

DOI: 10.53555/ks.v12i5.3324

A Comparative Study of Community Parks Lahore: Assessing Design, Amenities and User Preferences

Farhana Naz^{1*,3}, Fatima Nasir Alvi², Sobia Razzak², Saffa Khan³, Sana Malik^{4,5}, Saad Mujahid⁶,
⁷Muhammad Faran Saleem

¹Assistant Professor, Interior Design Department, Lahore College for Women University Lahore, Pakistan.

²Student of Ph.D., School of Architecture and Planning, University of Management and Technology Lahore, Pakistan

³ Student of M.Architecture, School of Architecture and Planning, University of Management and Technology Lahore, Pakistan

⁴ Lecturer, Birmingham City University, United Kingdom

⁵Adjunct Associate Professor, Sunway University, Malaysia

⁶ Assistant Professor, School of Architecture and Planning, University of Management and Technology Lahore, Pakistan

⁷ Visiting Lecturer, Interior Design Department, National College of Arts Lahore, Pakistan

***Corresponding Author:** Farhana Naz

*Email: Farhana.naz@lcwu.edu.pk, ORCID: <https://orcid.org/0009-0000-9495-5489>

Abstract: Community parks provide recreation, relaxation, and nature connection for socialization and health. Park design, facilities, neighborhood demographics, geographic location, social and cultural variables affect user percentages. The study compares four parks in Shadman Colony and the Defense Housing Authority (DHA) in Lahore, Pakistan, to find out what attracts families, young adults, kids, teens, and senior citizens. It also involves identifying the causes of the usage gap between Shadman Park and DHA parks. Research employed qualitative and quantitative methodologies. Questionnaires, surveys, and in-person observations have revealed park visitors' preferences, viewpoints, and behaviors. The research examined park facilities, accessibility, upkeep, safety, inclusiveness, and community involvement to determine their impact on park use. The research revealed that both DHA and Shadman parks are usually well-liked by the people of the neighborhood. The parks appeal to various populations and provide a variety of attractions, resulting in a wide range of preferences and experiences. However, DHA parks generally attract female visitors and emphasize physical activities, while Shadman parks appeal to women, children, and men of all ages by offering relaxation, green spaces, and recreational options. Urban planners, park managers, and other community stakeholders can use the study's findings to make parks more inclusive.

Keywords: park design; demographics; neighborhood; accessibility; green spaces; upkeep; inclusiveness; safety, community involvement

Introduction

Several researchers investigated the benefits that people derive from visiting urban parks [1-4]. Green spaces help create livable communities and enable successful urban planning to achieve sustainable cities [5, 6]. Parks are vital places for people to visit to improve their health, mental condition, coping with stress, sense of community and aid in the community's resilience to crisis, all of which contribute to their happiness and pleasure with life [7-10]. Parks have tremendous importance in city planning and neighborhood enhancement [11]. A significant number of residents make use of green space as an escape from the pressures and responsibilities associated with city living [12].

The layout, landscaping, accessibility, and architecture of a community park are only a few of the factors that should be taken into account during the design process [13]. People's preferences are affected by both the kind and density of vegetation [14-18]. The inclusion of amenities like playground equipment and benches has also been found to be appreciated [19, 20], as have the size and accessibility of green spaces [17, 21]. Although not all studies have identified substantial benefits [18], cleanliness and maintenance are also likely to play a factor in the preferences of park visitors [17, 22, 23]. Space constraints, historical significance, and planned activities all play a role in shaping park designs [24]. Having amenities in a park is critical to attracting and keeping visitors [25]. Playgrounds, recreational facilities, walking routes, and picnic places are just a few examples of the many ways in which parks can improve people's quality of life [13, 26].

Parks in neighborhoods are essential for promoting residents' health, wellbeing and happiness in many ways [27]. Large areas open to the public for leisure and relaxation, where people can enjoy contact with nature [28-30]. There is a strong correlation between how well-designed and well-equipped a park is and how happy its visitors are [31-33]. These parks especially if they are closer to one's residence contribute to the residents physical and mental wellbeing [34, 35]. These green spaces are also a source of keeping the mental fatigue and stress away and were also contributed as an important factor in social interaction [36-39]. Therefore, park planners, designers, and politicians need to be aware of what factors contribute to the creation and maintenance of high-quality parks [33].

Several studies have been conducted to investigate the relationship between park design, facilities, and user preferences. The accessibility of a park in terms of its connection to neighborhood is a key factor for the nearby residents use and it raises the user/usage percentage [40, 33]. Accessibility analysis was used to calculate urban parks conditions to accessibility. Walkability around parks is emphasized in research and discussed how it positively impacts the visitor's behavior towards park use and their physical activities [41-44]. Some parks charge fee for entry due to their highly designed and landscaped features/ Park fee is also an important factor contributing towards user percentage [45]. Considering another aspect, research shows that if the distance from park and home is long, people spend longer time in parks in comparison to people with shorter distances. At the same time, Parks that are accessible via public transport get more visitors [46, 47]. Neighborhood parks play a very important role in children's physical and mental health [48]. The relationship between children's population, analysis of trip lengths based on factors like age, gender, income, family structure and geographical location [49].

Malek and Nashar [50] studied the park usage pattern and concluded that if visitors' preferences and requirements are met, park usage will increase [51]. Also, the contentment of visitors increases their frequency of visits and time spent outdoors, which has a positive effect on their health [48]. The quality of environmental attributes/Aesthetics such as water features, sculptures, variety of landscape, foliage and plants and views makes a park more engaging for the users. According to a study of Nordh & Østby [38], these features engage people in parks and restore and promote their psychological well-being. Another study conducted by Edwards et al. [52] to find out which park features were the reason for an increase in the park usage by adolescents. This study also contributed in establishing an attractiveness score to find out the key factors influencing the users to use a particular park. Ajayi [53] recommended providing appropriate amenities for simulation of active living. To promote physical activity and park usage planners and designers must employ features such as skate parks, walking paths, barbecues, picnic tables, public toilets, court lighting, equipment, and the number of trees. Parks with more features are three times more popular among users [52]. Such open spaces indirectly influence and improve users' health through various activities performed [53]. The quality of environmental attributes/Aesthetics such as water features, sculptures, variety of landscape, foliage and plants and views makes a park more engaging for the users [54].

Marzukhi et al. [55] recommends that there must be activities in park that attract people to visit and surveillance agents themselves as defensible space concept is very important for safety of users of park. Implementing the defensible space concept in park design improves safety and promotes social interaction and healthy environment of neighborhood [56]. Crime Prevention through Environmental Design (CPTED) is another approach to reduce crime rates. It focuses on enhancing community engagement and social interaction through environmental design which ultimately makes it safer for residents. In urban environments, mental fatigue is caused by an overload of information. It is thus important to create restful and mentally sustaining environments as an escape [57]. A good neighborhood park can be beneficial for mental health, by creating environments that contribute to treating and reducing stress [58, 59]. By providing stimulating environments, the overwhelming urban life can be given a respite. The park's design must aim to provide a deeper understanding of enhancing features for a healthy life [49]. Tracks and sidewalks are a key feature in parks promoting senior citizens physical activity with special emphasis on the walking surface. The width of the track as well as shaded seating areas in-between is very important in this context. Physical activities but in their respective zones are considered more appropriate in design [60].

