope of the survey, 96 elderly individuals were interviewed. The questions in the questionnaire form were categorized under 5 main headings. These headings are;

- Identification of the user profile
- Determining the preferred times of the park
- Determination of the duration and time of use of the park area
- Determination of park preference and selection reasons
- Evaluation of user satisfaction and expectations in the park area.

Results

When the socio-demographic characteristics of the participants are analyzed, 57.3% of the participants are women and the remaining 42.7% are men. Since the study was carried out on individuals in the elderly group, all of the participants were aged 40 and over.

The results of the questionnaire regarding the age distribution rates of the elderly individuals using the park are given below.

40-50 Age Range (In our study, according to UNESCO's new definition of the elderly, we carried out a decanket study not only with individuals aged 65 years and over, but also with individuals aged 40 years and over)

- Male individuals: The number of male individuals using the park in this age range is 15 (36.6%).
- Female individuals: The number of female individuals using the park in the same age range is 22 (40%).
- **51-60 Age Range:**
- Male individuals: The number of male individuals using the park in this age group is 11 (26.8%).
- Female individuals: The number of female individuals aged 51-60 using the park is 20 (36.4%).
- **61 and Over:**

- Male individuals: The number of male individuals aged 61 and over using the park is 14 (34.1%).
- Female individuals: The number of female individuals using the park in the same age group was 13 (23.6%).

These data reveal the age and gender distribution of park use in detail. It is observed that the rate of women's park use is higher than that of men in certain age groups, especially among the elderly individuals. However, this ratio changes in favour of men in the group aged 61 and over. This situation shows that there are differences between genders in park usage habits as age increases.

Due to both climatic characteristics and social structure, the hours of use of parks vary during the day. Seasonally, there may be large differences between the number of elderly individuals using the parks in some time periods.

The results of the survey on the frequency of use of the parks by the elderly individuals using the parks are given below.

Individuals who use the park 3-4 times a week:

- Male individuals: The number of male individuals who use the park 3-4 times a week is 14 (50%).
- Female individuals: The number of female individuals who use the park with the same frequency is 14 (50%).
- Individuals who use the park every day:
- Male individuals: The number of male individuals who use the park every day is 10 (40%).
- Female individuals: The number of female individuals who use the park every day is 15 (60%).

These data reveal the frequency of park use of elderly individuals on the basis of gender in detail. Although the ratio of male and female individuals using the park 3-4 times a week is equal (50%), it is observed that the ratio of women (60%) is higher than men (40%) among individuals who use the park every day. This shows that female individuals use the park more regularly and frequently.

The results of the survey regarding the time intervals of the elderly individuals using the park are shown below.

40-50 Age Range:

- Park use in the morning hours: In this age range, 5 (45.5%) of the individuals use the park in the morning.
- Park use during lunch hours: 6 (30%) of the individuals in the same age group use the park at noon.

51-60 Age Range:

- Park use in the morning hours: The number of individuals aged 51-60 using the park in the morning hours is 0 (0%).
- Park use at noon: 9 (45%) of the individuals in this age group use the park at noon.

61 and Over:

- Park use in the morning: 6 (54.5%) of individuals aged 61 and over use the park in the morning.
- Park use at noon: 5 (25%) of the individuals in the same age group use the park at noon.

These data reveal the distribution of park use among different age groups according to different time periods. In particular, individuals between the ages of 40-50 use the park mostly in the morning, while individuals between the ages of 51-60 prefer the park at noon. Individuals aged 61 and over have the highest rate of using the park in the morning hours. This situation shows that park usage habits change according to age groups and park usage is more common in the morning hours.

According to the survey results, the time spent in the park by the elderly individuals using the park was analysed in detail. Of the individuals aged 40-50, 27 (28.6%) spend 1-2 hours, 6 (29.4%) 2-3 hours and 25.0% 3-4 hours. Among individuals aged 51-60, 22 (38.6%) spend 1-2 hours, 6 (35.3%) 2-3 hours and 3 (37.5%) 3-4 hours. Among individuals aged 61 and over, 20 (1.4%) spend 1-2 hours, 0 (0.0%) 2-3 hours and 0 (0.0%) 3-4 hours.

According to these results, it is seen that individuals between the ages of 40-50 generally spend 2-3 hours. A higher rate of 3-4 hours is observed in individuals between the ages of 51-60. Individuals aged 61 and over are generally found to spend 1-2 hours in the park.

