Jurnal Kajian Ruang Vol 6 No 1
Maret 2026
http://jurnal.unissula.ac.id/index.php/kr

# Park Facilities Quality and Gender Perception Differences

**Gladya Putri Permatasari[1], Aceng Gima Sugiama[1] ***

[1]Commerce Department, Politeknik Negeri Bandung
*Corresponding author, e-mail: gima.sugiama@polban.ac.id

***ABSTRACT***

*The physical facilities of apartment parks are crucial, yet studies on this subject are scarce. This study aims to evaluate apartment park facilities based on neighborhood quality (accessibility, attractiveness, functionality, safety) and investigate differences in gender perception. Using a quantitative approach, the data is analyzed using descriptive statistics and the Mann-Whitney U test. Using data from 133 respondents, the study results found, descriptively, accessibility is in good condition but the pedestrian path is slightly damaged and has not been equipped with information boards; attractiveness is still lacking to improve aesthetics and ensure the cleanliness of the park; functionality for sports facilities is not yet available, and seating and children's play areas are uncomfortable; and safety has been met, but lighting at night is inadequate. The results also showed, generally, no significant difference between the assessments of the park's physical facilities by the two genders. However, specifically, there were significant differences in perceptions of proximity, vegetation availability, and trash receptacle availability. This study is expected to serve as a reference in creating apartment parks by integrating quality neighborhood parks and designing park facilities that function inclusively for both males and females.*

***Keywords: physical asset facility, low-cost apartment, neighborhood park quality.***

## 1. INTRODUCTION

Studies on low-cost apartments are still scarce; the complexity of the problem continues to occur, especially in metropolitan cities. Various factors cause the problem, including the increasing number of urban residents that is difficult to stem, increasing urbanization, minimal sources of funds for housing, shrinking land for housing, and others (Okafor, 2016). The development and construction of multi-storey houses, such as apartments, is one of the practical solutions. Rapid urbanization has encouraged increased opportunities to live in multi-storey housing, such as apartments or similar housing, reducing the availability of green space in urban areas (Feng et al., 2022). However, green open spaces have been proven to provide environmental and social benefits to city communities (Kabisch et al., 2015). In Indonesia, developing low-cost apartments is an effective solution to land scarcity because it can save land use, rejuvenate slum areas, and provide affordable housing for low-income communities (Mawardi et al., 2020). However, many of these residences face challenges in their use, including limited green

space and access barriers (Lahoti et al., 2023). As a type of urban green open space, neighborhood parks should play an essential role as recreational and social spaces for their users (Malek et al., 2012). The many challenges that arise, such as limited land, difficult access to the park, and the availability of facilities that do not meet user needs, result in low intensity of park use (Anggrahita et al., 2023; Bakar et al., 2016; D. Cohen & Leuschner, 2018).

Based on various scientific perspectives, public spaces should be multifunctional and easily accessible to all age groups of residents (Kamelnia & Karimani, 2019; Rahajuni et al., 2020). However, in practice, the integration of public space in low-cost apartments is often neglected. Likewise, with Malek et al. (2012) explanation, that poor park quality is often caused by a mismatch between park facilities and usage patterns, preferences, and user needs, which causes the green space not to function optimally. Previous research has examined the criteria for measuring the quality of green open space as a space that meets the needs of its users through the quality neighborhood park criteria approach (Malek et al., 2012). Meanwhile, other research explores the factors that form quality urban green spaces by identifying four subjective criteria for measuring the quality of green open spaces, namely accessibility, attractiveness, functionality, and safety (Fatiah et al., 2021). Previous studies have shown that damaged pedestrian paths, lack of aesthetics and cleanliness, poor facility conditions, and limited lighting are obstacles to optimal use of urban green open spaces (Bakar et al., 2016; Biernacka & Kronenberg, 2018; Maas et al., 2006). By integrating these various perspectives, this study attempts to bridge existing phenomena and optimize park assets through measuring quality criteria according to user needs. According to the results of a recent literature search, studies on green open spaces generally focus on accessibility, park proximity, and equity, their impact on health, green space quality, park design for specific groups, and residential park biodiversity (Dong et al., 2023; Narh et al., 2020; Nguyen et al., 2021). There is a research gap; no research has yet focused on park physical facilities based on neighborhood apartment park quality.

Most urban spatial planning does not yet meet the provision of green open space. Cimahi City has three low-cost apartment locations: Cigugur Tengah, Leuwigajah, and Cibeureum, which have parks or green open spaces as part of environmental facilities. The facility assets of the three parks are indicated as not yet meeting the criteria for adequate environmental park quality. Several previous studies have also highlighted that

green open spaces in low-cost apartments in Cimahi City are not optimal in accommodating the needs of residents for adequate facilities and their contribution to improving environmental quality (Histanto & Kusliansjah, 2018; Muhsin et al., 2016). Therefore, a study is needed to evaluate residents' assessments of the quality of park facility assets to encourage improvements in their quality in urban housing environments through a quality neighborhood park criteria analysis framework. The findings of this study are expected to provide theoretical and empirical contributions by understanding the factors that can produce quality parks that are inclusive and multifunctional for all residents.

