

Research on the Influencing Factors of Users’ Perception of the Inclusiveness of Urban Parks Based on the Grounded Theory

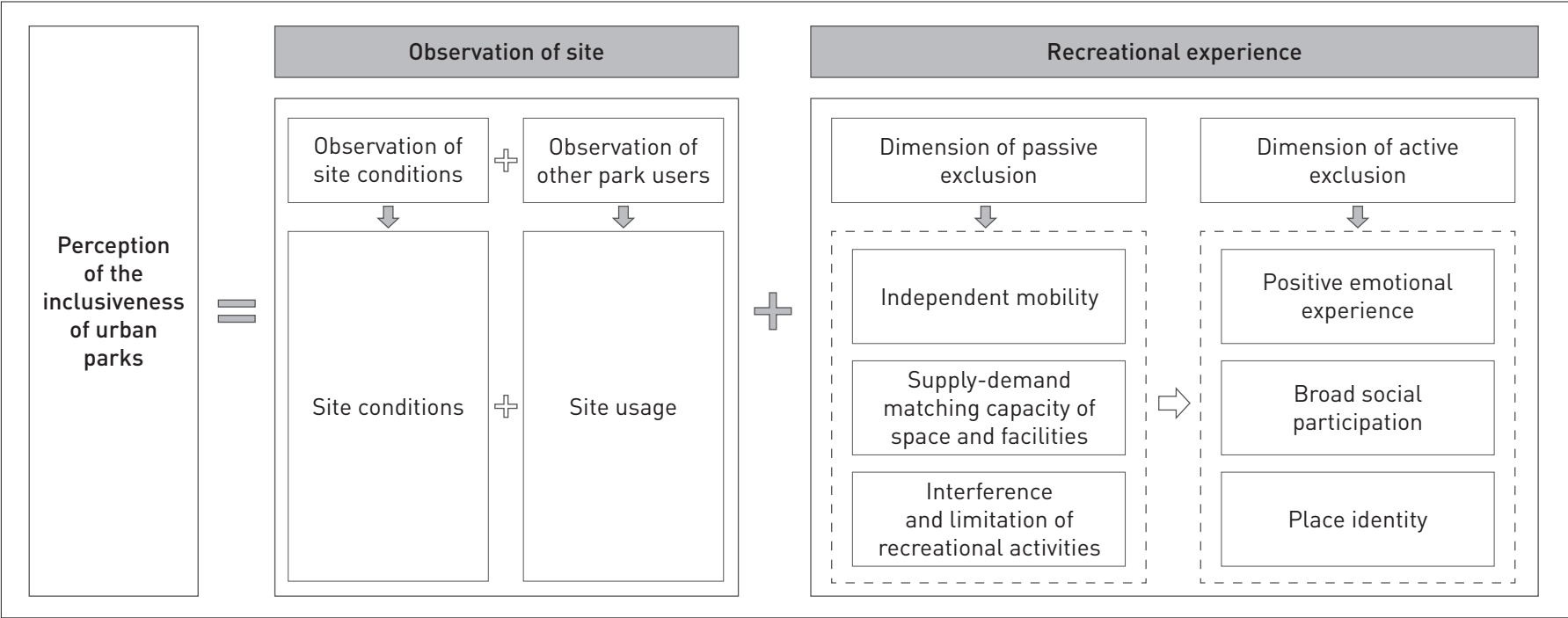
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GRAPHICAL ABSTRACT



HIGHLIGHTS

- Establishes an influencing factor model of users’ perception of the inclusiveness of urban parks
- Clarifies the path and influencing factors to users’ evaluation on the inclusiveness of urban parks
- Clarifies the difference of influence degree of each influencing factor on different groups
- Improves the connotation of inclusive design of urban parks based on the concept of design exclusion

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KEYWORDS

Urban Green Spaces;
Landscape Justice;
Social Equity;
Inclusive Design;
Design Exclusion;
Grounded Theory;
Model

The improvement of the inclusiveness of urban parks can guarantee the recreational opportunities and experience of different user groups, especially the vulnerable ones, and is also an important way to promote the justice of urban green landscape. The research explores the influencing factors to park users' perception and evaluation on the inclusiveness of urban parks. Through the three-level data coding and analysis, a model consisting of eight main categories (i.e. site conditions, site usage, independent mobility, supply-demand matching capacity of space and facilities, interference and limitation of recreational activities, positive emotional experience, broad social participation, and place identity) which cover 30 influencing factors to individuals' perception of the inclusiveness of urban parks is established. The model shows that park users

evaluate the inclusiveness of urban parks upon their observation of site conditions and usage, and their own recreational experience; while the latter is affected by both physical and psychological factors related to passive exclusion and active exclusion, according to the concept of design exclusion. The disparity of the physical environmental quality of urban parks would lead to users' different emotions and feelings about recreational activities. The model helps clarify the path and key factors of inclusiveness evaluation and provides a theoretical reference for future research and practice of landscape justice.

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1 Introduction

With the increase of urban green space problems such as uneven distribution of landscape resources, disparity of recreational spaces, and marginalization of vulnerable groups, the issue of landscape justice has attracted wide attention^[1]. Landscape justice is to ensure that everyone has equal access to landscape resources and gets participated in the landscape design process^{[2]~[4]}. The conceptual framework of landscape justice in urban green spaces proposed by Izz Yi Jian et al. includes such dimensions as access and management, and social inclusion^[5]. The authors' research team have analyzed the development system of landscape justice in urban green spaces, and pointed out that ensuring that all kinds of social groups have equal accessibility to green spaces is critical to landscape justice, and the balance and coordination of various demands and usage relationships among different groups to enhance the inclusiveness of urban green spaces is also fundamental^[1]. Many existing studies on the inclusiveness of urban green spaces focus on the diverse needs of users of varied ages, genders, races, physical conditions, cultural backgrounds, etc., so as to ensure the equality of urban public resource distribution

and recreational opportunities^{[6][7]}. As an important part of urban green spaces, free urban parks provide citizens with shared public service resources and become places for people's daily recreational and social activities, facilitating societal connection and interactions. Therefore, the research focusing on the inclusiveness of urban parks will help promote the realization of landscape justice in urban open spaces.

2 Literature Review and Theoretical Assumption

Research shows that the spatial distributions of different user groups in parks are different, and the influencing factors resulting in these differences are also varied by types of sites and user groups^[8]. Considering such diversities, homogeneously generic design and construction of urban parks may limit the recreational opportunities of certain groups^[9]. The inclusiveness of urban parks emphasizes that the sites need to meet the diversified and differentiated demands of various user groups, and provide all visitors equal recreational opportunities and experiences as far as possible.

Existing studies, mainly concentrating on the spatio-temporal

differences in the activities of users of different ages, have summarized the factors and indicators to the environmental suitability for each age group. For example, scholars analyzed the heat maps and spatio-temporal differences of the elderly and children using community outdoor spaces^[10]. Some others have summarized the landscape and space elements suitable for elderly-oriented sports environment in urban parks, and analyzed the influence of these elements in terms of different use purposes through clustering analysis^[11]. Among studies on environmental characteristics conducive to the growth of children^{[12][13]} and adolescents^[14], researchers have explored their special needs and preferences of activity types, and targeted environmental design indicators, as well as the correlations between these indicators. By now, researchers have developed mature evaluation tools and theoretical systems, such as QUality INDEX of Parks for Youth (QUINPY)^[15] and the Affordance Theory applied to study children's perception of environment^{[16][17]}. At the same time, for people with mobility disabilities, researchers have also established a system of barrier-free environmental elements in urban parks^[18], and national standards such as Codes for Accessibility Design (GB50763-2012) have also provided a guarantee for the quality improvement of barrier-free public spaces.

