Research on Perception of Green Fairness and Its Influencing Factors in Affordable Housing Communities

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Abstract: This study investigates the green fairness perception of residents in two representative affordable housing communities in Guangzhou—Zede Garden and Jude Garden—by employing a variety of methods including interviews, surveys, and the construction of an ordered Logit regression model. The findings indicate that, overall, the perception of green fairness among residents is negative. The communities suffer from inadequate greenery, low green visibility rate, and an uneven spatial and temporal distribution of green spaces. These issues result in significant differences in the experiences and needs of various groups within the communities. Specifically, the research highlights that the community's greenery conditions do not significantly affect residents' perceptions of green fairness, while the green visibility rate has a limited impact, which is further complicated by uneven green space distribution. Furthermore, there are noticeable disparities in green fairness perception between different demographic groups. In light of these findings, the study recommends strengthening the construction and management of public spaces within affordable housing communities to enhance residents' green fairness perception, ultimately fostering the development of greener, more livable, and harmonious environments.

Keywords: Affordable Housing Communities; Perception of Green Fairness; Logit Regression Model; Influencing Factors

1. Introduction

As urbanization progresses, urban green spaces have become an essential component of green infrastructure and public services. The accessibility and fairness of these spaces are increasingly recognized as key indicators of the quality of life for urban residents [1]. Affordable housing, as a crucial housing model for low- and middle-income families, plays a significant role in addressing public welfare. However, the early development of affordable housing communities often prioritized basic housing needs over environmental considerations. This has resulted in issues such as poor green infrastructure, insufficient green space, and uneven distribution of greenery. In some cases, a lack of maintenance and management has led to the illegal encroachment of public green areas, negatively affecting residents' perceptions of green fairness.

The study of affordable housing communities has become a prominent area of research. For instance, Ma et al. observed that affordable housing communities in Guangzhou exhibit clear tendencies of marginalization, with the concentration of low-income groups exacerbating the imbalance in the allocation of public services [2]. In recent years, research has increasingly focused on the fairness of green spaces in smaller community settings. Yang et al., based on microdata from Tianjin, found significant disparities in the perception of green space between residents of different socio-economic backgrounds. High-income groups tend to focus on aesthetic quality, while low-income groups place more emphasis on functionality and accessibility [3]. Green fairness theory has also evolved, with Adams' theory of fairness being widely applied in community studies. This theory emphasizes the combined effects of procedural fairness, distributive fairness, and interactional fairness [4]. Kals et al.'s cognitive-affective-behavioral theory further suggests that residents' perceptions of green

space fairness are influenced not only by objective environmental quality but also by their subjective emotional needs [5]. For example, Li and Ta [6], in their study of suburban Shanghai, found a positive correlation between the size of green spaces and residents' mental health. However, they also pointed out that affordable housing communities, due to issues such as homogeneous vegetation and outdated infrastructure, often fail to meet residents' emotional expectations. Regarding the renovation of green spaces in aging communities, Lu Jiaxin et al. found that designs such as "shared gardens" and pocket parks can effectively mitigate conflicts caused by residents' self-built green spaces [7]. Wang and Ye emphasized that renovation efforts should consider the participatory rights of different community groups [8]. He et al. argued for the introduction of transparent decision-making mechanisms to prevent the marginalization of vulnerable groups in resource distribution [9]. In Poland, the construction of community gardens has significantly improved social connections and cultural activities, enhancing residents' sense of interactional fairness [10]. From a policy perspective, Tang et al. highlighted the shift in China's affordable housing policy from a focus on "construction" to "governance". This transition calls for the dynamic optimization of green spaces through collaboration between property managers and residents' self-governance [11]. While research on green fairness in communities has grown considerably, there remains a gap in fine-scale analysis, particularly concerning the needs of specific groups, such as people with disabilities or low-income populations.

Guangzhou, as one of the first cities in China to implement affordable housing, has seen continuous growth in the scale of such projects and coverage population, making it a representative case for the development and construction of affordable housing. This study focuses on two typical affordable housing communities in Guangzhou, analyzing residents' perceptions of green fairness and the factors influencing these perceptions. The research aims to enrich empirical studies on green fairness in affordable housing communities and provides recommendations for optimizing the design of green spaces, improving residents' perception of fairness, and promoting sustainable community development.