A comparative examination of community parks is essential to appreciate the diverse design techniques, facilities provided, and user preferences that affect park utilization and satisfaction [61]. Despite current studies, a comparison study that evaluates park design, amenities, and user preferences across different community parks is required. This study would provide a better understanding of the characteristics that contribute to positive park experiences and influence evidence-based park design and planning suggestions [18, 62]. The main objective is to look at the characteristics and elements of the parks that encourage frequent usage by families, young adults, kids, and seniors and to examine the similarities and differences between types of parks in terms of layout, amenities and patron preferences. This study intends to add to the body of knowledge on park usage dynamics offering scholarly insights into the causes of high or low user engagement in these parks. By delving deeper into these characteristics, we may gain a better understanding of park layouts and how well they cater to a wide range of visitors' preferences.

2. Materials and Methods

Lahore, the capital of Pakistan's Punjab Province, located on the banks of the river Ravi, covers an area of 11727 square kilometers, growing at a rate of 2.55% [63]. Lahore has 276 green belts and 828 parks, according to the Parks and Horticulture Authority Lahore [64]. The city has a number of beautiful parks where people can get away from the hustle and bustle of the city. Shalimar Gardens is a UNESCO World Heritage Site that has some of the most beautiful Mughal buildings and gardening. Lawrence Gardens, which is also called Bagh-e-Jinnah, has monuments and well-kept grounds. Gulshan-e-Iqbal Park and Jilani Park both have a lot of green space, places to play, and culture events. Model Town Park and Johar Town Park are both quiet places with places to run and play. Besides these big parks, Lahore also has a lot of smaller parks and green places spread out all over the city. The size and number of features of these parks vary, from small neighborhood parks to big recreation centers. Because all of Lahore's green areas or parks cannot be included into single research, the paper aims to conduct a comparative analysis of four neighborhood parks of two well-established residential

areas namely Shadman an area carrying the legacy of the colonial period yet blending well with the city's urban fabric and Defence Housing Authority (DHA), a modern and the most sought-after residential area in Lahore.

Respondents were teenagers, young adults, adults, middle age and old age from the neighborhoods of the Shadman colony and DHA-phase V. There was a number of total 85 participants, 55 from Shadman colony parks and 35 from DHA parks. The age of participants falls between 15-80 years. Park design, amenities, user preferences, and neighborhood satisfaction were investigated. Park neighborhoods are defined as areas within 400 m (a five-minute walk) of each park because this distance has been established in the literature as a requirement for frequent park use [65-67]. Park size, facilities, and user surveys, interviews, and observations are used to measure the variables. We learned about the strengths and weaknesses of the four community parks in Shadman, DHA Lahore and user preferences by analyzing these qualities, which will be helpful for future park design and management decisions.

A flexible research methodology (survey) is employed as a tool for data collecting in order to accomplish the goal of this study. The elements from the research that were discussed in the preceding section were used to develop the questionnaire. In the first step, in order to determine the frequency and length of time that various demographic groups use the park, we did systematic observations of park activities and behaviors. These observations gathered qualitative information on the park's facilities, human interactions, and general ambience. During the second stage, we did surveys of the parks for two weekdays and on weekend days for four to six consecutive weeks to collect information on park usage trends and preferences. For this purpose, a formal questionnaire was created. Visitors to the park from various demographic groups, such as families, teenagers, young adults, adults and senior citizens, were asked that questionnaire to complete surveys. The survey asked the respondents about their overall park experience during their visits there and the reasons for visiting the parks. They were also asked about the cleanliness, facilities, amenities, seating, resting areas, maintenance, landscape in the park, their safety and security and their recommendation to the other park users or who want to visit the park. Lastly, a basic statistical analysis of the surveys and observational data is conducted to provide an overview of park usage trends and demographics of visitors. To determine the variations and similarities between the parks in Shadman Colony and DHA, a comparative study is carried out, concentrating on elements including park characteristics, accessibility, upkeep, safety, and community involvement. The statistical method Microsoft Excel is used to investigate the connections between park attributes, demographic variables, and the proportions of families, teenagers, young adults, adults and seniors who use the park.

3. Results

The study's findings are detailed below in terms of categories derived from systematic observation and respondent's interview. These are: assessment of location and design elements, evaluation of park amenities and evaluation of user perception and satisfaction. The discussion incorporates data from interviews and systematic observation centered on three major themes variable to the study.

3.1 Assessment of Design Elements

All the four parks in Shadman colony and DHA are in the residential community. However, one of the parks, Ayesha Park, in Shadman colony is dedicated to women and children only. In the context of the comparative assessment of these community parks, the setting of parks in DHA Lahore is based on the contemporary urban park layout while the Shadman parks are designed at different centers within the residing community to make it more attractive. The residents walk to the parks due to their closer proximity which is not more than 10 meters. The neighborhood's proximity encouraged a healthy lifestyle. A convenient location allowed daily natural connection. All four parks are connected to the area without a dangerous junction. People can walk or drive to the parks since surrounding dwellings are close to them. However, the accessibility ramps/pathways for disabled people are missing in both parks of Shadman colony and there are no direction signs.

The quality of environmental attributes/Aesthetics such as water features, sculptures, variety of landscape, foliage and plants and views makes a park more engaging for the users. The well-maintained flower beds in DHA parks can be included as positive attributes adding to the aesthetic quality of the parks while at the Shadman parks, the flower beds are maintained but with only one or two varieties of flowers. It was observed that there was not much of the flower variety available however bushes, green areas, and trees were the additional elements contributing to the natural ambience and pleasant setting of the DHA parks. The linear arrangement of the flower beds indicated that a contemporary metropolitan urban park layout had been followed in DHA parks (Fig. 1). The Shadman parks are well maintained but on simpler lines. The first Shadman Park has less greenery/shades and it is divided in two parts by a tiled walkway incorporated with swings and an open gym. The trees are aligned along the outer periphery of the park. Ayesha Park of Shadman is greener and has beautiful old trees in the center and along the periphery. The ground is lush green and well maintained with flower beds (Fig. 2).



Figure 1. DHA Parks Showcasing Exquisite Topiary Work with Trimmed Plants and Hedges.



Figure 2. Shadman Parks Showcasing Flowers, Plants and Hedges.




It is observed that features like a gazebo and pavilions were missing in both parks of DHA while in both parks of Shadman colony gazebos are present in the center as focal point. However, one of the DHA parks has the fountain in the center as the focal point to enhance the aesthetics of the park. There are no special features like water bodies, sculptures in any of the four parks. Because selected parks fall in the category of community parks therefore it can be implied that heavy structures have been avoided as a conscious planning.