In addition, more and more studies have revealed that it is necessary not only to pay attention to the physiological differences of site users, but also to consider their mental and emotional status^[19]. On the one hand, the concept of universal design applied in landscape design practice highlights the design of specialized barrier-free facilities in a more universal form that would facilitate a broader public usage, showing care and respect to the vulnerable groups and improving their sense of belonging in the environment^{[20][21]}. On the other hand, in view of the disparity in culture, race, social status, and other dimensions, bringing national or regional cultural elements into the design of urban parks^[22], or setting up shared supporting facilities such as benches^[23], can enhance users' place identity and emotional resonance.

In general, although it sees diversity in research objects, perspectives, and methods among studies on the inclusiveness of urban parks, their common purpose is to make the site serve as many visitors as possible and make them all have sound recreational experience. In the previous study, this research team used the concept of "design exclusion" to examine the connotation of the research on inclusiveness in dimensions of passive exclusion and active exclusion. Design exclusion means

that certain people are excluded by current mainstream products, services or designs, because their needs cannot be met^[24]. Passive exclusion—meaning that visitors might be marginalized because their own conditions cannot adapt to the environmental settings of the site—focuses on the differentiated abilities and needs of site users. Meanwhile, active exclusion—meaning that visitors give up the opportunity to use the site actively because they lack enough recreational motivation—focuses on the impact of the site's inclusiveness level on users' perception and emotions. Therefore, the inclusiveness of urban parks can be promoted by addressing the injustice of recreational services in urban parks that resists design exclusion^[24].

Through literature review, the authors found that, on the one hand, most research on the inclusiveness of urban green spaces including urban parks is conducted in view of certain single groups, with little systematic outcome. Also, existing research results are mostly theoretical (such as proposing design principles and methods), and less attention is put to individuals' perception and evaluation factors of the inclusiveness of urban parks, failing to summarize characteristics of urban parks with strong inclusiveness. On the other hand, research on design exclusion is still at the stage of conceptual assumptions, and the specific indicators of both passive exclusion and active exclusion dimensions are still unclear, not to mention forming a complete theoretical model. Based on the Grounded Theory, this paper aims to extract and clarify the influencing factors and their correlations to users' perception of the inclusiveness of urban parks, and to build a theoretical model of influencing factors by using the assumption of design exclusion. It hopes to provide a conceptual and theoretical reference for relevant research and practice in the field of landscape justice.

3 Research Process

3.1 Research Method

Using Grounded Theory, this paper aims to explore the influencing factors and theoretical framework of the inclusiveness of urban parks based on users' perception. Grounded Theory is a research method concerned with the generation of theoretical models, which is "grounded" in data that has been systematically collected and analysed. In Grounded Theory studies, theory emerges from the logical and systematic assessment of the phenomenon^[25]. This is a typical bottom-up approach, which can reduce the limitations of data analysis and conclusions by empirical concepts or pre-set theoretical models, particularly

suitable for exploratory studies. Although the Grounded Theory has been widely applied and contributed to the development of basic theoretical models for different disciplines and topics, it is still rarely employed in the research on urban open spaces^{[26][27]} and urban parks^[28].

3.2 Study Objects

In order to test the results of qualitative research by using the method of data triangulation, the selected study objects usually need to cover a variety of types, so that researchers can compare the similarities and differences. It can also help researchers understand the content of each concept and the relationship between each other^[29]. In this research, site users, park managers, and professional landscape designers of urban parks were selected as three groups of study objects for further interviews.

1) Through interview with site users, researchers can directly understand their cognition, perception, and evaluation of the inclusiveness of the parks. This study set the propositions of children, adult, and senior respondents to 30%, 20%, and 50% respectively in each sample park according to the research team's previous findings on the general age structure of site users in urban parks^[30], as well as the fact that existing public space design often fails to well respond to children's needs^{[31][32]}. The user respondents included 12 aged people with physical disability. To ensure the comparability of the samples, there were also 32 respondents who are tourists from other places or local visitors who were not household-registered in Guangzhou.

2) The interviews with park managers aim to examine the daily usage and the park's inclusiveness level from the perspective of operators. The research team organized in-depth interviews with park managers from each sample park, 16 respondents in total.

And 3) the interviews with landscape designers aim to collect opinions from park creators and attempts to explain the influencing factors to the inclusiveness of urban parks from a professional perspective. The research team selected 4 landscape designers with over-5-year practice experience of urban park design, who have good understanding and are interested in the research questions. In addition, this research interviewed 10 experts, including 6 PhD students majoring in Landscape Architecture and 4 professors whose research directions are related to this study.

3.3 Sample Sites

The study selected 9 free urban parks as sample sites, including three types of parks and covering 7 districts throughout Guangzhou. Urban comprehensive parks often have a larger

service radius and accommodate a wider variety of user groups, which requires a greater level of inclusiveness. Therefore, four comprehensive parks located in Yuexiu District and Tianhe District (two central districts) were selected as sample sites for visitors, namely Yuexiu Park, Liuhua Lake Park, Tianhe Park, and Pearl River Park (Table 1).

3.4 Data Collection

The research team prepared different interview outlines for each respondent group (Table 2). Researchers recorded the interview with the consent of respondents, and would adjust the content and sequence of the questions flexibly and ask more questions when the respondents talked about the inclusiveness evaluation of urban parks. At the same time, researchers wrote memos and coding notes about the details of the interview process and scene, respondents' subtle expressions and emotional changes, as well as the researchers' thoughts and ideas during the interview.

4 Data Processing and Model Construction

The research team collected a total of 95 valid samples with explicit answers around the interview outline. The total length of interview texts is more than 230,000 Chinese characters, and the collected data were analyzed and processed according to the following steps.

4.1 Open Coding

Open coding is the process of conceptualizing and categorizing the phenomenon mentioned in textual data such as users' experience and feelings, consisting of three steps.

1) First, the study used the word cloud analysis function of NVivo 12 (a qualitative analysis software) to roughly summarize the conceptual information of the text, and then carefully extracted and proofread the coding elements from the interview records to refine the language and form the initial concepts.

2) To ensure the accuracy of data analysis, initial concepts were screened to eliminate the ones with overlapped implications or less relevant to the research topic. In the coding process of this study, initial concepts such as environmental sanitation, scenic beauty of natural landscapes, and air quality and accessibility level that will little cause the inequality of recreational opportunities and experience for tourists are regarded irrelevant. The initial concepts whose coding occurrence is less than twice were also excluded. More than 150 initial concepts closely related to this research topic were finally identified.

Table 1: Basic information of the sample parks													
Type	Name	Area (hm ²)			Total visits (thousand)			Including recreational sites or not			Including service facilities or not		
		Total area	Land area	Water area	Year of 2020	Year of 2019	Year of 2018	Fitness	Sports	Children's playground	Barrier-free facilities and signs	Number of barrier-free toilet stall	Special rental services
Comprehensive park	Yuexiu Park	64.4	58.7	5.7	7,360	12,140	10,790	Yes	Yes	Yes	Yes	54	Wheelchair, baby carriage, hearing-aid, stick, etc.
	Liuhua Lake Park	52.9	23.6	29.3	6,540	1,170	980	Yes	Yes	Yes	Yes	22	Wheelchair, stick, etc.
	Tianhe Park	70.2	59.8	10.4	7,870	11,640	10,000	Yes	Yes	No	Yes	7	None
	Pearl River Park	27.4	24.3	3.1	2,620	3,620	1,410	Yes	No	Yes	Yes	28	Wheelchair, umbrella, etc.
Special park	Baiyun District Children's Park	7.3	7.3	0	500	600	600	Yes	No	Yes	Yes	4	Wheelchair, baby carriage, etc.
	Exhibition Park	9.8	8.5	1.2	150	210	200	No	No	No	Yes	1	None
	Xiangxue park	16.9	14.6	2.3	120	300	500	No	No	No	No	8	None
Community park	Huaguo Mountain Park	14.4	13.6	0.8	400	500	460	Yes	No	Yes	Yes	4	None
	Pingkang Park	4.1	3.4	0.7	100	90	90	Yes	No	No	Yes	3	None

NOTES

1. Data source: management office of each sample park.

2. The types of recreational sites in this study are defined as follows: fitness site refers to the venue with fitness equipment; sports site refers to the venue created for basketball, badminton, and other sports activities; and children’s playground refers to the venue specially for children to play games, rest, or carry out natural education and other activities.