## 2. LITERATURE REVIEW

### 2.1 Neighborhood Park Quality

A neighborhood park is a green space in an urban area that uses various recreational facilities and interactions for city residents as users (Fatiah et al., 2021). Wei and Yang (2023) define a neighborhood park as a place that serves active and passive recreation through the provision of park facilities for a variety of users. Environmental parks play an important role in housing, not only as green open spaces, but also as public open spaces. According to Elvareta and Dwisusanto (2023), Government policies can encourage people to be active in their residential units or their immediate environment by using open spaces on a city settlement scale (neighborhood) compared to a large scale in the city center. Environmental parks function not only as green areas but also as public open spaces that people use for activities or social interaction (Hariz, 2013). Agung et al. (2019) stated that the quality of parks in urban areas is vital in improving the quality of urban life.

Neighborhood park quality has been studied in previous studies to evaluate quality according to park criteria. As reviewed by Malek et al. (2012) in their research on The Making of a Quality Neighborhood Park, they defined a quality neighborhood park as a public green open space that meets users' needs, usage patterns, and preferences. Given the limited resources and choices available to low-income communities, users' social and physical environment must support a healthy quality of life by providing adequate quality parks (Bakar et al., 2016). Sasongko et al. (2017) explained that a person's social activities to gather or interact in a park can be influenced by the physical space of the park, such as the size of the area, pedestrian paths, seating layout, trees, and others. Thus, a park can

be of good quality if designed equally for all its users, including supporting the intensity and comfort of individuals interacting in the park. Based on previous studies that explored the factors that form quality urban green spaces by identifying four subjective quality measurement criteria in the form of accessibility, attractiveness, functionality, and safety (Fatiah et al., 2021).

Accessibility: The first dimension as a criterion for a quality neighborhood park is accessibility. Accessibility is defined as the ease or comfort of users in reaching the facilities available to support the usability and functionality of the park users (Bakar et al., 2016; Fatiah et al., 2021). Accessibility is one of the determining factors for the success of a park in providing convenience for its users to visit (Suanmali, 2014). The ease or comfort of accessibility and affordability of facilities can enable users to carry out activities in the park more efficiently (Sugiama et al., 2024). Mullenbach et al. (2021) found that accessible parks within walking distance can increase the frequency of visits or trigger regular use of park facilities. In addition, signage facilities in the park will make it easier for users to access the park, find out the location of other park elements or facilities, and obey visiting regulations (Rosli et al., 2020). Universal design explains that the composition and design of an environment can be easily accessed, understood, and used as much as possible.

Attractiveness: The second dimension as a criterion for neighborhood park quality is functionality. Biernacka & Kronenberg (2018) emphasized that attractiveness is when someone voluntarily wants to use or spend time in a place that meets their needs and preferences for that place. The presence of vegetation is one of the park elements that can influence the quality of the park. Hussein et al.'s (2021) study proved that park users prefer the presence of biodiversity and natural features such as trees and brightly colored flowers. A clean and well-maintained park environment is an attribute that users prefer and can be reflected through good park maintenance (Fatiah et al., 2021). Another study by Lubis (2020) found that trash bins are one of the park facilities that users most demand for waste management to create park cleanliness.

Functionality: The third dimension as a criterion for quality neighborhood park is functionality. Functionality is how users can feel and use green space with various available facilities, thus forming a bond between users and the space according to its function (Fatiah et al., 2021). Individual perceptions of the quality of green open spaces are critical when users consider engaging in an activity in a green space that facilitates

that activity (Fongar et al., 2019). Children need a space to accommodate all their activities according to their needs and natural behavior (Rahajuni et al., 2020). However, most low-cost apartments in Indonesia are still designed for the needs of adult residents and do not provide safe and comfortable facilities for children and teenagers (Febriandia & Hayati, 2022). In addition, seating is an essential feature in a park as a resting place that can protect park users (Silitonga & Nurfazilla, 2021). The availability of sports facilities in a park can also encourage physical activity among its users (Fatiah et al., 2021). Thus, an attractive park environment can be interpreted as meaning that users can enjoy the park from a good design (aesthetic), which is related to the aesthetics of the placement of facilities and their completeness (Rosli et al., 2020).

Safety: The fourth dimension as a criterion for quality neighborhood park is safety. Safety can be assessed based on an overall assessment of how safe and secure the park is for users to carry out activities that will provide a sense of security (Bahriny & Bell, 2020). Feelings of safety can be measured by how safe people perceive a place to be or the feelings of safety it evokes, where the place can be influenced by factors such as lighting and the views of other users (Bakar et al., 2016). Lighting is a supporting facility for security and safety that is needed at night so that park visitors feel safe (Rosli et al., 2020). The strategic presence of lighting will provide visibility and protection to increase the use of the park at night. Lack of available lighting can turn an environment into a place to avoid when it gets dark (Rahm et al., 2021). The study by Mauliana et al. (2024) regarding park security indicates that installing CCTV at strategic points in the park can increase the perception of park visitors' security while reducing all possible dangers. A park must have a boundary separating it from the surrounding space, marked by a fence that is not too high and closed, or border plants around the park that function as a buffer between the park and the road (Fatiah et al., 2021; Framesthi & Hindersah, 2010).