3.2 Evaluation of Park Amenities

Availability of amenities makes a park more user-friendly. In terms of basic amenities, all the four parks under evaluation have very basic amenities including the parking spaces and trash cans with hardly any rest rooms and drinking water facilities. In Shadman Parks, the walking tracks are thoughtfully provided on the perimeter of the parks whereas different areas of the park could be approached by paved walkways connected to the perimeter walkways. The length of these jogging tracks is about 600-800 meters. The placement of benches along the walking track is helpful for old age residents to take a breath during walk. The jogging track of DHA parks are about 700-1000 meters. All these tracks are shaded with the trees all along these tracks. The sidewalks all along the parks are also present there. In the Shadman Park-one, there is mosque connected to the park which is used for communal gatherings like Eid and funeral prayers and there is also a community marketplace across the road on one side of the park. However, the Ayesha Park Shadman caters only light walking and jogging (Figure 2). Though these parks do not have any specialized sports area like tennis, badminton or football, but the teenager boys in the Shadman park-one use it to play cricket and other sports.

The findings regarding sports facilities revealed that these parks are not sports-oriented owing to the designated small area. Secondly, these parks are characterized as neighborhood parks catering to light jogging /walking and casual recreational activities. The short-distance trail again indicated light exercise activity areas in the parks. Parks in a relatively new sector of Phase-V and Shadman park-one feature an open gym as well. It is observed that the well-maintained facility is majorly used by middle-aged residents with an age group of 40 and above in the DHA parks while by the teenagers and young adults in the Shadman parks. Despite the absence of any designated areas for sports facilities, the playground equipment like swings, slides and fun things to climb on are present there in all the four parks (Table 1). The inclusion of an open gym specifies the provision of modern quality amenities in the pocket parks of DHA.

Table 1 Features Showcasing Different Facilities in Shadman Colony and DHA Parks Lahore.

Features	DHA Park 1	DHA Park 2	Shadman Park 1	Ayesha Park Shadman
Playground Equipment for Children				
Play set or structure	√	-	√	√
Things to hang from	√	√	√	√
Things to slide down	√	√	√	√
Functional stairs, ladders and ramps	-	-	√	-
Fun things to climb on	√	√	√	-
Swings	√	√	√	√
				
Pictorial References				
Sports facilities				
Basketball court	-	-	-	-
Tennis court	-	-	-	-
Volleyball court	-	-	-	-
None of the above	√	√	√	√
Seating available				
Benches scattered throughout the park	√	√	√	√
Outdoor seating areas	√	√	√	√
Shade structures or shelters				
Pergolas or gazebos	-	-	√	√
Shade trees or umbrellas	√	√	√	√
Covered picnic areas	-	-	√	√
				
Facilities for active recreation				
Fitness equipment or exercise stations	√	-	√	-
Running or jogging paths	√	√	√	√

Another significant research finding refers to the prohibition of picnic activities in DHA parks. This policy highlights not only the regulations of the housing society but also manifests the preferences and social set-up of the locality. On the other hand, Despite of small size of the Shadman community parks, picnic activities take place and are not prohibited by any laws of Shadman society. It is observed that in the context of the condition and maintenance of the amenities within each park are varying. Most of the amenities in the DHA parks are well-maintained and in good working condition while in Shadman parks, the overall upkeep of the amenities is bad to fair except for the seating, paved tracks and trash cans. Similarly, the cleanliness with respect to different aspects in DHA parks are from mostly to extremely while in Shadman Parks, the overall upkeep of cleanliness is from somewhat to mostly.

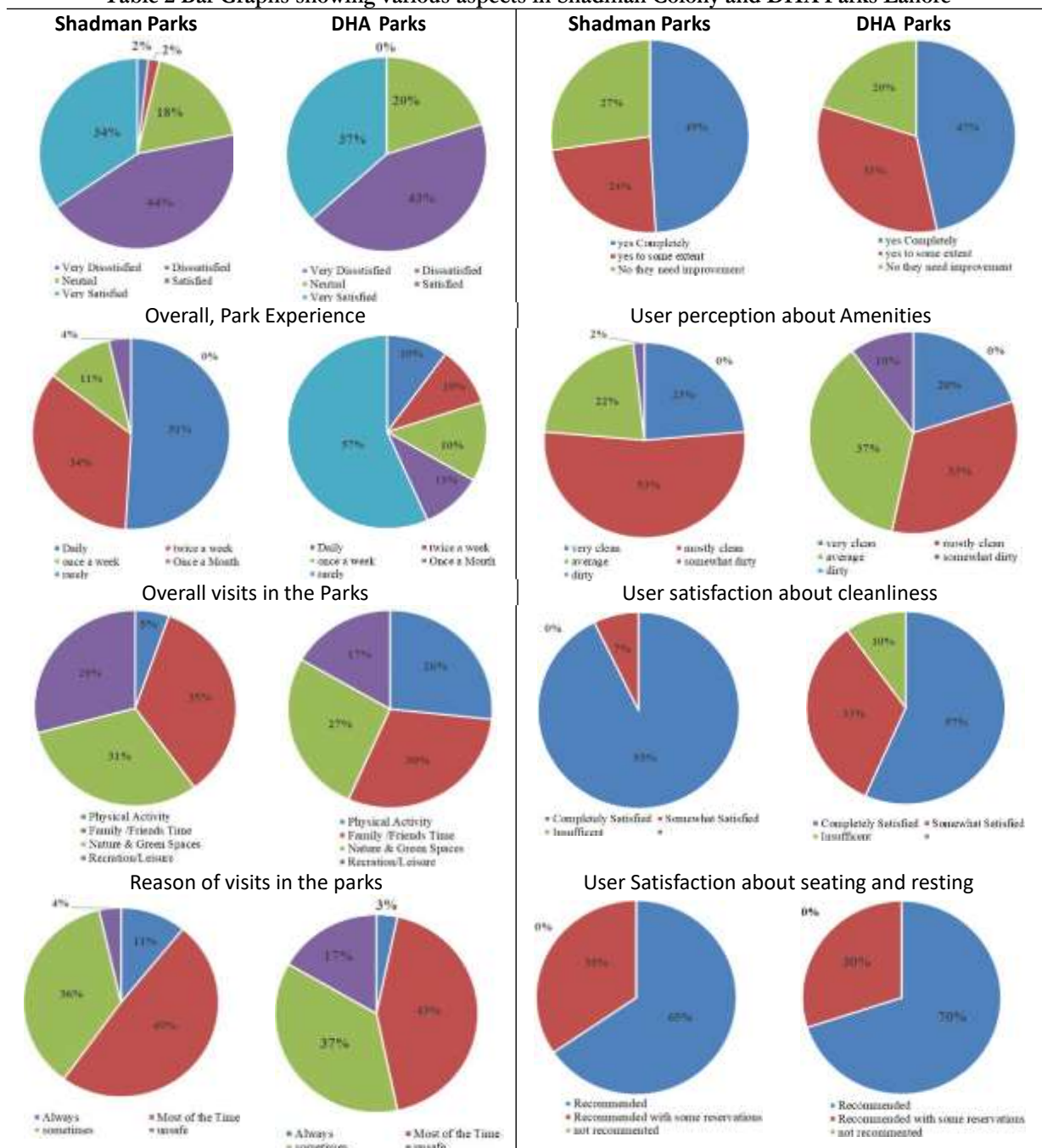
3.3 Evaluation of User Perception and Satisfaction

The demographic data of DHA parks shows that the parks are primarily visited by women, with almost double the ratio of women to men. The demographic composition leads to the social environment of the area and women's involvement in outdoor activities, The demographic data of Shadman Parks revealed that these parks are visited by women, children and men of all age groups. The Shadman park-one is more popular among children because it is open to all, in contrast to the Ayesha Park where only women and children are allowed. This demographic composition shows that the society is very perceptive to the needs of women involvement and relaxation through outdoor space while the DHA parks are more popular in middle age and adults rather than old age or teenagers.