Table 2: Interview outlines

Type of interviewee	Interview schedule	Interview method	Interview outline
Site users	October to December, 2021	One-on-one interview; focus group (by recreational activity types)	Do you feel the environment of this park inclusive or friendly to you, and why? What are the obstacles or difficulties you may encounter during your visit? What factors would make you emotionally negative during your visit? How do you think the parks in this city differ from those in your hometown in terms of recreational experience? (For visitors from other cities) Do you have any suggestion or idea about the future development of urban parks?
Park managers	June to July, 2021	One-on-one interview; focus group (2 ~ 6 respondents in each group)	What are the target user groups of the park? Which groups do you think are neglected in the current park design? Which groups do you think are more vulnerable in recreational activities, and why? What complaints and suggestions do you often receive from park users, and mainly from which groups?
Landscape designers	June to July, 2021	One-on-one interview	How do you understand the connotation of the inclusiveness of urban parks? What factors do you think might influence the inclusiveness level of urban parks? Among your practices of urban park design and construction, what approaches are used to meet the needs and improve the visiting experience of different user groups? What views or suggestions do you have on the inclusiveness of urban parks?

And 3) the initial concepts left after screening were further classified and merged to form 30 concept sets (categories), which process is demonstrated in Table 3.

4.2 Axial Coding

The purpose of axial coding is to identify various logical relations (e.g., causal relations, situational relations, semantic relations)

among the categories. Axial coding is a process during which researchers only analyze one relation of a category each time, and generate the main category through continuous comparisons to identify its related categories and logic relations. At the same time, it is necessary to constantly test the authenticity and reliability of the assumed logical relations with original data and actual situations. Finally, the research team deduced 8 main categories

Table 3: Examples of conceptualization and categorization for open coding

Original interview materials	Initial concepts	Categories
“There are steps where the wheelchair can not pass, so I have to walk slowly on my own. It’s more difficult when I’m going down the steps because it hurts my knee...”	Difficulty of passage	Accessibility
“There is a ramp at the arch bridge around the main entrance, but it’s too steep for wheelchair users like us to cross...”	Steep ramp	
“Pushing a baby carriage would be so hard if there is no barrier-free facility. I didn’t notice it until I became a mother...”	Barrier-free facility	

Continued

Table 3: Examples of conceptualization and categorization for open coding

Original interview materials	Initial concepts	Categories
“Now low handrails are installed in toilets. It’s helpful for the elderly who have difficulty to move around...”	Special service for target user groups	User service of space and facilities
“The hand washing sinks are too high for little kids to use. They need to be carried up when washing hands...”	Facility design	
“The security guards came to kick us out if we were loud. They asked us to keep the noise under 70 decibels...”	Activity forbiddance	Management restriction
“We used to play the flute in the open space in front of the swimming hall, but now we’re not allowed to do that. It’s hard for us to find another suitable place...”	Activity restriction	
“We’re not allowed to use tents and picnic mats or fly kites. So we just take the kids for a stroll...”	Restriction of activity types	
“I’m scared to visit the park at night because of the poor lighting...”	Fear	Sense of safety
“I feel so stressed and nervous when I pass through there...”	Psychological impact	
“Every time I hear them sing old songs, I will remember my past time and feel warm. I have a deep affection for this place...”	Memories	Emotional engagement
“I’ve lived over here for more than 10 years and often visit this park, so I feel an attachment for it...”	Long-term companionship	

NOTE
Due to the length limits of the table, only part of the interview materials is excerpted.

based on the 30 initial categories (Table 4)—these corresponding initial categories are regarded as the influencing factors on users’ perception of the inclusiveness of urban parks.

4.3 Selective Coding

Selective coding is to further distinguish the core category from the 8 main categories, then systematically analyze the relations between other main categories and initial categories, and finally develop a new theoretical framework. In this process, the explanatory power and integrity of the theoretical framework also need to be verified with original data. The category of “perception of the inclusiveness of urban parks” was identified as the core

category because it has certain relations with all other main categories. Then, by analyzing and constructing the correlation structure between the main categories and the core one, an influencing factor model of users’ perception of the inclusiveness of urban parks composed of 8 dimensions was established (Fig. 1). Original data were constantly used to verify the explanatory power and completeness of the theoretical framework as well.

4.4 Theoretical Saturation Test

Data cleansing, analysis, and memo writing were continuously conducted throughout the data collection phase. When the total

amount of text data analysis was about 70 copies, the model tended to reach theoretical saturation. After the research team sorted out and analyzed the rest 25 copies of interview data, no new categories or other new characteristics of the categories were found. Therefore, the influencing factor model of users’ perception of the inclusiveness of urban parks had reached theoretical saturation.