2. Case Study Overview and Data Sources

2.1 Case Study Overview

This study focuses on two representative affordable housing communities in Guangzhou: Zede Garden and Jude Garden. Jude Garden, located in Haizhu District, covers an area of 21,700 square meters with a green space ratio of 30%. It is one of the earliest affordable housing communities established in Guangzhou. Zede Garden, situated in Baiyun District, spans approximately 3,500 square meters and has a green space ratio of 35%. Notably, it is the first affordable housing community in the city to feature a pocket park, making it a unique example of innovative green space design within such communities.

2.2 Data Sources

The research adopts a mixed-method approach, combining a questionnaire survey and in-depth interviews to gather data. The questionnaire, which was distributed to residents in both communities, includes questions regarding residents' basic information, their satisfaction with community green spaces, perceptions of green fairness, and the frequency with which they engage in community greening activities. A total of 120 questionnaires were distributed, with 114 valid responses collected.

In addition, in-depth interviews were conducted with a diverse group of residents, selected based on factors such as age, gender, profession, and income level. These interviews focused on residents' views regarding the quality of the community's green spaces, their use of green facilities, and their opinions on the fairness of green space distribution. The insights from these interviews provide essential qualitative data for the study's analysis.

3. Theoretical Foundation and Research Methods

3.1 Theoretical Foundation

Theory of fairness, proposed by American psychologist John Stacey Adams in the 1960s,

posits that individuals assess fairness in their lives by comparing their own inputs and outcomes with those of others. Inputs refer to the time, effort, skills, and experience an individual contributes, while outcomes encompass the rewards they receive, such as money, recognition, status, and benefits. When individuals perceive that their input-output ratio is equivalent to that of others, they feel they are being treated fairly, leading to positive attitudes and behaviors. Conversely, when individuals perceive an imbalance in their input-output ratio relative to others, they experience a sense of unfairness. This sense of unfairness may result in negative attitudes and behaviors, such as decreased motivation, reduced effort, or dissatisfaction[12].

In the context of research on perceptions of green fairness, theory of fairness plays a crucial role. Residents of affordable housing communities, when evaluating the fairness of green resource allocation, compare their own investments and benefits—such as access to green spaces or the use of greening facilities—against those of other residents. For instance, if a resident makes efforts to maintain community greenery or follows greening regulations but does not enjoy the same access to green resources as others, such as smaller green spaces or deteriorating green facilities, they may experience a sense of unfairness. Similarly, some ground floor residents may engage in self-built greening, which reduces the amount of public green space available, consequently diminishing the green space accessible to upper floor residents, leading to feelings of unfairness. Such perceptions of unfairness can significantly affect residents' satisfaction with the community and their sense of belonging, ultimately influencing their willingness to participate in and support green initiatives within the community. Equity theory thus provides a valuable framework for understanding the psychological and behavioral dynamics behind residents' perceptions of green fairness and offers insight into the underlying causes of fairness issues in affordable housing communities' green space development.

3.2 Research Methods

An ordered Logit regression model was employed in the study to conduct an in-depth analysis of the factors influencing residents' perceptions of green fairness. The level of green fairness perception was treated as the dependent variable and categorized into five levels: "Very Fair", "Somewhat Fair", "Neutral", "Somewhat Unfair", and "Very Unfair". Independent variables, including community greening conditions, green visibility rate, residents' socio-economic characteristics (such as age, gender, income, and profession), and participation in community activities, were incorporated into the model. Statistical software was used to process and analyze the data, and through model estimation and testing, the direction and extent of each factor's influence on residents' perceptions of green fairness were determined. This allowed for the identification of the key factors affecting the perception of green fairness.

Additionally, the Python OpenCV library was used to analyze photographs and calculate the green visibility rate. A large number of photos were taken from various locations and angles within the community to simulate the everyday perspectives of residents. These photos were processed using OpenCV, and their hue, saturation, brightness, and other characteristics were analyzed to compute the green visibility rate. A correlation analysis was then conducted between the green visibility rate and residents' perceptions of green fairness. This analysis explored the impact of the green visibility rate on residents' perceptions of green fairness, providing objective data indicators for the assessment of the visual effects of community green spaces and residents' perceptions of these areas.