These findings reveal that the time spent by elderly individuals in the park may differ according to their age range. Understanding the park usage habits and preferences of the elderly is important for parks to provide better service for the elderly population. In this framework, park administrations can make arrangements to meet the needs of elderly people and enable them to use parks more effectively.

The reasons why elderly people go to parks differ according to individuals and age groups. Elderly individuals primarily go to parks to spend time during the day. These preferences differ in order of importance. İhlamur Park is generally preferred by elderly people for walking and sports (n: 54 %56.2), spending time with their grandchildren and children (n: 27 %28.1), spending time with family and friends and having picnics (n: 11 %11.4). In addition, other factors also play an important role in the preference of the park. These factors include the location of the park (1), the reliability of the park (2), the functional features of the park and the opportunity to rest (3). This data reveals that the park usage habits of elderly individuals vary depending on both their individual needs and environmental factors. Parks are important areas for both physical activities and social interactions for elderly individuals, and features such as functionality and accessibility are determinant in the preference of these areas. According to the results of the analyses, (25%) of individuals between the ages of 40-60 disagree that the park is safe, while 4 (23.5%) agree with this view. According to the analysis of the studies and survey results on the neighborhoods where the elderly people who use the park reside and the means of transportation to the park, 4 (23.5%) of the elderly people who come to the park by private car reside in Sancak neighborhood and 2 (3%) reside in Yazır neighborhood. Of the elderly individuals who use public transport to reach the park, 1 (5.9%) comes from Sancak Neighborhood and 1 (1.5%) comes from Yazır Neighborhood. On the other hand, 12 (70.6%) of the elderly individuals who reach the park on foot come from Sancak Neighborhood and 64 (95.5%) come from Yazır Neighborhoods. These findings reveal the park access

preferences of elderly individuals living in different neighborhoods and the ease of access to parks in different neighborhoods.

The opinions of the elderly people using the park on the adequacy of planting were analyzed according to the survey results. (0,0%) of the individuals between the ages of 40-60 disagree with the adequacy of planting, while 8 (30,8%) agree with this view. On the other hand, 0 (0,0%) of the individuals between the ages of 60-70 both disagreed and agreed with the adequacy of planting. In the light of these data, it is seen that individuals in the 40-60 age group have serious criticisms about the planting of the park and half of this group finds the planting works inadequate. However, there is no negative opinion about the adequacy of planting in the 40-60 age group and 30.8% of them have a positive opinion. In the 60-70 age group, no opinion was reported according to the survey results. These results indicate that the park management should review its planting policies. Especially the dissatisfaction of the 40-60 age group may negatively affect the frequency and satisfaction of users in this age range. Therefore, measures such as diversification of planting activities, aesthetic arrangements and increasing the number of plants can increase user satisfaction. On the other hand, the high satisfaction rate of the 40-60 age group indicates that the current planting policies for this age group are successful. The fact that there is no opinion in the 60-70 age group may indicate that this group is not interested in the issue of planting or that this group is not sufficiently represented in the survey.

The park management should take steps to overcome the dissatisfaction of the 40-60 age group with the inadequacy of the existing planting (there is not enough shading because the trees are still small) and maintain current practices during the replacement of drying plants to maintain the satisfaction of the 40-60 age group with the presence of linden trees. The reasons for the silence of the 60-70 age group should be investigated, and the opinions of this group on the planting works of the park should be taken to increase the overall satisfaction of the general use of the park.

The opinions of the elderly people using the park on the adequacy of the equipment elements in the park were analysed in detail according to the survey results. Regarding the adequacy of the reinforcement elements, 4 (36.4%) of the individuals aged 40-60 do not agree with the adequacy of reinforcement elements, while 3 (17.6%) agree with this view. On the other hand, there is no disagreement rate in the 60-70 age group and there is no opinion on the adequacy of reinforcement elements among the participants in this age group. In the light of these data, the rate of participation among individuals aged 40-60 is 17.6% and some of the participants in this age group think that the reinforcement elements are insufficient. However, there is no negative opinion about the reinforcement elements among the participants aged 60-70.