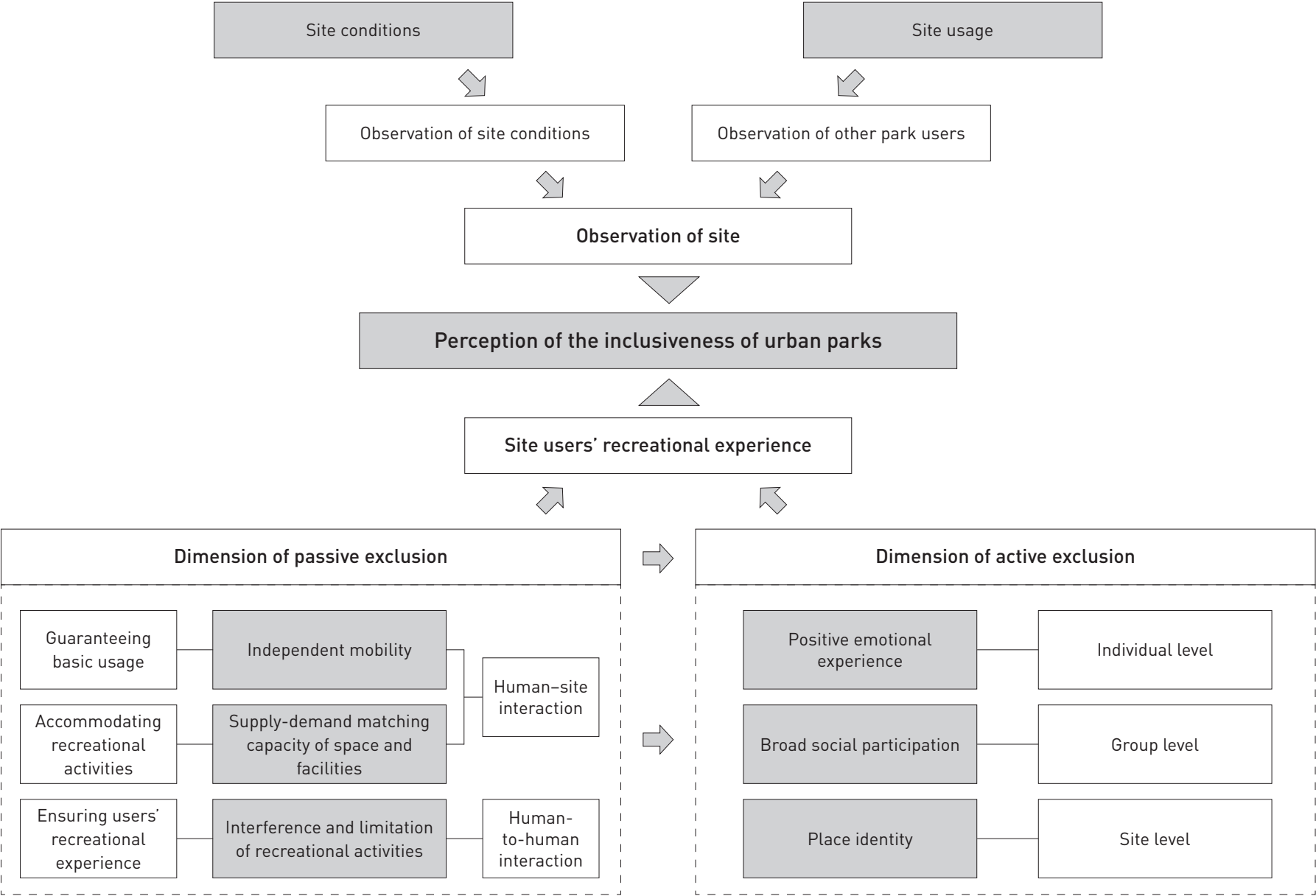
4.5 Code Comparison

In this study, the method of investigator triangulation was used

to verify the reliability of coding results, which is, to compare the coding consistency of data materials by different researchers or research groups under the same research topic. Before starting the coding work, the research team discussed and clarified the relevant connotation and concepts of the inclusiveness of urban parks through seminars and other forms, and divided researchers into groups A and B to code the data separately. Through the coding comparison analysis by Nvivo 12, the coding content and data sources were double-checked to ensure the coding accuracy, and the average values (weighted by source size) were calculated

Table 4: Main categories and the corresponding influencing factors

Main categories	Influencing factors	Main categories	Influencing factors
F1: Site conditions	Park size	F5: Interference and limitation of recreational activities	Time conflict
	Park functions		Activity interference
F2: Site usage	Diversity of user groups		Noise interference
	Equilibrium of user groups	F6: Positive emotional experience	Management restriction
	Diversity of activity types		Sense of respect
F3: Independent mobility	Accessibility		Sense of safety
	Security	F7: Broad social participation	Sense of fairness
	Legibility		Social interaction
F4: Supply-demand matching capacity of space and facilities	Diversity of space and facility types		Public participation
	Sufficiency of space and facilities quantity	F8: Place identity	Response to users’ feedback
	Design of space and facility layout		Space democracy
	User service of space and facilities		Cultural identity and sense of belonging
	Diversity of space and facility functions		Emotional engagement
	Convenience of space and facilities		Self-efficacy
	Comfort of space and facilities		Economy and social capital



1. The influencing factors model of users' perception of the inclusiveness of urban parks

(Table 5). The Kappa value obtained in this research is 0.8732 (greater than 0.75) and the coding consistency is 91.58%, proving that the consistency of coding results by the two research groups is sound and the analysis results of data materials have a high level of reliability.

5 Model Description and Interpretation

This section elaborates on the influencing factor model of users' perception of the inclusiveness of urban parks (Fig. 1). The content analysis of the main categories and their influencing

factors (Table 4) suggests that users' perception of the inclusiveness of urban parks can be interpreted by two dimensions. The main categories F1 and F2 are about users' observation and perception of the park's site conditions, including their perception of the size and functions of the park (F1), and their observation of the site usage (F2). The other six main categories are related to site users' evaluation of their recreational experience. Specifically, regarding the main categories F3, F4, and F5, users pay more attention to the park's matching capacity between the environment's demands and a user's capability. These indicators can measure users' recreational opportunities related to physical settings, from the perspective of

Table 5: Examples of code comparison

Code	Source	Source size (Chinese chars)	Kappa	Agreement (%)	A and B (%)	Not A and not B (%)	Disagreement (%)	A and not B (%)	B but not A (%)
Accessibility	Manager 1, Liuhua Lake Park	4,227	0.9052	98.64	3.21	95.43	1.36	0	1.36
Activity interference	Manager 1, Liuhua Lake Park	4,227	0.9278	92.01	0.99	91.02	7.99	7.05	0.94
...									
Diversity of space and facility types	Designer 1	6,350	0.9177	88.26	17.23	71.03	11.74	8.35	3.39
Security	Designer 1	6,350	0.8798	90.82	2.37	87.45	9.18	1.67	7.51
...									
Emotional engagement	User 1, Yuexiu Park	3,447	0.9472	97.93	11.18	86.75	2.07	0.64	1.43
Management restriction	User 1, Yuexiu Park	3,447	0.8627	89.54	7.88	81.66	10.46	4.32	6.14
...									
Average for all codes and sources (weighted by source size)			0.8732	91.58	3.96	87.62	8.42	2.51	5.91

NOTE
Due to the length limits of the table, only part of the coding examples is excerpted.

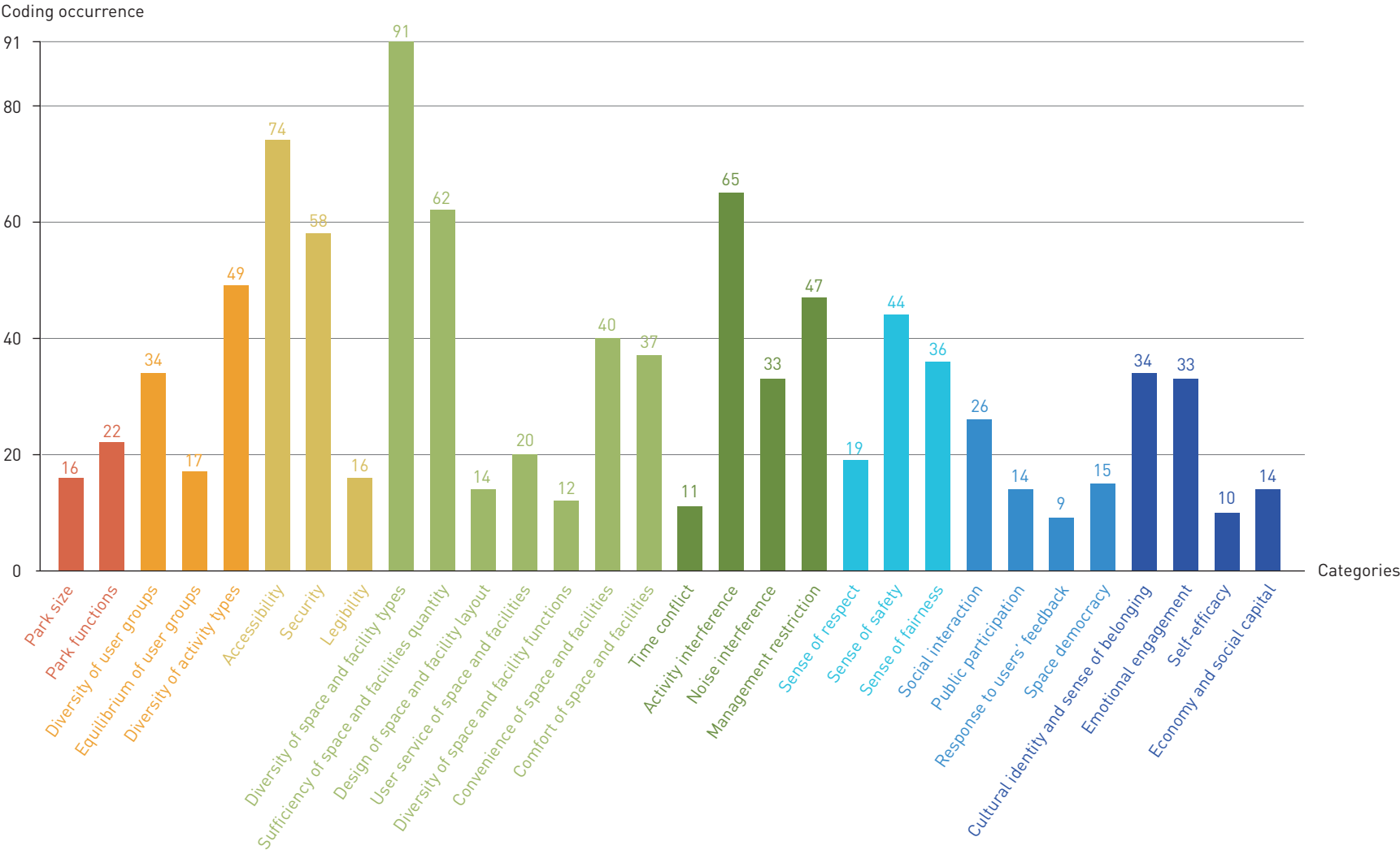
passive exclusion. Under the main categories from F6 to F8, users evaluate the inclusiveness of parks by their personal emotions and feelings, from the perspective of active exclusion. Through analyses of the coding occurrence of each main category (Fig. 2) and the coding rate difference of each main category on each user groups (Fig. 3), combined with the scenario analysis and causal analysis of the original qualitative data, the influencing mechanism of each main category and the correlations between these main categories were identified.