The survey covered various aspects of the park in terms of park visit, reasons for visit and the overall experience of the respondents with respect to the different age groups. The respondents were interviewed with respect to their satisfaction about the amenities including cleanliness, seating, resting areas, security, accessibility for disabled and old citizens, landscaping, and overall maintenance. Majority of the respondents in Shadman and DHA parks were satisfied regarding overall experience (Table 2). The ratio of dissatisfied respondents is also very low in Shadman parks. Old age citizens in Shadman parks were more satisfied as compared to the DHA parks where adults and middle-aged people were more satisfied rather than old citizens. In Shadman parks, 51% of the respondents visit the park daily while in DHA parks only 10% respondents visit the parks daily while more than half respondents visit rarely. Overall the ratio of visiting the shadman parks on frequent basis is more than the DHA parks. As discussed above, according to the satisfaction level, majority of the old age citizen of shadman parks visit the park daily than the DHA parks where middle age or adults ratio is a bit more than the old age citizens.

In Shadman parks, mostly respondents visit the park to spend their time with family/friends, to enjoy the nature/ green spaces and for recreation. While the respondents of DHA parks visit the park for physical activity, and some of them to spend their time with family/friends, to enjoy the nature/ green spaces. However, both communities differ here in a way that the respondents of DHA are not interested for any kind of leisure or recreation while the respondents of Shadman are not fond of physical activities in the parks. Rather they have most interest in nature/green spaces and recreation as the majority of the respondents are old age and teenagers while the majority of respondents in DHA parks are adults or middle age who are most interested in physical activity while the teenagers are mostly interested to socialize with their friends. The in-depth study of the parks in both communities indicated a comprehensive positive perception of the users. The evaluated level of satisfaction is on the higher side of fulfillment about the amenities in the parks. In both communities, almost 50% of respondents are completely satisfied. Only 20-27% of middle aged and adults are in the favor of further improvement in the parks of both communities. The evaluation level of satisfaction about cleanliness is also on the higher side. 53% of respondents of Shadman parks and 33 % of DHA are satisfied. According to their perception, these parks are mostly clean while somewhat from 22-37% are having the average observation while 20-23% are in the favor of very clean. According to adults and teenagers of both communities, the parks are clean most of the time. The respondents (93%) of Shadman parks are satisfied with seating and resting facilities while 57% of DHA parks are completely satisfied. All the age groups of both communities are also satisfied with the seating and resting facilities.

Table 2 Bar Graphs showing various aspects in Shadman Colony and DHA Parks Lahore



Most of the respondents of both communities expressed satisfaction regarding safety and security but females are bit concerned and viewed safety in numbers. The Ayesha Park Shadman is considered safer by them due to male prohibition rule. About 43-49% feel safe most of the time in the parks of both communities while 36-37% do not feel safe all the time. As per the respondents' point of view, all the parks are considered safe most of the time because of proper lighting. In both communities, 65-70% respondent of recommended others to visit these parks while 30-35% recommended some reservations. the age groups are also in the favor of recommendation in the parks of both communities.

4 Discussion

The result from the findings covers the qualities and characteristics of four selected parks, emphasizing their accessibility, environmental aesthetics, and the presence or lack of specific amenities. The parks are close to residential areas, with distances varying from 3.5 to 10 meters from the nearest residence. This encourages residents to walk and provides convenient access, which contributes to a healthy lifestyle [34, 35]. Additionally, parking facilities are offered for visitors who arrive by car. It has been noticed that the parks in Shadman colony lack accessibility ramps/pathways for impaired people, as well as guidance signs. This suggests that modifications are needed to ensure inclusion and ease of navigation inside the parks. The quality of environmental features and aesthetics has a significant impact on park appeal and engagement. The DHA parks are regarded as having well-kept flower beds, various sceneries, foliage, and trees, all of which contribute to a pleasant and natural environment. The Shadman parks, on the other hand, feature simpler aesthetics, with fewer flower kinds but still retaining greenery through bushes, trees, and well-kept lawns.

The DHA parks have a modern metropolitan urban park layout with linear flower bed designs. However, both parks in Shadman colony have gazebos as focal points, and the first park includes swings and an open gym. A fountain serves as the main point of one of the DHA parks. None of the parks have water features or sculptures, implying a deliberate design decision, maybe due to their status as pocket parks. Tracks and sidewalks are a significant feature that promote walkability around the park and physical activity especially among senior citizens [41, 42, 43, 44 60]. All the parks have sidewalks and benches around their perimeters, providing pedestrians with safe and convenient walkways. Shadman Park-One features a mosque linked to it that is utilized for public gatherings, as well as a community mart nearby. While the parks lack specialized sports grounds, youngsters in Shadman Park-One use the limited open space to play cricket and other sports. Despite their modest size, the parks all contain playground equipment such as swings, slides, and climbing structures to cater to children's recreational activities. One of the DHA and Shadman parks has an open gym, which provides modern amenities for exercise and fitness. The open gym is mostly used by middle-aged inhabitants in DHA parks, while youths and young adults prefer to utilize it in Shadman parks.

DHA parks have a policy barring picnic activity, reflecting the housing society's policies and societal preferences. Picnic activities, on the other hand, are permitted at the Shadman parks. The state and cleanliness of park amenities vary. Most amenities in DHA parks are well-maintained and in good functioning order, whereas in Shadman parks, overall care ranges from poor to fair, apart from chairs, paved paths, and garbage cans. The cleanliness of DHA parks ranges from mainly to highly clean, while Shadman parks range from somewhat to mostly clean. DHA parks generally attract female visitors, with a much larger female to male ratio. Shadman parks, on the other hand, are frequented by women, children, and men of all ages. Shadman Park-One is very popular among youngsters because it is available to everyone, whereas Ayesha Park is only for women and children. This implies that the Shadman community is sensitive to women's needs and provides leisure areas, whereas DHA parks are more popular with middle-aged and adult visitors.

Most responders in both Shadman and DHA parks were pleased with their entire park experience. In Shadman parks, 34% of respondents were very satisfied, while 37% were satisfied and 43% were very satisfied in DHA parks. In either park, there were no dissatisfied replies. Older people were more satisfied in Shadman parks than in DHA parks, where adults and middle-aged persons were more satisfied (Fig. 3). According to Zhai & Baran [60], senior citizens have their personal preferences on features they like or dislike. Mostly they liked soft tracks preferably 3-3.9 meters wide with a sprinkling of seating for rest, trees, flowers and water bodies. They prefer these pathways slightly away from main activity zones and visual landmarks.