The issues that the elderly people who use the park are disturbed about the park were analyzed in detail. Among the elderly men using the park, 15 (31.9%) were disturbed by car noises and 23 (50%) were disturbed by misuse of the park. Similarly, 32 (68.1%) of the elderly women were disturbed by car noises and 23 (50%) were disturbed by misuse of the park. These results reveal that the causes of

discomfort encountered by elderly individuals in the park may differ according to gender. A significant portion of both male and female elderly individuals are disturbed by car noises. In addition, misuse of the park is also a source of disturbance for both male and female elderly individuals. These findings point to an important point that park managements should take into consideration in order for parks to better meet the needs of the elderly. In order to keep the noise levels under control in the parks, preventive planting between the highway and the park and taking the necessary measures regarding the design and use of the parks will enable elderly individuals to have a more enjoyable time in the parks.

Conclusion

It is the duty of each individual and the state to make the elderly feel that they are still a part of society and to ensure that they continue their social life instead of isolating them from society as an object that has completed its duty and is a burden to society. One way to offer this social life to elderly individuals is to provide them with the opportunities that will enable them to use public spaces and parks within these spaces comfortably.

When the age and gender distribution of park use is analyzed in the survey results, it is observed that women are generally more active, but this trend changes in the 61 and over age group. It is revealed that park usage habits change according to gender as age increases. This change may reflect the change in the interest and preferences of older individuals in parks with age. The fact that women prefer parks more in younger age groups may be because young women prefer to use parks for social, recreational and sports activities. However, the reversal of this situation in the age group of 61 years and over is probably due to the fact that older men tend to use the parks more frequently and regularly. In this age group, it may be important to understand in more detail what the determinants of men's use of the park are. Perhaps factors such as maintaining physical activity, meeting up with friends or utilizing their time in the park in a more beneficial way.

According to the data on the frequency of use of Ihlamur Park, it is seen that the rate of women using the park 3-4 times a week is equal to that of men, but the rate of women using the park every day is higher. This shows that women use the park more regularly and frequently. While a gender balance is observed among individuals who use the park 3-4 times a week, the higher proportion of women among those who visit the park every day may indicate that women frequently visit the park in their daily routines. This indicates that women regularly prefer the park for both physical and social activities.

In the analyses conducted according to the time intervals of park use, it was found that the preferred time periods differ among different age groups. In particular, it was observed that individuals aged 61 and over had the highest rate of using the park in the morning hours. This indicates that older individuals prefer to spend time in the park in the morning hours and prefer to start their day actively. The decrease in the use of parks at noon is perhaps due to the fact that elderly individuals prefer to rest at home during this time. This indicates that parks should be used more actively in the morning hours for elderly people.

When the distribution of the time spent in the park according to age groups was analysed, it was determined that each age group spent different amounts of time in the park. This reveals that the park usage habits of the elderly may vary according to age ranges. In particular, it is observed that individuals aged 61 and over spend shorter periods of time in the park. This may be related to the physical capacity of the elderly or the way they utilize the facilities in the park. These data show that parks should be made more attractive for the elderly and arrangements should be made to ensure that the elderly use the parks more effectively.

In the examination of the reasons for going to the park, it was seen that elderly individuals primarily prefer parks to spend time during the day. In addition, it was determined that environmental factors were also effective in park selection. This shows that parks are important not only for physical activities but also for social interactions. Parks are thought to be an important platform to strengthen the social ties of the elderly and increase their interaction with society.

Studies on access to parks have revealed the preferences and convenience of older people living in different neighborhoods. This shows that the location and accessibility of parks can affect the use of elderly people. The fact that parks are accessible and easy to reach for elderly individuals indicates that they should be made more attractive for this group.

Declarations

This study was presented at the 7th International Anatolian Agriculture, Food, Environment and Biology Congress, (Kastamonu, TARGID 2024)

Ethical Approval Certificate

The experimental procedures of this study were approved by the Ethics Committee of Selçuk University, Architecture and Design Faculty (Approval date and number: 03/11/2023-09/04).

Author Contribution Statement

Sertaç Güngör: Project administration, supervision, conceptualization, methodology, review, editing, formal analysis and writing the original draft

Zehra Çelik: Data collection and investigation.

Conflict of Interest

The authors declare no conflict of interest.

Acknowledgments

This article was presented at the 7th International Anatolian Agriculture, Food, Environment and Biology Congress Kastamonu/Turkiye and published in the abstract booklet.

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