4. Results Analysis

4.1 Homogeneous Vegetation and Perceived Unfairness Due to Spatial Encroachment

The Jude Garden community has a green space ratio of 30% (Figure 1). Its greening is predominantly dominated by large trees, with significant areas of bare soil and a lack of variation in vegetation layers. In certain sections, the greenery is sparse, failing to provide adequate shade or recreational space for residents. Furthermore, due to insufficient maintenance, some of the trees have grown poorly, with sparse foliage, preventing the

area from achieving the intended greening effect. The community also lacks sufficient greening facilities, such as children's playgrounds or fitness equipment, which would complement the green spaces and meet residents' diverse needs.

In contrast, Zede Garden has a green space ratio of 35% (Figure 2). Due to the community's older construction, the greenery in Phase 1 is relatively well-established, but the overall quality remains low, and the vegetation is monotonous. It mainly consists of common trees and shrubs, with little variety in plant species, resulting in a lack of depth in the landscape. Field surveys revealed several issues with green maintenance within the community, including areas overrun with weeds and facilities such as benches and pavilions in varying states of disrepair, all of which detract from residents' overall experience. In Phase 2 of the community, although the planning appears more reasonable, a significant issue is the extensive self-built greenery by residents. Ground floor residents have nearly entirely occupied the surrounding green space with private gardens, often fenced off with clear boundaries. This encroachment on public green areas reduces the available communal space and disrupts the overall balance and fairness of the community's green layout.

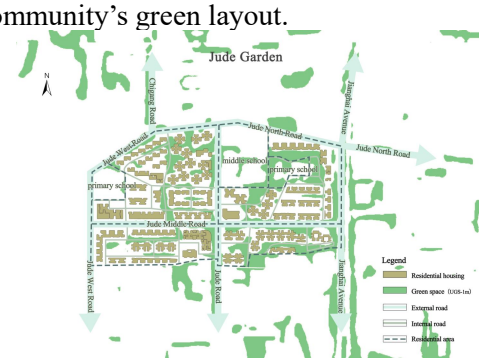

Figure 1. Greening Coverage in Jude Garden

Figure 2. Greening Coverage in Zede Garden

From the perspective of residents' perceptions of green fairness, the condition of community greening has a direct influence on how they perceive fairness in the allocation of green space. In interviews, many residents reported that the poor greening conditions in their community prevented them from enjoying the same green benefits as residents in other neighborhoods, which they felt was unfair. Some pointed out that the disorderly and unattractive landscaping in their community made a stark contrast to the lush, well-maintained green areas of nearby newly built commercial housing communities, reinforcing their sense of disadvantage in terms of living environment. The issue of self-built green spaces also created tensions around fairness. Ground floor residents, who were able to create their own private gardens, enjoyed a higher level of greenery compared to residents on upper floors, who had no similar opportunity. This disparity led to a growing sense of unfairness among the residents. These findings highlight the strong correlation between the quality of community greening and residents' perceptions of green fairness, underscoring that improving greening conditions is essential to enhancing residents' sense of fairness in their living environment.

4.2 Moderate Green Visibility Rate in Zede Garden, While Relatively Low in Jude Garden

The green visibility rate is a crucial indicator of the proportion of green space that residents can directly observe in their daily lives. This metric plays a significant role in assessing residents' perceptions of green fairness. In this study, green visibility rates were calculated by capturing images from residents' perspectives within the community and analyzing the color composition of these images using Python's OpenCV library (Figure 3).

According to the evaluation criteria proposed by Japanese scholar Natsushi Orihara, a green visibility rate of 25%-35% suggests a moderate level of green perception, where the greening plants effectively alleviate residents' stress. A green visibility rate of 15%-25% indicates a lower level of greenery, with a relatively simple green environment, but still providing a light and pleasant walking experience for residents. Based on the green visibility rate survey results for the two

communities, Zede Garden has a green visibility rate of 33.24%, placing it within the moderate range. Residents here have frequent exposure to green spaces and generally report a positive visual experience. On the other hand, Jude Garden has a green visibility rate of 24.97%, which is relatively low. This means that residents have limited access to visible green space, which may negatively affect their satisfaction with the community's green environment and their sense of fairness regarding it.