5.1 Users’ Observation and Perception of Site Conditions

Most professional practitioners believe that the inclusiveness of park is related to park size and functions, and that park design

should maximize the park’s service benefits on the premise of ensuring its service quality for target user groups. Users would have different expectation and requirements for the inclusiveness of parks due to their own understandings of the park size and functions. Users will have lower expectation for the overall inclusiveness of the park with smaller areas or the park is primarily targeted to serve a specific group. For example, users usually do not have too much requirements about facilities in children’s parks that serve other groups. During the interviews of park users, it is found that the main category of perception of site conditions is more mentioned and easily understood by young people.

The research also found that users often observe other users’ activities in the park. When they noted that the user groups are



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2. Coding occurrence of each influencing factor in each main category

diverse, especially when vulnerable groups such as the disabled account for a higher proportion, they will make a higher evaluation on the inclusiveness of the park. When the park is available for a wide variety of recreational activities, it leads to much more positive comments (such as “it’s a lively place” and “it’s so dynamic”) from users, indicating that the site is more inclusive. Therefore, one of the external characteristics of urban parks with higher inclusiveness is that the site has a capacity to serve more diverse user groups and to accommodate a higher variety of recreational activity types.

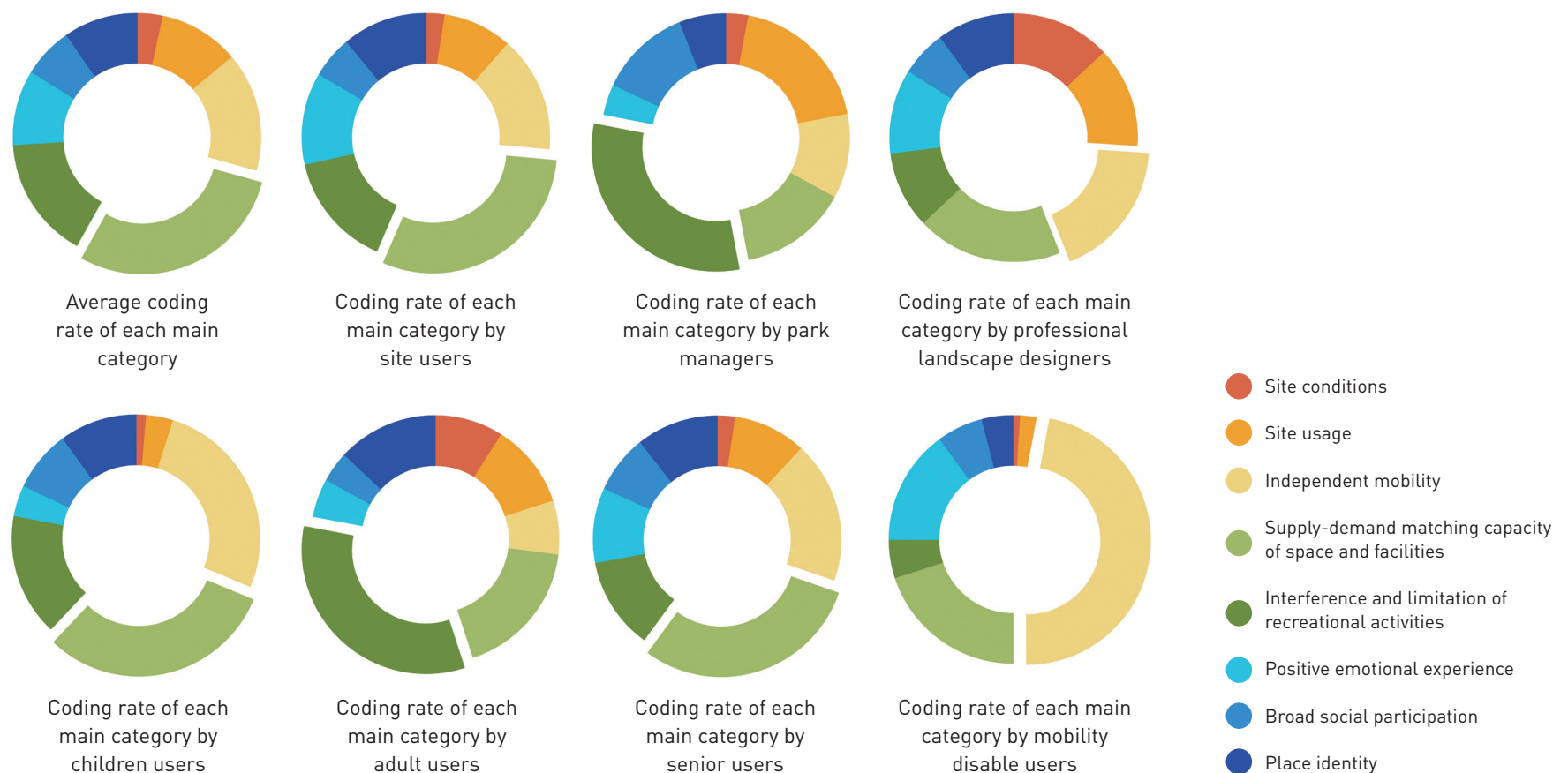
5.2 Users’ Evaluation of Their Recreational Experience

The inclusiveness level of urban parks perceived by users is influenced by both physical environmental characteristics and individuals’ emotion and feelings on recreational opportunities, which can be explained from perspectives of passive exclusion and

active exclusion, respectively. During the interviews, it was found that users’ emotion and feelings on recreational opportunities are determined by their evaluation on the physical environmental settings of the park. Therefore, it is believed that the differences in environmental quality of the site will lead to the changes of users’ psychology on recreational opportunities.