**2.2 Differences in Perception between Genders**

A study conducted by Alnaim et al. (2025) showed that gender differences are one factor influencing the use of neighborhood parks, thus forming social preferences to determine the intensity and comfort of individuals' interactions in parks. The gender gap in park facilities creates injustice for men and women, so that their provision needs to be responsive to gender needs in parks as public spaces used for social activities. Women frequently expressed concerns about lighting conditions and perceived safety in green parks (Olta Braçe et al., 2021). Furthermore, Masullo et al. (2022) found that the use of

facilities varied and was uneven according to age and gender, as evidenced by men and boys having significantly higher use than women and girls. Talarowski et al. (2019) confirmed that men use open green spaces for physical activities such as jogging or morning exercise, with a higher frequency of visits than women. In line with the research findings by Sugiama et al. (2024), men are more likely to use physically intensive park facilities (such as exercise equipment) than women. These findings suggest that the quality of parks must be designed to support a more efficient and equitable use of public green open spaces inclusively for all park users.

## 3. METHOD

This study uses a descriptive method with a quantitative approach. The quantitative approach is obtained through the results of a questionnaire distributed to residents of low-cost apartments in Cimahi City. The object of study was low-cost apartment parks in Cimahi City. This study's quality neighborhood park variable is measured using dimensions and indicators adapted from previous studies (Bakar et al., 2016; Fatiah et al., 2021; Malek et al., 2012).

The population in this study was residents of low-cost apartments in Cimahi City (Leuwigajah, Cibeureum, and Cigugur Tengah) who had visited or used the parks of the three low-cost apartments. The primary data of this study were obtained through questionnaires distributed to residents. The sample used met the Slovin sample size requirements of 96 respondents, and the number of respondents who participated exceeded the minimum sample size. Among the 140 questionnaires distributed, 7 were unsuitable, so only 133 respondents (*S*133) were suitable for further analysis.

The distributed questionnaire consisted of 8 questions on the demographic characteristics of respondents and 19 questions on the quality of facility assets in low-cost apartment parks in Cimahi City. The collected data were subjected to statistical analysis, including validity and reliability tests. Measurement of answers to questions on the quality of park facility assets was determined using a Likert Scale with a rating range of 1 "strongly disagree" to 5 "strongly agree". Before being distributed, the questionnaire was tested on several residents to determine how well respondents understood the statements. All statements were measured for validity and reliability, and only valid and reliable questions were further analyzed using SPSS version 26.

In addition, in evaluating gender-based differences in the perceptions of male and female residents of the asset quality of low-cost apartment park facilities in Cimahi City,

the Mann-Whitney U Test is used to compare two independent sample medians from the same population on an ordinal, interval, or ratio scale. The statistical decision criteria are based on the p-value (Asymp. Sig.), where the results of the p-value > 0.05 indicate no significant difference (Ho is accepted), and the p-value < 0.05 indicates a significant difference (Ho is rejected).

## 4. RESULT AND DISCUSSION

Data from 133 respondents (*n*=133) who participated in this study were analyzed to determine residents' perceptions of the asset quality of low-cost apartment park facilities in Cimahi City. The collected data, presented in Table 1, reveal the demographic characteristics of the respondents.

Table 1 Respondent Demographic Characteristics

| Variable | Categories | *n* | % |
|---|---|---|---|
| Gender | Male | 71 | 53.4% |
| | Female | 62 | 46.6% |
| Age | 15 – 25 Yrs. | 18 | 13.5% |
| | 26 – 45 Yrs. | 77 | 57.9% |
| | 46 – 60 Yrs. | 33 | 24.8% |
| | > 60 Yrs. | 5 | 3.8% |
| Residence (low-cost apartment) | Leuwigajah | 41 | 30.8% |
| | Cibeureum | 54 | 40% |
| | Cigugur Tengah | 38 | 28.6% |
| Nature of the visit | Scheduled/routine | 40 | 30.1% |
| | Rarely/sometimes | 41 | 30.8% |
| | Unscheduled | 52 | 39.1% |
| Visiting hours | Morning | 45 | 33.8% |
| | Midday | 22 | 16.5% |
| | Afternoon | 62 | 46.6% |
| | Evening | 4 | 3% |
| Activities | Relax/sit back | 83 | 62.4% |
| | Play | 16 | 12% |
| | Exercising/Sport | 30 | 22.6% |
| | Other activities | 4 | 3% |
| Most frequently used park facilities | Playground | 17 | 12.8% |
| | Seat facilities | 84 | 63.2% |
| | Sposrt facilities | 31 | 23.3% |
| | Rubbish bin | 1 | 0.8% |
| The least used park facility | Playground | 57 | 42.9% |
| | Seat facilities | 3 | 2.3% |
| | Sposrt facilities | 24 | 18% |
| | Rubbish bin | 49 | 36.8% |

Source: Research Data, 2025

Based on Table 1, 133 respondents (*n*=133) are residents of low-cost apartments in Cimahi City who participated in the questionnaire survey. A total of 71 female respondents (53.4%) and 62 male respondents (46.6%) showed a slight difference in numbers, with a difference of 9 more female respondents (6.7%) than male respondents.