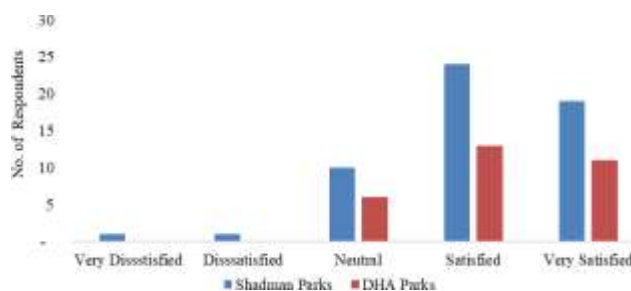


Fig. 3. Comparison of Overall Park Experience.

In Shadman parks, 51% of respondents attend every day, whereas in DHA parks, only 10% visit daily, with more than half visiting only infrequently. Shadman parks have a larger proportion of frequent visitors overall (Fig. 4). Shadman parks have a higher proportion of senior residents than DHA parks, which have a higher proportion of middle-aged and adult visitors.

Respondents primarily visit Shadman parks to spend time with family/friends, enjoy nature/green areas, and indulge in recreation. Respondents frequent DHA parks for physical activity, to spend time with family/friends, and to enjoy nature/green areas. However, there is a difference in preferences between the two populations, with DHA respondents favoring leisure or recreation and Shadman respondents favoring physical activities (Fig. 5).

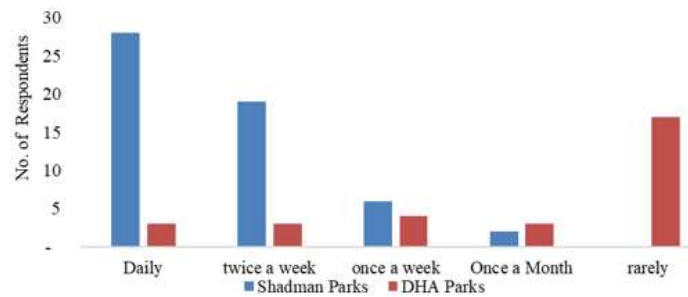


Fig. 4. Comparison of Frequency to Visit Park.

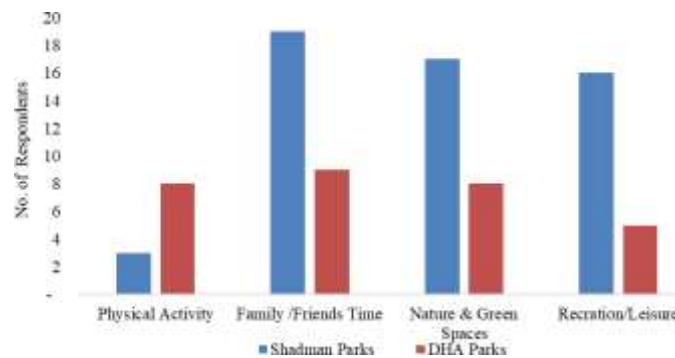


Fig. 5. Comparison of Reasons for Park Visit.

Overall, both communities had a favorable impression of the park's amenities. The degree of satisfaction was high, with over half of those polled expressing perfect pleasure. Only 20-27% of middle-aged and adult respondents thought there was room for development (Fig. 6). The level of satisfaction with cleanliness, was likewise largely good, with variances depending on age groups and gender concerns (Fig. 7). One of the respondents remarking on the community's involvement reminiscing about the past said that patients from nearby mental hospital used to take care of the garden as a hobby which also helped them with the community engagement. Another senior resident of Ayesha Park talked about her daily walking experience and elaborated that she hardly got the driver and car to herself to go any other parks. So, its very convenient for her to visit this park in terms of accessibility.

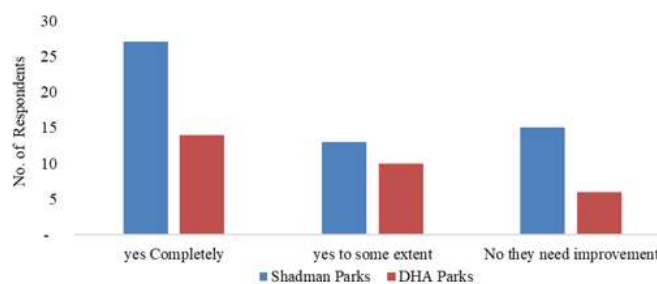


Fig. 6. Comparison of Facilities and Amenities as per need.

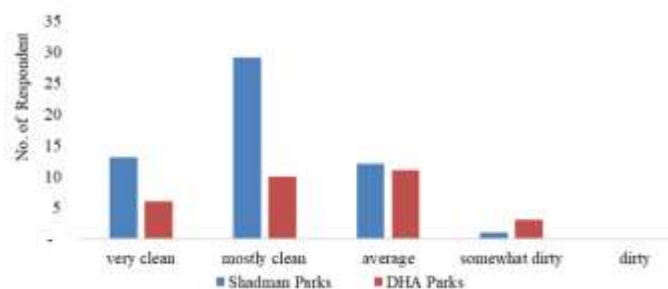


Fig. 7. Comparison of cleanliness of parks.

Most respondents were satisfied with seating and resting places (Fig. 8). Though Shadman parks have a variety of seating options like benches and Gazebos but the latter is not found in DHA parks. A gazebo is the kind of seating which is most enjoyed by visitors that come with family for recreation. The level of satisfaction with safety and security, and the likelihood of recommending the parks to others was, overall, favorable, but there were some disparities based on age groups (Figs. 9 & 10).

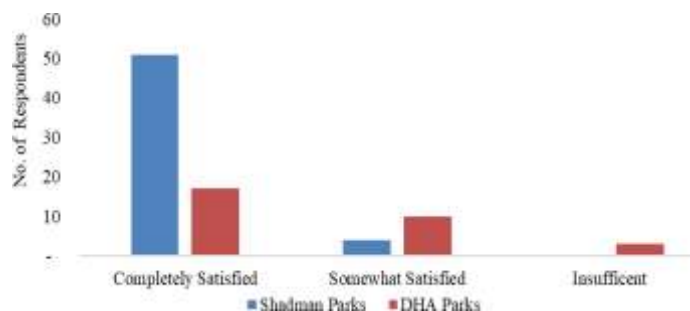


Fig. 8. Comparison of Seating and Resting Places.

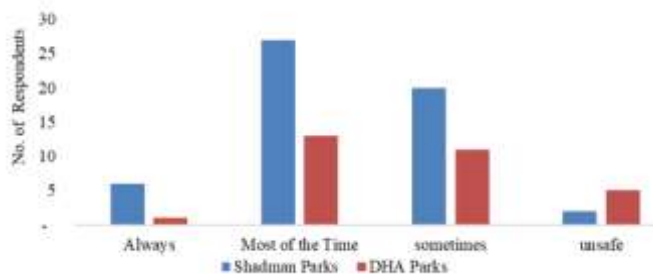


Fig. 9. Comparison of Safety and Security.