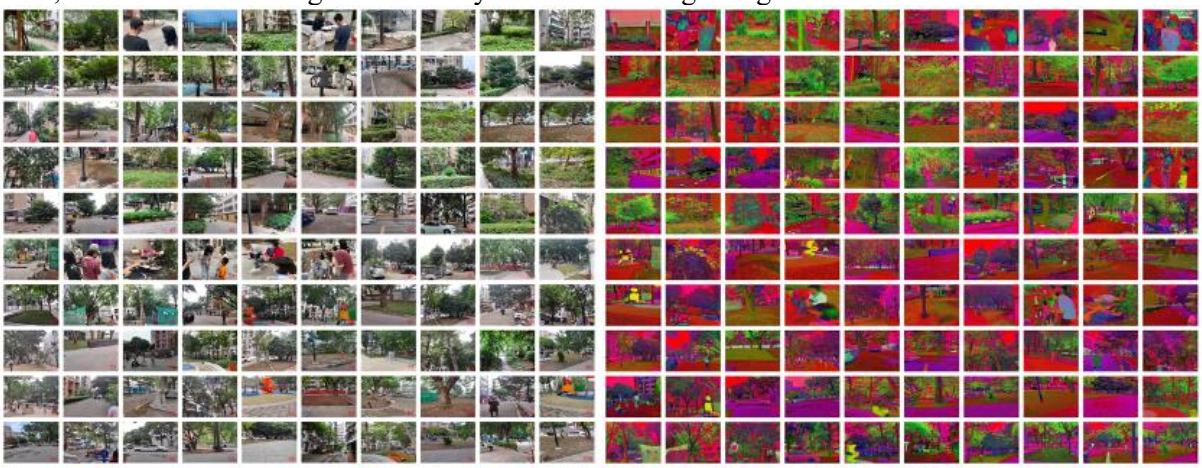

Figure 3. Green Visibility Rate Analysis of the Communities

Residents in Jude Garden, due to the lack of visual green experiences, generally report a lower sense of satisfaction. Compared to nearby communities with more abundant greenery, the perceived unfairness becomes more pronounced. However, interviews revealed that even in Zede Garden, where the green visibility rate is higher, residents' perceptions of green fairness were negatively impacted due to issues such as poor greening quality, monotonous vegetation, and the privatization of green space by certain individuals. This suggests that while the green visibility rate is an important factor influencing perceptions of green fairness, it must be considered alongside other elements such as the quality of greening and the availability of facilities to truly enhance residents' overall sense of fairness regarding their environment.

4.3 Significant Differences in Residents' Green Space Requirements at Different Times of Day

This study utilized Baidu's heatmap tool to comprehensively collect activity data from residents of Jude Garden (Figure 4) and Zede Garden (Figure 5) between 7:00 AM and 8:00 PM. In conjunction with field research, we analyzed the patterns of green space usage by residents at various times of day and explored how these temporal factors influence their perception of green fairness.

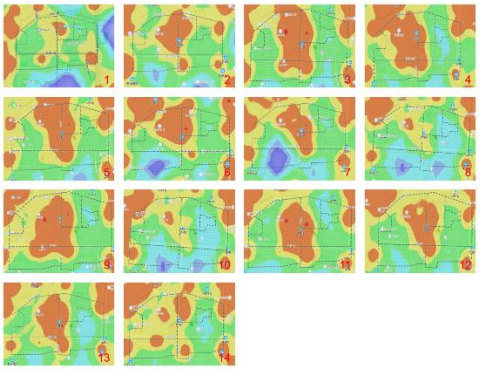

Figure 4. Activity Heatmap of Jude Garden Residents

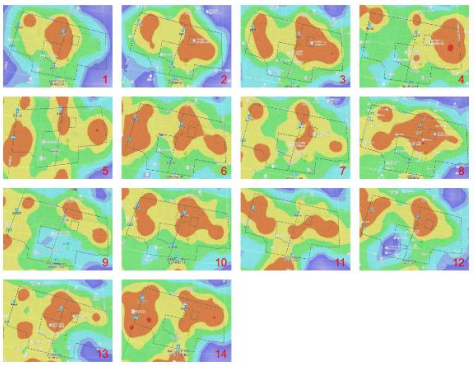

Figure 5. Activity Heatmap of Zede Garden Residents

From 9:00 AM to 10:00 AM, residents begin to converge in the community's green spaces for recreational activities, leading to a significant increase in the use of green spaces. As a result, expectations for the comfort and completeness of green facilities rise. Between 11:00 AM and 12:00 PM, outdoor activities