These results indicate that the respondents in this study were female residents. Based on age, they are between 26 and 45 years old (57.9%), with 24.8% between 46 and 60 years old, while 13.5% are between 15 and 25 years old. This could indicate that those living in these apartments are predominantly young, with a small number of elderly residents, who live in the Cibeureum Low-Cost Apartment.

According to the data, residents of these low-cost apartments visit the park only occasionally to fill their afternoon free time, at 46.6%. The physical facility they use most frequently, at 62.4%, is seating for relaxing. Lastly, the facility data that is the intended use is playground as much as 42%, while the rest is used for various physical park facilities, including sports facilities.

### 4.1 Descriptive Statistical Analysis

The data collected from the questionnaire results were tabulated and tested for validity and reliability. *Firstly*, the Pearson validity test assesses the respondents' understanding of the researcher's meaning. Because the validity test is used for 133 respondents with a significance level of 5% and degrees of freedom ($df$)=$n$-2, which means 133-2=131, the $r$-table value=0.170. Based on the validity column in Table 2, each statement item is declared valid because the $r$-calculated value > $r$-table (0.170). *Secondly*, a reliability test using Cronbach's Alpha (CA) calculation was conducted to assess the consistency of answers to each statement item received from respondents. Based on Table 2, the resulting CA value=0.879>0.6 (standard CA value) is reliable.

In the next stage, descriptive statistical analysis was carried out, using scoring techniques (Sugiama, 2014), namely describing the number of frequencies and percentages in describing the level of perception or assessment of residents towards the quality of facility assets in low-cost apartment neighborhood parks in Cimahi City based on the quality of neighborhood parks with dimensions of accessibility, attractiveness, functionality, and safety. The results of the analysis are presented in Table 2.

The determination of scoring weights uses interval distance calculations, which are calculated by comparing the highest and lowest values on the assessment scale (Sugiama, 2014; Sugiyono, 2020). The statistical analysis results in Table 2 reveal that, generally, the quality of the low-cost apartment park facilities in Cimahi City produces an "agree" score for the four dimensions of the neighborhood park quality criteria, as explained below.

*First*, the accessibility dimension has a total score of 1917 (72%) which shows that the low-cost apartment parks in Cimahi City as a whole have fulfilled the ease and comfort of accessibility for residents as users in reaching the park, in line with the study of Fatiah et al. (2021) that accessibility via pedestrian paths must make it easier to reach the park and its condition does not endanger its users. However, it was found that the pedestrian path had an uneven surface, the paving blocks were loose, and there was no signage in the park area. A park should be equipped with facilities that can make it easier for users to access the park, identify the location of the facilities, and understand the provisions in the park (Rosli et al., 2020).

Table 2 Descriptive Statistical Analysis and Mann-Whitney U test

| Items | Validity | CA | Scoring (Freq.) | Asymp. Sig. |
|---|---|---|---|---|
| Accessibility (AC) | | | 1917 | |
| AC1: I can easily reach the park. | 0.762 | .838 | 481 | 0.570 |
| AC2: In think, the walking paths in the park are safe for all ages to walk on. | 0.565 | .856 | 543 | 0.698 |
| AC3: The distance between the park and my residence is close. | 0.672 | .841 | 485 | 0.023 |
| AC4: This park is equipped with warning signs or signs that are clearly visible. | 0.611 | .855 | 408 | 0.291 |
| Attractiveness (AT) | | | 2560 | |
| AT1: The trees and plants in the park are very attractive. | 0.830 | .841 | 484 | 0.028 |
| AT2: In my opinion, trees and plants in the park enhance the visual aesthetics (color and type) of the park. | 0.827 | .842 | 511 | 0.018 |
| AT3: In my opinion, the park is clean from rubbish. | 0.698 | .849 | 506 | 0.012 |
| AT4: I can easily find a trash can in the park. | 0.637 | .850 | 548 | 0.012 |
| AT5: The placement of park facilities (playgrounds, seating, etc.) made me interested in visiting this park. | 0.522 | .851 | 511 | 0.479 |
| Functionality (FU) | | | 2497 | |
| FU1: I feel comfortable using the seats in the park. | 0.715 | .837 | 606 | 0.252 |
| FU2: Seating supports my social interactions with others in the park. | 0.515 | .852 | 550 | 0.669 |
| FU3: In my opinion, the park has a children's play area that is comfortable for children to use. | 0.744 | .851 | 383 | 0.324 |
| FU4: Children's playgrounds can support children's recreation and interaction in the park. | 0.447 | .854 | 517 | 0.718 |
| FU5: The park can support my sports activities. | 0.667 | .859 | 441 | 0.599 |
| Safety (SA) | | | 2670 | |
| SA1: The lighting in the park makes me feel safe at night. | 0.601 | .845 | 361 | 0.276 |
| SA2: Lighting from park lamps does not interfere with my view. | 0.510 | .853 | 536 | 0.767 |
| SA3: I feel safe because the park is always guarded by guards or CCTV. | 0.592 | .859 | 590 | 0.580 |
| SA4: The park fence keeps me safe in the park. | 0.502 | .859 | 585 | 0.351 |
| SA5: I feel safe in the park because the area around the park is clearly visible. | 0.537 | .859 | 598 | 0.784 |
| Total | | .879 | | 0.082 |