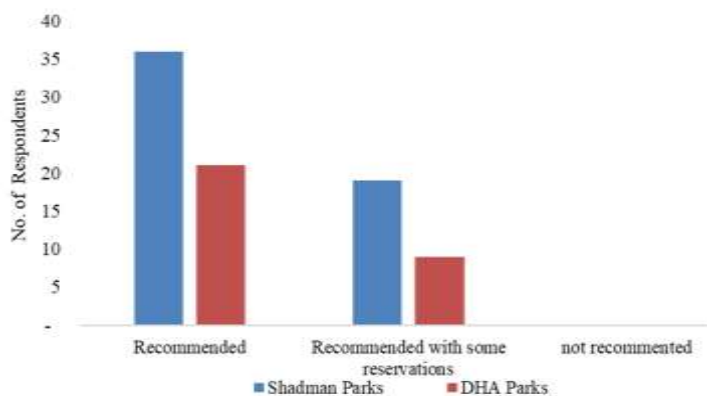


Fig. 10. Comparison of Recommendation to Others.

5 Conclusion

Based on discussion above the research study compared four community parks, two from Defence Housing Authority (DHA) and two from Shadman respectively These parks cater to a varied range of age groups and genders, and the DHA parks mostly attract women, while the Shadman parks welcome visitors of all ages and genders. The parks in Shadman are more accommodating to women and children, and they pay attention to the requirements they have. The findings of the survey emphasize the significance of parks in terms of their role in providing members of the community with spaces that are easily accessible and well-maintained. Both DHA and Shadman parks are designed to cater to the specific tastes and requirements of their respective local communities, and as a result, they each include a distinct set of traits and amenities. In general, respondents from both communities acknowledged a high level of contentment with their time spent in the park. Many respondents had satisfactory opinions regarding the availability of utilities, the cleanliness of the sitting, and the level of safety. When compared to DHA parks, Shadman parks have a higher frequency of daily visitors, which indicates a larger reliance on these spaces for day-to-day recreation and leisure pursuits. On the other hand, adults and people in the middle years of their lives are the demographic that most frequently visits DHA parks. The parks chosen show efforts to provide accessible green areas for citizens, with varied levels of environmental beauty and characteristics. The DHA parks prioritize well-kept flower beds and natural ambiance, whilst the Shadman parks emphasize greenery with gazebos as focal points.

Overall, the parks appear to have been created with functionality and simplicity in mind, catering to the needs of the surrounding neighborhoods.

Different groups have different reasons for visiting parks, thus the explanations for why people go to parks are also different. Visitors to Shadman Parks place a higher value on spending time with family and friends, appreciating nature, and participating in recreational activities, whereas visitors to DHA park are more interested in engaging in active pursuits. Each of the two groups of parks features a selection of standard amenities, including seating areas, walking paths, and playground apparatus. However, Shadman parks include a wider range of amenities, such as open gyms, gazebos, and pavilions, whereas DHA parks put more of an emphasis on well-kept flower beds and a modern design plan. Parking spots and trash cans are provided in all four parks. However, all parks lack bathrooms and drinking water, indicating a constraint in terms of convenience and comfort for park visitors.

The Shadman Parks contain walking paths that link to paved walkways travelling to various sections inside the park. Jogging paths range in length from 600 to 1000 meters in both Shadman and DHA parks, giving chances for fitness and physical activity. Elderly citizens can rest on benches built along the tracks. The survey results show that both DHA and Shadman parks are usually well-liked by the people of the neighborhood. The parks appeal to various populations and provide a variety of attractions, resulting in a wide range of preferences and experiences. While DHA parks generally attract female visitors and emphasize physical activities, Shadman parks appeal to women, children, and men of all ages by offering relaxation, green spaces, and recreational options. Overall contentment, cleanliness, seating amenities, safety, and security were all rated positively in both communities, contributing to the parks' satisfactory impression. Most people who responded to the survey in both areas said that they would suggest the parks to their friends and family members. This suggests that people have a favorable impression of the park facilities and are satisfied with the park.

This research would contribute towards understanding user preferences of the target audience. By taking these findings into consideration, urban planners and park administrators in Lahore would be able to further improve the overall experience of the park and better meet the varied needs of park visitors. These factors would provide a deeper understanding of enhancing features contributing to healthier neighborhoods, specifically designed on the principles of mindfulness of the users.

References

1. Midden, K. S., & Barnicle, T. (2004). Evaluating the effects of a horticulture program on the psychological well-being of older persons in a long-term care facility. *Acta Horticulturae*, (639), 167–170. <https://doi.org/10.17660/actahortic.2004.639.20>.
2. Grahn, P. (1994). Green structures - The importance for Health of nature ar. *European Regional Planning*, 56, 89–112.
3. Iamtrakul, P., Tenknomo, K., & Hokao, K. (2005). WALKING AND CYCLING BEHAVIOR WITHIN THE SERVICE AREA OF PUBLIC PARKS. *Journal of the Eastern Asia Society for Transportation Studies*, 6, 225–240. <https://doi.org/https://doi.org/10.11175/easts.6.225>.
4. Hussain, G., Nadeem, M., Younis, A., Riaz, A., Khan, M. A., & Naveed, S. (2010). IMPACT OF PUBLIC PARKS ON HUMAN LIFE: A CASE STUDY, 47(3), 225–230.
5. Garau, C., & Pavan, V. (2018). Evaluating urban quality: Indicators and assessment tools for smart sustainable cities. *Sustainability*, 10(3), 575. <https://doi.org/10.3390/su10030575>.
6. Zuniga-Teran, A. A., Staddon, C., de Vito, L., Gerlak, A. K., Ward, S., Schoeman, Y., Hart, A., & Booth, G. (2019). Challenges of mainstreaming green infrastructure in Built Environment Professions. *Journal of Environmental Planning and Management*, 63(4), 710–732. <https://doi.org/10.1080/09640568.2019.1605890>.
7. Bedimo-Rung, A. L., Mowen, A. J., & Cohen, D. A. (2005). The significance of parks to physical activity and Public Health. *American Journal of Preventive Medicine*, 28(2), 159–168. <https://doi.org/10.1016/j.amepre.2004.10.024>.
8. Rung, A. L., Broyles, S. T., Mowen, A. J., Gustat, J., & Sothorn, M. S. (2010). Escaping to and being active in neighbourhood parks: Park use in a post-disaster setting. *Disasters*, 35(2), 383–403. <https://doi.org/10.1111/j.1467-7717.2010.01217.x>.
9. Samuelsson, K., Barthel, S., Colding, J., Macassa, G., & Giusti, M. (2020). Urban Nature as a Source of Resilience during Social Distancing amidst the Coronavirus Pandemic. <https://doi.org/10.31219/osf.io/3wx5a>.
10. Kyle, G. T., Mowen, A. J., & Tarrant, M. (2004). Linking place preferences with place meaning: An examination of the relationship between place motivation and place attachment. *Journal of Environmental Psychology*, 24(4), 439–454. <https://doi.org/10.1016/j.jenvp.2004.11.001>.
11. Monty, K. M. I. (2022). Architecture and Modern Information Technologies, 04(61), 292–305. <https://doi.org/10.24412/1998-4839-2022-4-292-305>.
12. Maller, C., Townsend, M., Pryor, A., Brown, P., & St Leger, L. (2005). Healthy nature healthy people: 'contact with nature' as an upstream health promotion intervention for populations. *Health Promotion International*, 21(1), 45–54. <https://doi.org/10.1093/heapro/dai032>.
13. Gkentsidis, A., Chatzidimitriou, A., & Tellios, A. (2021). *Modern Environmental Science and Engineering*, 7(6), 554–561. [https://doi.org/10.15341/mese\(2333-2581\)/06.07.2021/004](https://doi.org/10.15341/mese(2333-2581)/06.07.2021/004).
14. Nordh, H., Alalouch, C., & Hartig, T. (2011). Assessing restorative components of small urban parks using conjoint methodology. *Urban Forestry & Urban Greening*, 10(2), 95–103. <https://doi.org/10.1016/j.ufug.2010.12.003>.
15. Bjerke, T., Østdahl, T., Thrane, C., & Strumse, E. (2006). Vegetation density of urban parks and perceived appropriateness for recreation. *Urban Forestry & Urban Greening*, 5(1), 35–44.