decrease, and the number of people using the green space declines. During this period, the primary demand for green spaces shifts to a quieter, more peaceful environment. From 4:00 PM to 6:00 PM, after work and school hours, activity levels rise as more residents, including children, occupy the green spaces. This marks a peak in the usage of green areas, where people of all age groups gather, and their demands for the green space become more varied. At 8:00 PM, after dinner, residents again converge in the communal green areas to relax, chat, and walk. At this time, there is an increased desire for a calm, comfortable atmosphere, with higher expectations for the quality of the environment to facilitate relaxation.

There are clear differences in the use of green spaces by residents at different times, and the time factor plays a crucial role in shaping perceptions of green fairness. During peak usage times, residents demand higher-quality green facilities and environments. If these expectations are not met, it can lead to a sense of unfairness. Therefore, when planning and managing community green spaces, it is essential to consider the varying needs of residents throughout the day. Proper allocation of green facilities, along with enhanced maintenance and management of these spaces, can significantly improve residents' perceptions of green fairness.

4.4 Analysis of Residents' Perceptions of Green Fairness

(1) Overall Perception Leaning Toward Unfairness, with Differences Among Groups

Statistical analysis of the questionnaire data reveals that residents generally perceive the community's green fairness as "unfair", with only a small minority considering it "very fair" (see Table 1). Additionally, there are significant differences in how various groups perceive the green fairness within their community, reflecting the diverse needs and experiences they have with the green spaces:

(1) Parents tend to feel that the community's infrastructure and green space quality are inadequate, with concerns over safety hazards and a lack of human-centered design. They also feel there is a shortage of child-friendly safety features. (2) Children focus more on the enjoyment that green spaces bring. They wish for more flowers, plants, and playground facilities in the community, which they perceive as a fair and equitable offering of green spaces. (3) Due to their busy work schedules, renters generally have a low frequency of green space usage. However, issues such as poor property management (e.g., mosquito infestations, inadequate lighting) lead to a lack of security and comfort. Furthermore, some public green areas have been occupied for vegetable gardening, which diminishes their sense of fairness regarding green space availability. (4) People with disabilities frequently reports that the community lacks accessible facilities, such as elevators, making it difficult to navigate the space and enjoy the green areas. They see this as an unfairness and hope that the community will prioritize the construction of accessible facilities to ensure equal opportunities for all to enjoy green spaces. (5) Elderly residents generally have a negative perception of green fairness, citing aging, poorly maintained green spaces, pest issues, and a reluctance to go outside after dark. Furthermore, the lack of proper property management and issues such as ground floor residents privately occupying and cultivating public green spaces significantly affect their enjoyment of these areas.

Table 1. Frequency Distribution of Residents' Perceptions of Overall Green Fairness

Name	Option	Frequency	Percentage
Green fairness	Very Unfair	17	14.91%
	Somewhat Unfair	34	29.82%
	Neutral	23	20.18%
	Somewhat Fair	35	30.70%
	Very Fair	5	4.39%
	Total	114	100

(2) Analysis of Factors Affecting Perception of Green Fairness

The results of the ordered logistic regression analysis (Table 2) indicate that greening conditions have a significant negative impact on the perception of green fairness (regression coefficient: -0.504, p-value: 0.01, OR: 0.604). This suggests that as the quality of green spaces improves, residents' perception of green fairness actually worsens. This phenomenon may be linked to the encroachment of public spaces by privately constructed greenery. Ground floor residents

may improve their living environment by adding their own greenery, but this behavior reduces the public green space available for others, leading to inequities, particularly for upper floor residents and others who cannot enjoy the same level of green space.

Furthermore, employment status has a significant positive impact on green fairness perception (regression coefficient: 1.738, *p*-value: 0.001, *OR*: 5.685), with residents in better employment situations having more positive perceptions of green fairness. Research indicates that wealthier residents tend to reside in newer, better-maintained communities such as Zede Garden, where greening conditions are superior and the issue of private encroachment is less pronounced. Moreover, residents with better employment often have longer work hours and spend less time in the community, leading to lower demands for green space, and thus, a relatively more favorable view of green fairness.