5.2.1 Passive Exclusion Analysis

The coding occurrence of the main categories related to passive exclusion accounts for more than 50% of the total occurrence. Among them, “accessibility,” “diversity of space and facility types,” and “activity interference” are the top three factors by coding occurrence, which belong to the main categories of “independent mobility,” “supply-demand matching capacity of space and facilities,” and “interference and limitation of recreational activities,”



3. Coding rate difference of each main category on each user group

respectively. The first two main categories are emerged in human-site interactions, while the third one is generated in human-to-human interactions. The following are the findings of comparative research on the coding occurrence ratios of the main categories for different user groups (Fig. 3).

1) “Accessibility” and “safety” in the main category of “independent mobility” are the most concerned factors for elderly people with physical or mobility disabilities, parents taking baby carriages, and other user groups. This is because people with mobility disabilities mainly enjoy the recreation via sightseeing on the way, so the safe accessibility to spaces and basic service facilities is critical to their recreational perception. At present, the accessibility within urban parks mainly depends on the supply level of barrier-free facilities, so sites with less barrier-free facilities or poor services will largely discourage the use of people with mobility disability.

2) The recreational perception of the elderly with better mobility and health conditions are more influenced by the “supply-

demand matching capacity of space and facilities.” In the parks, they can participate in a wide range of recreational activities, including fitness with equipment, dance and physical exercise, Qigong, and boxing. The core of “supply-demand matching capacity of space and facilities” should be the creation of diversified places and facilities to meet the various recreational needs of different user groups. Users’ major concern is the type diversity and the quantity of space and facilities, while factors such as the convenience and the comfortableness can indicate the richness of user groups and the level of humanity care.

And 3) the main category “interference and limitation of recreational activities” relates to the conflicts of recreational opportunities among park users. “Time conflict” is a slightly influencing factor and can be resolved through users’ conciliation. Relatively, “activity interference,” “noise interference,” and the “management restriction” are the more concerned factors, and the disturbed/restricted users often think negatively of the park’s inclusiveness due to their unsatisfied recreational experience. This

issue has received less attention from landscape designers, but considered by park managers a major difficulty in improving the inclusiveness of park; young users who are physically healthy would pay more attention to this main category, because compared with space and facility settings, the interaction/interference between users is more likely to influence their recreational experience.

It is clear that a park's capacity to support users' "independent mobility" is critical to their recreational activities, especially for those with mobility difficulties. "Supply-demand matching capacity of space and facilities" determines how the park can support users' diverse recreational activities. Reducing the interference and limitation of recreational activities can improve users' recreational experience.

5.2.2 Active Exclusion Analysis

In terms of active exclusion, the main categories such as "positive emotional experience" and "place identity" were mentioned more frequently by landscape designers, while less by park managers and users. A possible reason is that park managers are less likely to be aware of users' perception and feelings, and in Chinese societal culture, people are not used to expressing their personal emotions with others (researchers in this case). If the influencing factors related to the passive exclusion measures the "availability" of the park, then those related to the active exclusion evaluates users' "willingness" to use the park, which suggests higher requirements for a park's spatial and environmental quality.

1) At the individual level, users' perception of the inclusiveness of urban parks concentrates on "positive emotional experience," including "sense of respect," "sense of security," and "sense of fairness." The concept of universal design emphasizes that the construction of special services such as barrier-free facilities should pay attention to not only their functions, but also the subtle design of their forms. A design approach that encourages shared public use will reduce the psychological disparity of some disadvantaged groups. Reasonable spatial organization and good lighting can also make park users feel relax and free during touring and enhance their sense of security.

2) At the group level, users' positive perception of the inclusiveness of urban parks can be improved through public participation, which mainly consists of two types of interactions: with other users, and with park creators (including park managers and designers). "Social interactions" in urban parks has been proved beneficial to maintaining people's existing social ties and promoting the generation of new ones^[33], which is important to the development of users' psychological and social health. The

interaction with the park creators involves three influencing factors: "public participation," "response to users' feedback," and "space democracy." Proper public participation and timely response to the public's feedback will ensure that all kinds of users, regardless of their physical conditions or social status, are able to participate in the entire process of park design and decision-making by expressing their real needs in park usage, which is significant to effectively enhance the inclusiveness of the park. However, only a few of surveyed users had experience of providing feedback to park managers, resulting in a low coding occurrence for this influencing factor. The park managers are expected to provide more channels or means for collecting public opinions in the future.

And 3) at the site level, place identity is the emotional connection between people and the place. It emphasizes the establishment of spiritual identity and social fusion through emotional and cultural attachments^[34]. Place identity is directly defined by users' personal and emotional experiences, and can also be enhanced by the increase of social participation. Moreover, users' perception of the site culture can contribute to their sense of place identity. For local residents who live around the park and visit the park more frequently, their cultural identity of the city and the park often manifests as place identity. For example, cultural symbols of the city such as the Five Sheep Sculpture in Yueshi Park can help celebrate the local traditional culture and strengthen the cultural and social fusion of visitors from other cities.

6 Conclusions and Discussion

By reviewing the connotation of the concepts of inclusiveness and design exclusion in urban parks, the research studies 9 urban parks in Guangzhou as examples, uses the method of Grounded Theory to explore the influencing factors and the correlations with users' perception of the inclusiveness of urban parks, and constructs an influencing factor model of users' perception of the inclusiveness of urban parks. Main research findings include:

1) Users' evaluation on the inclusiveness of urban parks is usually based on their observation of the basic environmental conditions of the site and their perception and experience.

2) The key to improving the inclusiveness of urban parks can be summed up as making the park accommodate a greater variety of user groups and support more diverse recreational activities.

And 3) the perceived inclusiveness of urban parks is subject to users' recreational experience, which is influenced by both physical environmental characteristics of the park and individuals' emotions and feelings. According to the concept of design exclusion,

“accessibility,” “diversity of space and facility types,” and “activity interference” are the most concerned factors (related to passive exclusion), and “sense of safety” and “sense of fairness” are the main factors that can promote users’ positive emotional experience (related to active exclusion). And the disparity of the physical environmental quality of urban parks will lead to users’ psychological changes.

“We know that we cause a burden to the society because the city needs to invest more into park construction for users like us. So we dare not speak out our needs. Thank you for interviewing us and caring about our feelings. I wish you all the best in the future.” These are the words from three interviewees with physical disabilities. For them, urban parks are very precious outdoor leisure spaces, but sometimes it is so hard to enjoy the same recreational opportunities like others. The improvement of the inclusiveness of urban parks would further resist design exclusion and ensure the equality of recreational opportunities for different user groups.

This study enriches the evaluation objects in the research on the inclusiveness of urban parks, conducts a comprehensive research over multiple user groups, and establishes a framework for evaluating the inclusiveness of urban parks that analyzes the factors to the disparity of inclusiveness of urban parks for different user groups, and summarizes a series of influencing factors to users’ perceived inclusiveness of urban parks, as well as the paths and correlations. This study will provide a theoretical reference for the urban construction and development that promote landscape justice in the future.

In the meantime, the research also sees the following limitations. First, unlike the facts revealed by Western scholars that it is difficult for visitors from other regions or of different cultural backgrounds to get engaged into an unfamiliar park environment, the non-local park users in this study—the majority of them came from northern China—expressed that they can well get engaged into or even prefer the urban park environment of Guangzhou. This may be related to the open and pluralistic urban cultural background of Guangzhou or its pleasant and comfortable subtropical climate. In the future, further comparative research can be conducted to probe into the influencing factors to the inclusiveness of urban parks across cities with different cultural or climatic characteristics.

Second, the studied sample parks of this research are all from a single city (Guangzhou), and the validity of some findings to other cities or regions remains to be verified.

Third, user groups affected by design exclusion may also

include the vulnerable people with cognitive or perceptual difficulties. However, these groups are not able to express their thoughts and opinions clearly or completely through interviews. Therefore, these groups were not covered in this study.