- <https://doi.org/10.1016/j.ufug.2006.01.006>.
16. Wong, K.-K., & Domroes, M. (2005). The visual quality of urban park scenes of Kowloon Park, Hong Kong: Likeability, affective appraisal, and cross-cultural perspectives. *Environment and Planning B: Planning and Design*, 32(4), 617–632. <https://doi.org/10.1068/b31028>.
 17. Jim, C. Y., & Chen, W. Y. (2006). Recreation–amenity use and contingent valuation of urban greenspaces in Guangzhou, China. *Landscape and Urban Planning*, 75(1–2), 81–96. <https://doi.org/10.1016/j.landurbplan.2004.08.008>.
 18. van Vliet, E., Dane, G., Weijts-Perrée, M., van Leeuwen, E., van Dinter, M., van den Berg, P., Borgers, A., & Chamilothori, K. (2020). The influence of urban park attributes on user preferences: Evaluation of Virtual Parks in an online stated-CHOICE experiment. *International Journal of Environmental Research and Public Health*, 18(1), 212–232. <https://doi.org/10.3390/ijerph18010212>.
 19. Bullock, C. H. (2008). Valuing urban green space: Hypothetical alternatives and the status quo. *Journal of Environmental Planning and Management*, 51(1), 15–35. <https://doi.org/10.1080/09640560701712242>.
 20. Sanesi, G., & Chiarello, F. (2006). Residents and urban green spaces: The case of Bari. *Urban Forestry & Urban Greening*, 4(3–4), 125–134. <https://doi.org/10.1016/j.ufug.2005.12.001>.
 21. Bertram, C., & Rehdanz, K. (2015). The role of urban green space for human well-being. *Ecological Economics*, 120, 139–152. <https://doi.org/10.1016/j.ecolecon.2015.10.013>.
 22. Gobster, P. H. (2002). Managing urban parks for a racially and ethnically diverse clientele. *Leisure Sciences*, 24(2), 143–159. <https://doi.org/10.1080/01490400252900121>.
 23. Özgüner, H. (2011). Cultural differences in attitudes towards urban parks and Green Spaces. *Landscape Research*, 36(5), 599–620. <https://doi.org/10.1080/01426397.2011.560474>.
 24. Gibson, H., & Canfield, J. (2016). Pocket Parks as community building blocks: A focus on Stapleton, CO. *Community Development*, 47(5), 732–745. <https://doi.org/10.1080/15575330.2016.1220965>.
 25. Cybriwsky, R. (1999). Changing Patterns of Urban Public Space. *Cities*, 16(4), 223–231. [https://doi.org/10.1016/s0264-2751\(99\)00021-9](https://doi.org/10.1016/s0264-2751(99)00021-9).
 26. Greening, G., & Pomeroy, G. M. (2019). Impact of parks, recreation, and other open space areas on property values and quality of life: A case study of south middleton township. *Multidimensional Approach to Quality of Life Issues*, 253–266. https://doi.org/10.1007/978-981-13-6958-2_17.
 27. Nichols, D., & Freestone, R. (2012). The 5th Healthy Cities: Working Together to Achieve Live able Cities. In *The 5th Healthy Cities: Working Together to Achieve Live able Cities*. Reinvigorating 20th century residential pocket parks for the 21st century. (pp. 108–124). Nerang ; AST Management Pty Ltd.
 28. Sharma, J. P. (2014, September). Spatialising leisure: Colonial Punjab’s public parks as a paradigm of modernity. *Tekton*. <https://tekton.mes.ac.in/issues/volume-1-issue-1/contents/dr-jyoti-pandey-sharma/>.
 29. Zhang, L., Liu, S., & Liu, S. (2021). Mechanisms underlying the effects of landscape features of Urban Community parks on health-related feelings of users. *International Journal of Environmental Research and Public Health*, 18(15), 7888. <https://doi.org/10.3390/ijerph18157888>.
 30. Pretty, J., Peacock, J., Sellens, M., & Griffin, M. (2005). The mental and physical health outcomes of Green Exercise. *International Journal of Environmental Health Research*, 15(5), 319–337. <https://doi.org/10.1080/09603120500155963>.
 31. Bruce A. *Pocket Park design: Solutions for the regeneration of public space in high-density cities*, Mulgrave, Victoria: Images Publishing; 2017, p. 7–11.
 32. Iliopoulo S, Litsardaki ML. Pocket parks as spaces of “Re-public”: the experience of the Alexandro Svolou initiative. *The Urban Transcripts Journal* 2020;3. doi: <https://journal.urbantranscripts.org/>.
 33. on Environmental Design ‘Pocket Parks’--role and benefits of their creation and contribution to the environmental upgrading of big cities, Athens: 2020, p. 311–7.
 34. Bjork J, Albin M, Grahn P, Jacobsson H, Ardo J, Wadbro J, et al. Recreational values of the natural environment in relation to neighborhood satisfaction, physical activity, obesity and wellbeing. *Journal of Epidemiology & Community Health* 2008;62. doi:10.1136/jech.2007.062414.
 35. Kaczynski AT, Potwarka LR, Saelens BE. Association of Park Size, distance, and features with physical activity in Neighborhood Parks. *American Journal of Public Health* 2008; 98:1451–6. doi:10.2105/ajph.2007.129064.
 36. Kaplan S. The restorative benefits of nature: Toward an integrative framework. *Journal of Environmental Psychology* 1995; 15:169–82. doi:10.1016/0272-4944(95)90001-2.
 37. Kaplan R, Kaplan S. *The experience of nature a psychological perspective*. Cambridge, Massachusetts: Cambridge University Press; 1989.
 38. Nordh H, Østby K. Pocket Parks for people – a study of park design and use. *Urban Forestry & Urban Greening* 2013; 12:12–7. doi: 10.1016/j.ufug.2012.11.003.
 39. Kuo FE, Sullivan WC, Coley RL, Brunson L. Fertile Ground for community: Inner-city neighborhood common spaces. *American Journal of Community Psychology* 1998; 26:823–51. doi:10.1023/a:1022294028903.
 40. Floyd MF, Spengler JO, Maddock JE, Gobster PH, Suau LJ. Park-based physical activity in diverse communities of two U.S. cities. *American Journal of Preventive Medicine* 2008; 34:299–305. doi: 10.1016/j.amepre.2008.01.009.
 41. Juul V, Nordbø EC. Examining activity-friendly neighborhoods in the Norwegian context: Green space and walkability in relation to physical activity and the moderating role of perceived safety. *BMC Public Health* 2023;23. doi:10.1186/s12889-023-15170-4.
 42. Kang Y, Kim J, Park J, Lee J. Assessment of perceived and physical walkability using street view images and Deep Learning Technology. *ISPRS International Journal of Geo-Information* 2023; 12:186. doi:10.3390/ijgi12050186.
 43. Omar D, Omar KA, Othman S, Mohd Yusoff Z. Walkability design for Urban Public Housing Park. *Environment-*