Table 2. Summary of Ordered Logistic Regression Model Results

Item	Variable	Regression Coefficient	Standard Error	*z*-value	*Wald χ2*	*p*-value	*OR* Value	95% *CI* of *OR* Value
Dependent Variable Thresholds	Very Unfair	-3.002	1.2	-2.502	6.26	0.012	20.119	1.916 ~ 211.258
	Somewhat Fair	-1.187	1.185	-1.001	1.002	0.317	3.276	0.321 ~ 33.444
	Neutral	-0.158	1.179	-0.134	0.018	0.893	1.172	0.116 ~ 11.802
	Somewhat Unfair	2.525	1.215	2.079	4.321	0.038	0.08	0.007 ~ 0.866
Independent Variables	Greening Conditions	-0.504	0.197	-2.56	6.552	0.01	0.604	0.411 ~ 0.889
	Housing Type	-0.104	0.143	-0.724	0.524	0.469	0.902	0.681 ~ 1.193
	Education Level	0.082	0.174	0.475	0.226	0.635	1.086	0.773 ~ 1.526
	Monthly Income	-0.267	0.258	-1.036	1.074	0.3	0.766	0.462 ~ 1.269
	Employment Status	1.738	0.531	3.275	10.727	0.001	5.685	2.009 ~ 16.084
	Gender	-0.366	0.354	-1.035	1.072	0.301	0.693	0.347 ~ 1.387
	Age	0.174	0.173	1.007	1.014	0.314	1.191	0.848 ~ 1.672

5. Conclusions and Recommendations

5.1 Conclusions

This study, through an in-depth examination of two typical affordable housing communities in Guangzhou—Zede Garden and Jude Garden—comprehensively analyzes the residents' perceptions of green fairness, the influencing factors, and strategies for improvement, leading to the following key conclusions:

(1) Residents in affordable housing communities exhibit a generally negative perception of green fairness. In terms of community greening conditions, Zede Garden suffers from a lack of variety in plant species and insufficient landscape layering, while although some areas of Jude Garden show good vegetation growth due to its earlier construction, the overall greenery is insufficient to meet the residents' demands for high-quality green living environments.

(2) Jude Garden performs poorly in terms of green visibility rate, as residents have limited access to visible green spaces within the community. This directly affects their satisfaction with the environment and their sense of fairness.

(3) Different groups within the community exhibit significant differences in their perceptions of and demands for green fairness.

Parents with children are more concerned about the safety of activity areas, young tenants express dissatisfaction with property management and greening facilities, disabled individuals feel disadvantaged by the lack of barrier-free facilities, and elderly residents are dissatisfied with outdated and poorly managed greening facilities.

(4) The greening conditions within the community have a significant negative impact on perceptions of green fairness, while employment status shows a significant positive impact on the perception of green fairness.

5.2 Development Recommendations

(1) Optimization of Green Space Layout and Enhancement of Community Public Space Management

The key to improving the perception of green fairness in Guangzhou's affordable housing communities lies in optimizing the layout of green spaces. During planning, it is essential to consider both residents' needs and the spatial structure, ensuring the appropriate increase of green areas. In older communities, new green spaces can be created through the demolition of illegal buildings or the repurposing of idle land—such as transforming the abandoned waste storage area in Jude Garden into a pocket park. In terms of green space diversity, attention should be given to both variety and balance. The layout should include different types of green spaces, such as centralized green areas, linear green belts, and residential green spaces, so that residents are closer to greenery. For instance, large centralized green areas with comprehensive leisure facilities can be set up in the center of the community; linear green belts along roads, planted with street trees and flowers, can provide shade for residents as they travel; residential green spaces around homes can encourage residents to engage in greening activities and create a more vibrant green atmosphere.

Additionally, future management can be improved by offering regular training to enhance service quality and awareness. A standardized assessment system should be established, incorporating indicators such as the quality of greening maintenance, facility upkeep, and resident satisfaction. Channels for complaints should be set up to promptly address and respond to residents' concerns regarding green spaces and facilities. This will enhance residents' sense of community identity and belonging, thereby improving their perception of green fairness.