*Note: CA = Cronbach Alpha; Asymp. Sig. = p-value>0.05*
Source: Research Data, 2025

*Second*, the attractiveness dimension has a total score of 2560 (76%) which already meets the availability of facilities that attract residents to visit low-cost apartment parks, in line with several previous studies that the attractiveness of parks can include the availability of park space that supports visitors to spend various activities with attractive facilities, diversity of vegetation, and a clean environment (Biernacka & Kronenberg, 2018; Fatiah et al., 2021; Hussein et al., 2021). However, it was found that the vegetation was less diverse in terms of type and color (shrubs, grass, shade trees, and ornamental plants with bright flowers), resulting in a lack of interest from residents in the park, and waste management in the park was not optimal. The study by Du et al. (2016) found that a combination of brightly colored plants and a mix of green trees can improve the quality of a park landscape. Furthermore, trash cans are among the park facilities most sought after by users as waste management tools to maintain a clean park (Lubis, 2020). Therefore, vegetation and trash bins need more attention to improve the quality of low-cost apartment park facility assets in Cimahi City.

*Third*, the functionality dimension has a total score of 2497 (75%) which does not fully meet the quality criteria that provide a variety of facilities to support the activities of residents in low-cost apartment parks in Cimahi City, where parks should be able to function to support the activities of their users with a variety of facilities that are available properly (Fatiah et al., 2021). The study found that low-cost apartment parks in Cimahi City lack adequate sports facilities, seating, and playgrounds due to their dilapidated condition and lack of user comfort. Seating facilities in green parks are crucial features in a park and can influence visitors' perceptions of comfort (Silitonga & Nurfazilla, 2021). Sports facilities and playgrounds in neighborhood parks can also encourage physical activity, interaction, and recreation for their users (Fatiah et al., 2021; Suteja et al., 2019).

*Fourth*, the safety dimension has a total score of 2670 (80%), indicating that the low-cost apartment park facilities in Cimahi City meet the safety criteria for residents while in the park. However, damaged lighting was found, resulting in minimal lighting in the low-cost apartment park in Cimahi City. Based on the survey, the current alternative solution is to rely solely on spotlights installed in residential buildings, resulting in a decrease in park use at night. This is in line with the study by Rahm et al. (2021), which revealed that the lack of lighting availability can turn parks into places to avoid when it is dark.

Overall, this study's results indicate that the quality of neighborhood park facilities plays a significant role in increasing user engagement and comfort. Therefore, park management and design must be tailored to the needs and preferences of park users. These findings reinforce previous research on neighborhood park quality (Bakar et al., 2016; Fatiah et al., 2021; Malek et al., 2012).

**4.2 Differences in Gender Perception: Mann-Whitney U test**

The Mann-Whitney U test was applied to determine whether there were significant differences in the assessments of male and female residents regarding the quality of low-cost apartment park facility assets in Cimahi City. The Mann-Whitney U test is suitable because it aims to determine whether there are significant differences between the two groups in terms of gender (male and female) of residents and users of the physical facilities of low-cost apartments in Cimahi City. The use of the Mann-Whitney U test is the same as that used in previous studies (Sugiama et al., 2023).

Based on Table 2, five statements show significant differences with the results of Asymp. *Sig*. or *p*-value < 0.05, namely AC3 with *p*-value=0.023; AT1 with *p*-value = 0.028; AT2 with *p*-value=0.018; AT3 with *p*-value = 0.012; and AT4 with *p*-value=0.012. Thus, the findings of this study indicate that male and female residents have different perceptions or assessments regarding the accessibility and attractiveness of low-cost apartment parks in Cimahi City.

The results of this study support previous research, which showed that there are significant differences between the perceptions of accessibility in parks according to men and women. The study's findings support previous research, which found that women use neighborhood parks less frequently than men and show differences in perceived safety and accessibility. This study builds on the National Study of Neighborhood Parks in the United States (Cohen et al., 2021). In addition, this study also supports the results of previous research, which stated that men have a higher perception of ease of access to recreational facilities (including parks), while women are more sensitive to environmental safety and aesthetic factors (Bengoechea et al., 2005).

Despite some differences, both genders generally have the same perception of the asset quality of low-cost apartment park facilities in Cimahi City, because the study results showed Asymp. *Sig*. or *p*-value >0.05, which is 0.082. This finding proves there is no significant difference in the perceptions of male and female residents, so both

genders agree on all the criteria for the asset quality of low-cost apartment park facilities in Cimahi City.