In addition, quantitative tools should be developed to measure the inclusiveness of urban parks in the future. On the one hand, the combination of qualitative and quantitative research methods can more specifically explore the correlations and degrees between each dimension and each category in the model of users’ perception of the inclusiveness of urban parks, and further analyze the related in-deep mechanisms and reasons. On the other hand, introducing design factors and environmental factors as variables to better analyze the correlations with the inclusiveness of urban parks can offer guidelines for design practice and better promote the development of landscape justice.

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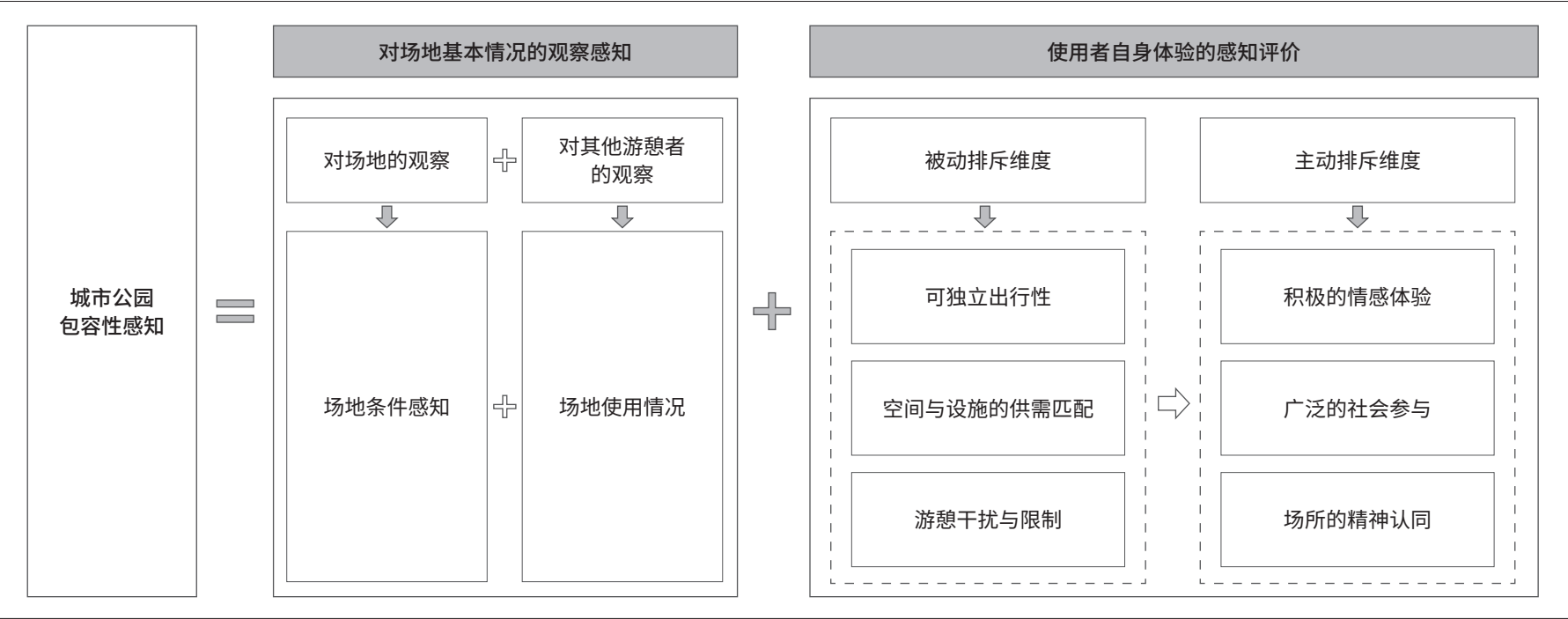
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基于扎根理论的城市公园游憩者包容性感知及影响因素研究

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图文摘要



文章亮点

- 建构了游憩者对城市公园包容性水平感知的影响因素模型
- 明晰了游憩者对城市公园包容性水平评价的路径及关键因子
- 明确了各影响因素对不同群体影响程度的差异
- 完善了基于设计排斥概念框架的城市公园包容性设计内涵

关键词

城市绿地；
景观公正；
社会公平；
包容性设计；
设计排斥；
扎根理论；
模型

摘要

城市公园包容性的塑造能够切实保障不同类别游憩者——尤其是弱势群体——的游憩机会与游憩体验，也是达成城市绿地景观公正的重要途径。本研究以探究游憩者对城市公园包容性主观感知与评价的影响因素为目标，通过扎根理论的方法，对城市公园游憩者与管理者、风景园林研究者与设计师进行访谈数据的收集，经

过对数据资料的三级编码及分析，发展出场地条件感知、场地使用情况、可独立出行性、空间与设施的供需匹配、游憩干扰与限制、积极的情感体验、广泛的社会参与、场所的精神认同等8个影响游憩者对城市公园包容性感知的范畴及其30个构成因子，共同构建了城市公园包容性感知影响因素模型。该模型显示，游憩者的评价是基于对场地条件及使用情况的观察和自身游憩体验两个层面展开，后者同时涵盖物理和心理两个维度，他们可通过设计排斥的概念进行解释和归纳，物理环境品质将影响游憩者精神与情感的变化。该模型明晰了包容性评价的路径及关键因子，为今后以景观公正为目标的建设与发展提供了理论参考。

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1 引言

伴随当今城市绿地中景观资源分配不均、游憩空间分异显著、弱势群体被边缘化等问题的凸显，景观公正议题受到广泛关注^[1]。景观公正的涵义主要体现在确保公众具有公平享有景观资源的机会，保障公众参与景观设计的话语权^{[2]-[4]}。简祎等人提出的城市绿地景观公正概念框架包括可达性与管理、社会包容性等维度^[5]。本研究团队曾梳理城市绿地景观公正的建设发展体系，指出保障各类社会群体公平享有良好的绿地可达性是达成景观公正的首要条件，而平衡与协调不同群体间需求差异及使用关系、提升城市绿地的包容性品质则是根本保障^[1]。城市绿地的包容性研究侧重对不同社会群体的人文关怀，关心不同年龄、性别、种族、身体状况、文化背景等社会群体的多样化需求，确保城市公共资源共享与游憩机会均等^{[6][7]}。免费开放的城市公园作为城市绿地的重要组成部分，是市民所共同享有的公共服务资源，成为市民开展休闲活动和社会交往的重要载体，可吸引不同类型的群体聚集于同一场地并发生社会联系。因此，聚焦城市公园的包容性研究，将有利于促进城市开放空间景观公正最终目标的达成。

2 文献综述与理论假设

研究表明，城市公园内不同类型游憩者在空间分布层面总体呈现明显分异性，且游憩空间分异的影响因素也在不同空间节点和群体类型上存在差异^[8]，均质化设计的建设模式则可能因忽略了个别群体的差异化需求而增加某些群体的游憩阻碍^[9]。城市公园的包容性即强调空间环境满足不同类别游憩者多样化与差异化的游憩需求，增强空间环境与各类游客的“匹配力”，尽可能使不同的游憩者皆有公平的游憩机会和游憩体验。

既有研究主要以年龄分异为视角，集中探讨了不同年龄段人群活动的时空特征差异，提炼出针对各年龄群体的环境适宜性要素及指标。例如，有学者总结分析了社区户外空间中，老幼活动聚集空间热点及空间使用时间的差异性特征^[10]，或总结了城市公园中适老运动环境的景观要