(2) Creation of Age-Friendly Green Spaces

By strategically planning and organizing different functional areas, the needs of various age groups can be met, thus enhancing the utilization and attractiveness of community green spaces. Residents of all age groups should be able to find suitable spaces within the green areas for their activities, which will convey the community's care and respect for them. This, in turn, will foster a stronger sense of identity and belonging toward the community.

(3)Regular Community Engagement Activities to Raise Awareness of Green fairness

Community green spaces play a crucial role in promoting resident interaction by offering comfortable venues for socializing, breaking down barriers, and strengthening community cohesion. To further facilitate communication, dedicated spaces for interaction—such as community plazas and neighborhood gardens—should be built. Additionally, enriching community activities can be regularly organized, such as cultural events that satisfy residents' spiritual and cultural needs and promote cultural exchange. Volunteer activities, such as environmental protection initiatives and support for the elderly and disabled, can also be organized to enhance residents' sense of social responsibility and cooperation. By creating spaces for socializing and hosting such activities, community green spaces can serve as social hubs that promote interaction, collaboration, and a harmonious atmosphere, ultimately improving residents' perception of green fairness. This will encourage residents to cherish green spaces and actively participate in their upkeep, thus supporting the sustainable development of affordable housing communities.

Acknowledgement

This work was financially supported by the Provincial-level College Student Innovation Project (S202313902036) and the University-level First-Class Undergraduate Course (2024YLKC051).

References

[1] Jiang Haiyan, Zhou Chunshan, Xiao Rongbo. Spatial Differentiation and Social Equity of Public Parks in Guangzhou. City Planning Review, 2010, 34 (04): 43-48.

[2] Ma Xiaoya, Yuan Qifeng, Zhao Jing. Sociospatial characteristics of Guangzhou's indemnificatory communities. Geographical Research, 2012, 31 (11): 2080-2093.

[3] Yang He, Zeng Zhi, Chen Tianyu, et al. Research on the Equity of Green Space in Mega Cities from the Perspective of Resident Needs—Evidence from 1655 Micro Samples in Tianjin. Urban Problems, 2021, (10): 36-45. DOI:10.13239/j.bjsshkxy.cswt.211004.

[4] Adams J S. Inequity in social exchange//Advances in experimental social psychology. Academic press, 1965, 2: 267-299.

[5] Kals E, Schumacher D, Montada L. Emotional affinity toward nature as a motivational basis to protect nature. Environment and behavior, 1999, 31(2): 178-202.

[6] Li Hong, Ta Na. The Effects of Green Space Scale and Structure on Mental Health from the Perspective of Neighborhood Differentiation. Tropical Geography, 2022, 42 (12): 2031-2041. DOI:10.13284/j.cnki.rddl.003593.

[7] Lu Jiaxin. Study on the "Micro-renovation" of Green Space in Old Communities in Huadu. South China Agricultural University, 2018. DOI:10.27152/d.cnki.ghanu.2018.000141.

[8] Wang Chen, Ye Lin. Green Space Fairness Issues and Countermeasures in the Renewal of Old Communities // Urban Planning Society of China, Chongqing Municipal People's Government. Vibrant Cities, Beautiful Living Environments—Proceedings of the 2019 China Urban Planning Annual Conference (02 Urban Renewal). Department of Planning, College of Architecture and Urban Planning, Chongqing University; Key Laboratory of Mountain Town Construction and New Technologies, Ministry of Education, College of Architecture and Urban Planning, Chongqing University, 2019: 1638-1646. DOI:10.26914/c.cnkihy.2019.005314.

[9] He Ge, Xiao Yang, Wu Rong, et al. Study on Urban Park Accessibility in Guangzhou from the Perspective of Social Equity. Landscape Architecture, 2020, 27 (01): 90-96. DOI:10.14085/j.fjyl.2020.01.0090.07.

[10] Janowska B, Łój J, Andrzejak R. Role of community gardens in development of housing estates in Polish cities. Agronomy, 2022, 12(6): 1447.

[11] Tang Ning, Wu Jingyu, He Jiahao. A Brief Analysis of the Development of Affordable Housing Construction from the Policy Perspective. Housing and Real Estate, 2023, (12): 10-14.

[12] Barber A E, Simmering M J. Understanding pay plan acceptance: The role of distributive justice theory. Human Resource Management Review, 2002, 12(1): 25-42.