Thus, in general, this research on the quality of low-cost apartment park facilities in Cimahi City confirms the importance of an approach through inter-gender assessment in the planning and management of low-cost apartment park facilities to create quality parks. Although in general, functionality and safety facilities are equally accepted by both genders, differences in perceptions of accessibility and attractiveness facilities indicate that efforts to improve physical access, landscape arrangement with vegetation, and cleanliness management with the provision of trash bins need to consider the specific needs and preferences of both female and male residents, so that low-cost apartment park facilities in Cimahi City can be used inclusively for all residents regardless of gender.

The practical significance of this study's findings can be expressed through two substantive perspectives. *First*, although parks aim to provide inclusive services for both women and men, some facilities are gender-specific oriented. While key facilities, such as sports equipment, are often exclusively designed for men, those requiring high levels of physical activity, such as gym equipment, are often exclusively designed for men. *Second*, it is crucial for neighborhood park managers in residential areas to prioritize gender-inclusive facilities for all genders, including children, adolescents, young adults, and elderly visitors. This can improve the effectiveness and inclusion of services for residents in these apartments.

## 5. CONCLUSION

According to visitors, the quality of affordable apartment park facilities is generally good. However, several facilities were found to be substandard, including the availability of pedestrian paths, the lack of facilities for people with disabilities, a lack of diverse vegetation, and inadequate lighting. Based on the perceptions of both men and women, the availability of inclusive park facilities is a crucial priority, while not neglecting the availability of gender-exclusive park facilities.

This study addresses all criteria for neighborhood park quality, including accessibility, attractiveness, functionality, and safety, as explored in previous research (Bakar et al., 2016; Fatiah et al., 2021; Malek et al., 2012). However, this study only conducted a univariate analysis (single variable) that did not include dependent, moderating, or intervening variables. Therefore, further research is recommended to

conduct a multivariate analysis (multiple variables) that integrates neighborhood park quality with property values, as reviewed by Lorenzo et al. (2007).

## REFERENCES

Agung, P. D., Wisnu, S., & Chairul, M. (2019). Pengaruh Partisipasi Masyarakat Terhadap Kualitas Taman Lingkungan Di Perumahan Kota Blitar. *Planning for Urban Region and Environment*, *8*.

Alnaim, A., Dano, U. L., & Alqahtany, A. M. (2025). Factors Influencing Social Interaction in Recreational Parks in Residential Neighborhoods: A Case Study of the Dammam Metropolitan Area, Saudi Arabia. *Sustainability*, *17*(9), 3810. https://doi.org/10.3390/su17093810

Anggrahita, H., Guswandi, G., & Auni, R. (2023). Space Utilization in Vertical Residential Complex (Rusunawa) in Jakarta, Indonesia. *E3S Web of Conferences*, *448*, 03054. https://doi.org/10.1051/e3sconf/202344803054

Bahriny, F., & Bell, S. (2020). Patterns of urban park use and their relationship to factors of quality: A case study of tehran, Iran. *Sustainability (Switzerland)*, *12*(4). https://doi.org/10.3390/su12041560

Bakar, N. A., Malek, N. A., & Mansor, M. (2016). Access to Parks and Recreational Opportunities in Urban Low-income Neighbourhood. *Procedia - Social and Behavioral Sciences*, *234*. https://doi.org/10.1016/j.sbspro.2016.10.246

Bengoechea, E. G., Spence, J. C., & McGannon, K. R. (2005). Gender differences in perceived environmental correlates of physical activity. *International Journal of Behavioral Nutrition and Physical Activity*, *2*(1), 12. https://doi.org/10.1186/1479-5868-2-12

Biernacka, M., & Kronenberg, J. (2018). Classification of institutional barriers affecting the availability, accessibility and attractiveness of urban green spaces. *Urban Forestry and Urban Greening*, *36*. https://doi.org/10.1016/j.ufug.2018.09.007

Cohen, Deborah A., Williamson, S., & Han, B. (2021). Gender Differences in Physical Activity Associated with Urban Neighborhood Parks: Findings from the National Study of Neighborhood Parks. *Women's Health Issues*, *31*(3), 236–244. https://doi.org/10.1016/j.whi.2020.11.007

Cohen, D., & Leuschner, K. (2018). How Can Neighborhood Parks Be Used to Increase Physical Activity? In *How Can Neighborhood Parks Be Used to Increase Physical Activity?* https://doi.org/10.7249/rr2490

Dong, J., Guo, R., Guo, F., Guo, X., & Zhang, Z. (2023). Pocket parks-a systematic literature review. *Environmental Research Letters*, *18*(8), 083003. https://doi.org/10.1088/1748-9326/ace7e2

Du, H., Jiang, H., Song, X., Zhan, D., & Bao, Z. (2016). Assessing the Visual Aesthetic Quality of Vegetation Landscape in Urban Green Space from a Visitor's Perspective. *Journal of Urban Planning and Development*, *142*(3). https://doi.org/10.1061/(ASCE)UP.1943-5444.0000329

Elvareta, & Dwisusanto, Y. B. (2023). IDENTIFIKASI KUALITAS RUANG TERBUKA PUBLIK DI PERMUKIMAN KOTA (STUDI KASUS : TAMAN LINGKUNGAN DI KAWASAN BSD CITY, KOTA TANGERANG SELATAN). *Riset Arsitektur (RISA)*, *7*(04). https://doi.org/10.26593/risa.v7i04.7235.388-406