- Behavior Proceedings Journal 2016; 1:311. doi:10.21834/e-bpj. v1i3.375.
44. Stevens RD. Walkability around neighborhood parks: An ... - university of Oregon. <https://ScholarsbankUoregonEdu/Xmlui/Handle/1794/1288> 2005. https://scholarsbank.uoregon.edu/xmlui/bitstream/handle/1794/1288/Stevens_final_project_2005.pdf?sequence=4 (accessed July 29, 2023).
 45. Basu S, Nagendra H. Perceptions of park visitors on access to urban parks and benefits of green spaces. *Urban Forestry & Urban Greening* 2021; 57:126959. doi: 10.1016/j.ufug.2020.126959.
 46. Abdul Malek N, Nashar A. Use pattern and activities: The evaluation of Malaysian Green Open Space Design. *PLANNING MALAYSIA JOURNAL* 2018;16. doi:10.21837/pmjournal. v16.i7.505.
 47. Zhang S, Zhou W. Recreational visits to urban parks and Factors Affecting Park visits: Evidence from geotagged social media data. *Landscape and Urban Planning* 2018; 180:27–35. doi: 10.1016/j.landurbplan.2018.08.004.
 48. Yusof N, Abulzawaid A, El-Khateeb SM. Park use patterns among children– dual roles of Neighborhood Parks. *IOP Conference Series: Earth and Environmental Science* 2020; 452:012102–11. doi:10.1088/1755-1315/452/1/012102.
 49. Reyes M, Páez A, Morency C. Walking accessibility to urban parks by children: A case study of Montreal. *Landscape and Urban Planning* 2014; 125:38–47. doi: 10.1016/j.landurbplan.2014.02.002.
 50. Abdul Malek N, Nashar A. Use pattern and activities: The evaluation of Malaysian Green Open Space Design. *PLANNING MALAYSIA JOURNAL* 2018;16. doi:10.21837/journal. v16.i7.505.
 51. Veitch J, Rodwell L, Abbott G, Carver A, Flowers E, Crawford D. Are Park availability and satisfaction with neighborhood parks associated with physical activity and time spent outdoors? *BMC Public Health* 2021;21. doi:10.1186/s12889-021-10339-1.
 52. Edwards N, Hooper P, Knuiman M, Foster S, Giles-Corti B. Associations between Park features and adolescent park use for physical activity. *International Journal of Behavioral Nutrition and Physical Activity* 2015; 12:1–10. doi:10.1186/s12966-015-0178-4.
 53. Ajayi AO, Amole OO. Open spaces and wellbeing: The impact of outdoor environments in promoting health. *Cities & Health* 2022; 6:1106–21. doi:10.1080/23748834.2021.2011537.
 54. Peschardt KK, Stigsdotter UK, Schipperijn J. Identifying features of pocket parks that may be related to health promoting use. *Landscape Research* 2014; 41:79–94. doi:10.1080/01426397.2014.894006.
 55. Marzukhi MA, Afiq MA, Ahmad Zaki S, Ling OH. An observational study of defensible space in the Neighborhood Park. *IOP Conference Series: Earth and Environmental Science* 2018; 117:012016. doi:10.1088/1755-1315/117/1/012016.
 56. Marzukhi MA, Afiq MA, Ling Hoon Leh O, Abdullah YA. The defensible space concept in Neighborhood Park case study: Taman task Puchong Perdana, Selangor, Malaysia. *PLANNING MALAYSIA JOURNAL* 2018;16. doi:10.21837/journal. v16.i7.517.
 57. LeFlore AJ. Increasing urban open space through pocket parks. PDF | Increasing Urban Open Space Through Pocket Parks | ID: M613n930d | Tufts Digital Library 2012. <https://dl.tufts.edu/concern/pdfs/m613n930d> (accessed July 31, 2023).
 58. Abkar M, Kamal M.S M, Mariapan M, Maulan S, Sheybani M. The role of urban green spaces in mood change. *Australian Journal of Basic and Applied Sciences*, 2010;4:5352–61.
 59. Ishak SA, Hussein H, Jamaludin AA. Neighborhood Parks as a potential stress reliever: Review on literature. *Open House International* 2018; 43:52–64. doi:10.1108/ohi-04-2018-b0007.
 60. Zhai Y, Baran PK. Urban Park pathway design characteristics and senior walking behavior. *Urban Forestry & Urban Greening* 2017; 21:60–73. doi: 10.1016/j.ufug.2016.10.012.
 61. Xu Y, Wheeler SA, Zuo A. The effectiveness of interventions to increase participation and physical activities in parks: A systematic review of the literature. *International Journal of Environmental Research and Public Health* 2022; 19:12590–602. doi:10.3390/ijerph191912590.
 62. Woolley H, Woolley H. *Neighborhood Urban Open Spaces*. Urban open spaces. , New York, USA: Taylor & Francis; 2003, p. 90–4.
 63. Government of Pakistan. District wise results / tables (census - 2017): Pakistan Bureau of Statistics. District Wise Results / Tables (Census - 2017) | Pakistan Bureau of Statistics 2021. <https://www.pbs.gov.pk/census-2017-district-wise> (accessed June 26, 2023).
 64. Parks and Horticulture Authority. To make Lahore. (PHA) Lahore 2018. <http://www.pha.gop.pk/> (accessed June 26, 2023).
 65. Boone CG, Buckley GL, Grove JM, Sister C. Parks and people: An environmental justice inquiry in Baltimore, Maryland. *Annals of the Association of American Geographers* 2009; 99:767–87. doi:10.1080/00045600903102949.
 66. Lindsey G, Maraj M, Kuan S. Access, equity, and Urban Greenways: An exploratory investigation. *The Professional Geographer* 2001; 53:332–46. doi:10.1111/0033-0124.00288.
 67. Wolch J, Wilson JP, Fehrenbach J. Parks and Park Funding in Los Angeles: An equity-mapping analysis. *Urban Geography* 2005; 26:4–35. doi:10.2747/0272-3638.26.1.4