Fatiah, A. A., Ponrahono, Z., & Zakariya, K. (2021). Quality of designs and features of small urban green spaces in Petaling Jaya Town, Malaysia. *Planning Malaysia*, *19*(15). https://doi.org/10.21837/PM.V19I15.931

Febriandia, A. A., & Hayati, A. (2022). Konsep Play Experience untuk Perancangan Hunian Vertikal Ramah Anak. *Jurnal Sains Dan Seni ITS*, *10*(2). https://doi.org/10.12962/j23373520.v10i2.70020

Feng, X., Toms, R., & Astell-Burt, T. (2022). The nexus between urban green space, housing type, and mental health. *Social Psychiatry and Psychiatric Epidemiology*, *57*(9), 1917–1923. https://doi.org/10.1007/s00127-022-02266-2

Fongar, C., Aamodt, G., Randrup, T. B., & Solfjeld, I. (2019). Does perceived green space quality matter? Linking norwegian adult perspectives on perceived quality to motivation and frequency of visits. *International Journal of Environmental Research and Public Health*, *16*(13). https://doi.org/10.3390/ijerph16132327

Framesthi, D. B., & Hindersah, H. (2010). Hubungan Antara Aktivitas Pengunjung Dengan Kondisi Taman Umum di Kecamatan Bandung Wetan. *Jurnal Perencanaan Wilayah Dan Kota*, *10*(1). www.bandungheritage.com

Hariz, A. (2013). Evaluasi Keberhasilan Taman Lingkungan di Perumahan Padat Sebagai Ruang Terbuka Publik Studi Kasus: Taman Lingkungan di Kelurahan Galur, Jakarta Pusat. *Journal of Regional and City Planning*, *24*(2). https://doi.org/10.5614/jpwk.2013.24.2.2

Histanto, E. N., & Kusliansjah, Y. K. (2018). Evaluation of Arragement and Use of Green Open Space in Cimai City's Rusunawa. *ARTEKS : Jurnal Teknik Arsitektur*, *2*(2). https://doi.org/10.30822/arteks.v2i1.44

Hussein, H., Ishak, S. A., & Wan Mohd Yunus, W. M. A. (2021). Neighborhood Park Visit Impacted Psychological Health in Reducing Stress. *Journal of ASIAN Behavioural Studies*, *6*(18). https://doi.org/10.21834/jabs.v6i18.383

Kabisch, N., Qureshi, S., & Haase, D. (2015). Human-environment interactions in urban green spaces - A systematic review of contemporary issues and prospects for future research. In *Environmental Impact Assessment Review* (Vol. 50, pp. 25–34). Elsevier Inc. https://doi.org/10.1016/j.eiar.2014.08.007

Kamelnia, H., & Karimani, F. (2019). Assessing Users' Physical Needs in High-rise Residential Building Design, Case Study: District 9 of Mashhad, Iran. *Armanshahr Architecture & Urban Development*, *11*(25).

Lahoti, S. A., Lahoti, A., Dhyani, S., & Saito, O. (2023). Preferences and Perception Influencing Usage of Neighborhood Public Urban Green Spaces in Fast Urbanizing Indian City. *Land*, *12*(9). https://doi.org/10.3390/land12091664

Lubis, A. R. (2020). *Konsep Penyediaan Fasilitas Pada Taman Perumahan Berdasarkan Persepsi Warga*. Institut Teknologi Sepuluh Nopember.

Maas, J., Verheij, R. A., Groenewegen, P. P., De Vries, S., & Spreeuwenberg, P. (2006). Green space, urbanity, and health: How strong is the relation? *Journal of Epidemiology and Community Health*, *60*(7). https://doi.org/10.1136/jech.2005.043125

Malek, N. A., Mariapan, M., & Shariff, M. K. M. (2012). The Making of a Quality Neighbourhood Park: A Path Model Approach. *Procedia - Social and Behavioral Sciences*, *49*. https://doi.org/10.1016/j.sbspro.2012.07.019

Masullo, M., Cioffi, F., Li, J., Maffei, L., Scorpio, M., Iachini, T., Ruggiero, G., Malferà, A., & Ruotolo, F. (2022). An Investigation of the Influence of the Night Lighting in a Urban Park on Individuals' Emotions. *Sustainability (Switzerland)*, *14*(14). https://doi.org/10.3390/su14148556

Mauliana, P., Ricky Firmansyah+, Hunaifi, N., Komalasari, Y., Dewi, S. W. K., & Sulastriningsih, R. D. (2024). Penerapan Teknologi CCTV untuk Meningkatkan Keamanan Lingkungan Perumahan. *Jurnal Pengabdian Kepada Masyarakat*, *4*, 114–124.

Mawardi, Y. I., Wulandari, R., Istiqomah, G. K. W., Susila, R. L., & Hendriavi, A. I. (2020). Analisis Kualitas Layanan Rumah Susun Sederhana Sewa (Rusunawa) Semeru dengan Menggunakan Metode Importance Performance Analysis (IPA). *MATRAPOLIS: Jurnal Perencanaan Wilayah Dan Kota*, *1*(1). https://doi.org/10.19184/matrapolis.v1i1.19218

Muhsin, A., Wibisono, M. A., Zahara, T., & Keisha, M. R. (2016). Desain Ruang Luar Ditinjau Dari Pola Aktivitas Dalam Optimalisasi Lahan Pada Rusunawa. *Reka Karsa*.

Narh, S. N., Takyi, S. A., Asibey, M. O., & Amponsah, O. (2020). Garden city without parks: an assessment of the availability and conditions of parks in Kumasi. *Urban Forestry & Urban Greening*, *55*, 126819. https://doi.org/10.1016/j.ufug.2020.126819

Nguyen, P.-Y., Astell-Burt, T., Rahimi-Ardabili, H., & Feng, X. (2021). Green Space Quality and Health: A Systematic Review. *International Journal of Environmental Research and Public Health*, *18*(21), 11028. https://doi.org/10.3390/ijerph182111028

Okafor, B. (2016). THE RESIDENTIAL HOUSING PROBLEM IN ANAMBRA STATE (A CASE STUDY OF ONITSHA METROPOLIS). In *International Journal of Civil Engineering, Construction and Estate Management* (Vol. 4, Number 2).

Olta Braçe, Marco Garrido-Cumbrera, & José Correa-Fernández. (2021). Gender differences in the perceptions of green spaces characteristics. *Social Science Qauarterly*, *102*(6), 2640–2648.

Rahajuni, I. A., Moeliono, M. F., & Srisayekti, W. (2020). Perilaku eksternalisasi anak rumah susun sederhana Leuwigajah Cimahi dalam optimalisasi ruang terbuka hijau. *Jurnal Sosioteknologi*, *19*(2). https://doi.org/10.5614/sostek.itbj.2020.19.2.12

Rahm, J., Sternudd, C., & Johansson, M. (2021). "In the evening, I don't walk in the park": The interplay between street lighting and greenery in perceived safety. *Urban Design International*, *26*(1). https://doi.org/10.1057/s41289-020-00134-6

Rosli, S., Leh, O. L. H., Adzmi, N. A. M., & Marzukhi, M. A. (2020). Relationship between quality of urban parks and physical activity: A case study in changkat public park, Batu Gajah, Perak. *Planning Malaysia*, *18*(4). https://doi.org/10.21837/pm.v18i14.824

Sasongko, W., Kurniasanti, R. P., & Siregar, J. P. (2017). The development concept of Taman Aloon-Aloon Tulungagung based on visual accessibility, diversity of activities and perception of users. *IOP Conference Series: Earth and Environmental Science*, *70*(1). https://doi.org/10.1088/1755-1315/70/1/012063

Silitonga, T., & Nurfazilla. (2021). ANALISA PENATAAN RUANG TERBUKA TAMAN HIJAU DI KECAMATAN MERAL KABUPATEN KARIMUN. *JURNAL PELITA KOTA*, *2*(I). https://doi.org/10.51742/pelita.v2ii.294

Suanmali, S. (2014). Factors Affecting Tourist Satisfaction: An Empirical Study in the Northern Part of Thailand. *SHS Web Conferences*. https://doi.org/10.1051/shsconf/20141201027

Sugiama, A. G. (2014). *Metode Riset Bisnis dan Manajemen* (Kartawan, Ed.; 1st ed., Vol. 1). Guardaya Intimarta.

Sugiama, A. G., Firdanti, K. H., & Rusmalinda, S. (2024). The Investigate of Green Open Space Recreation Facilities Based on Homo Urbanicus Theory. *Journal of Tourism Sustainability*. https://doi.org/10.35313/jtospolban.v4i3.139

Sugiama, A. G., Nurhikmah, W., Rini, R. O. P., & Wigati, E. (2023). Investigating the Essence of Recreational Accessibility and Its Effects on Satisfaction, Memories, and Loyalty of City Park Visitors. *African Journal of Hospitality, Tourism and Leisure*, *12*(4), 1524–1541. https://doi.org/10.46222/ajhtl.19770720.447

Sugiyono. (2020). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Alfabeta.

Suteja, M. S., Ratnaningrum, D., & Anggraini, D. (2019). EVALUASI RUANG PUBLIK SEBAGAI RUANG SOSIAL YANG RAMAH ANAK PADA PEREMAJAAN RUSUNAWA TAMBORA. *Jurnal Muara Sains, Teknologi, Kedokteran Dan Ilmu Kesehatan*, *2*(2). https://doi.org/10.24912/jmstkik.v2i2.1738

Talarowski, M., Cohen, D. A., Williamson, S., & Han, B. (2019). Innovative playgrounds: use, physical activity, and implications for health. *Public Health*, *174*, 102–109. https://doi.org/10.1016/j.puhe.2019.06.002

Wei, Y., & Yang, D. (2023). Impact of neighborhood destination built environments on daily activity opportunities of the elderly population: Based on perception and participation. *Progress in Geography*, *42*(1). https://doi.org/10.18306/dlkxjz.2023.01.008