素与空间要素，并通过聚类统计法分析了这些要素在不同需求类型中的影响程度^[11]；在有益于儿童^{[12][13]}与青少年^[14]成长与发展的环境空间议题下，有研究探讨了儿童与青少年的特殊需求特征、活动类型偏好及相应的环境设计指标要素等，并分析了这些要素间的相互影响关系。目前也已形成了较为成熟的评测工具与理论体系，如青少年公园质量评价指标体系（QUINPY）^[15]、适用于探究儿童环境感知的可供性理论^{[16][17]}等。与此同时，针对行动障碍者，相关研究也已构建城市公园无障碍环境构成要素体系^[18]，《无障碍设计规范》（GB50763-2012）等国家标准的出台也为城市公共空间的无障碍品质提升提供了保障。

除此之外，越来越多的研究指出，不仅需要关注使用群体在物理层面和生理层面的差异，也应同时强调心智和情感维度的关怀^[19]。一方面，将通用设计理念应用于景观设计实践，主张将无障碍设施等特殊化的设计以不经意的方式呈现，以主流群体能共同参与使用为愿景，从而给予弱势群体足够的尊重并提高他们在环境中的归属感^{[20][21]}。另一方面，针对文化、种族、社会地位等维度差异，将不同国家或地区的文化景观元素引入城市公园中^[22]，或是合理布置长凳等共享配套设施^[23]，以增强游憩者的身份认同感与情感融入。

总的来说，城市公园包容性领域的研究虽在研究对象、研究视角及研究方法等方面存在不同，但其目标都是使场地能够服务尽可能多的游憩群体，并使他们获得同样良好的游憩体验。本研究团队在以往的理论研究中曾借助“设计排斥”（design exclusion）的概念归纳包容性研究的内涵，并将之分为被动与主动两类。设计排斥指“一部分人被现有主流产品或服务设计排斥在外，因而无法得到使用需求的满足”^[24]。被动排斥是指“游憩者自身条件与环境特征无法相适应而被迫处于边缘化的状态”，关注游憩群体间差异化的能力与需求；而主动排斥是指“游憩者缺少足够的游憩心理动机而主动疏离场地”，关注场地包容性对游憩者内在情感的影响。因而，城市公园的包容性建设可理解为通过抵抗设计排斥来解决其内部存在的游憩服务不公正问题^[24]。

通过文献研究发现，一方面，包括城市公园在内的城市绿地包容性研究大多是针对单一群体的专项研究，呈现一定程度的碎片化，且研究

成果多为理论层面的设计原则与方法，缺少游憩者对城市公园包容性主观感知与评价因子的关注，从而无法回应包容性较强的城市公园应该具备何种特征。另一方面，对设计排斥的研究还停留在概念假设阶段，现有分类模式下各维度所包含的具体指标尚不明晰，未能形成完整的理论模型。因此，本文的研究目的在于，以“设计排斥”为概念假设，采用扎根理论（Grounded Theory）研究方法，提取与明晰影响游憩者包容性感知的影响因素及其关系，构建城市公园游憩者包容性感知影响因素模型，为今后景观公正领域的相关研究与实践提供概念与理论基础。

3 研究过程

3.1 研究方法

本文采用扎根理论研究方法，旨在探索基于游憩者主观感知的城市公园包容性影响因素与理论框架。扎根理论是强调将研究“扎根”于原始数据的系统性收集和分析，通过推理和评价所关注社会现象的形成逻辑，建构相关理论模型的研究方法^[25]。其研究过程是典型自下而上的方法，能够避免实证范式下经验性观念或预设性理论模式对所用资料和所得结论范围的“程式化”限制，因此十分适用于探索性研究。扎根理论已形成较为成熟的操作体系，为不同学科的不同研究议题贡献了基础理论模型，但在城市开放空间^{[26][27]}与城市公园绿地^[28]的相关研究中还应用较少。

3.2 研究对象

为了实现定性研究结果的数据互证，研究对象通常包括多种类型，

以使研究者获得不同视角的观点，并比较它们的共性和差异，理解各范畴及其性质与关系^[29]。因此，研究团队将城市公园的游憩者、管理者与专业从业者三类群体确定为本研究的访谈对象。

1）通过对游憩者的访谈能够直接了解公园使用者对场地包容性的认知、感知与评价情况。在年龄构成方面，基于研究团队过去对样本公园各类游憩者游憩总量比率的调查^[30]，以及通过文献研究所发现目前公共空间设计对儿童需求不够敏感^{[31][32]}的现状，控制每个样本场地中儿童的占比为30%、青壮年各为10%、老年人为50%。样本中包含12位存在不同程度肢体残疾的受访者，他们均为老年人；还包含32位来自外地的游客或居住于广州的非本市户籍人士，以保证样本数据的全面性和可比较性。

2）对管理者的访谈旨在探知运营者视角下的公园日常使用情况与包容性水平。研究团队在每个样本公园中各组织了一次针对公园管理者的深度访谈，共有16位管理者参与。

3）对专业从业者的访谈旨在了解建设者的观点和态度，从更具专业性的角度直接解释城市公园包容性的影响因素。研究团队采访了4名风景园林专业设计师，选择条件是从业5年以上、有丰富的城市公园设计实践经历，且对研究问题有一定认识和兴趣；另采访了6名风景园林学相关研究方向的博士研究生及4名高校教师。

3.3 研究场地

研究选取了9个免费向公众开放的城市公园作为样本研究场地，覆盖了广州市7个城区且涵盖了3种公园类型（表1）。城市综合公园的服务半径通常更大，意味着应该接纳更广泛的人群，需要具备更强的包容性。

表 1：研究样本公园基本信息

公园类型	公园名称	面积 (hm ²)			总访问量 (万人次)			场地类型			服务设施		
		总占地 面积	陆地 面积	水域 面积	2020 年	2019 年	2018 年	有无健身 活动场地	有无体育 运动场地	有无儿童 游憩场地	有无无障碍 设施及标识	无障碍厕位 数目（个）	特殊物品 租借服务
综合公园	越秀公园	64.4	58.7	5.7	736	1 214	1 079	有	有	有	有	54	轮椅、婴儿车、 助听器、拐杖等
	流花湖公园	52.9	23.6	29.3	654	117	98	有	有	有	有	22	轮椅、拐杖等
	天河公园	70.2	59.8	10.4	787	1 164	1 000	有	有	无	有	7	无
	珠江公园	27.4	24.3	3.1	262	362	141	有	无	有	有	28	轮椅、伞具

续表见下页

表 1：研究样本公园基本信息

公园类型	公园名称	面积 (hm ²)			总访问量 (万人次)			场地类型			服务设施		
		总占地 面积	陆地 面积	水域 面积	2020 年	2019 年	2018 年	有无健身 活动场地	有无体育 运动场地	有无儿童 游憩场地	有无无障碍 设施及标识	无障碍厕位 数目（个）	特殊物品 租借服务
专类公园	白云区儿童公园	7.3	7.3	0	50	60	60	有	无	有	有	4	轮椅、婴儿车等
	会展公园	9.8	8.5	1.2	15	21	20	无	无	无	有	1	无
	香雪公园	16.9	14.6	2.3	12	30	50	无	无	无	无	8	无
社区公园	花果山公园	14.4	13.6	0.8	40	50	46	有	无	有	有	4	无
	平康公园	4.1	3.4	0.7	10	9	9	有	无	无	有	3	无

注

1. 数据来源：各样本公园管理处。
2. 本研究中各场地类型定义如下：健身活动场地指设有健身器材的健身场地；体育运动场地指设有篮球场、羽毛球场等体育项目的专用运动场地；儿童游憩场地是指供儿童开展游戏、休憩、学习等的专用场地。

因此，研究进一步选择其中位于越秀区和天河区（广州市两个重要的中心城区）的4个综合公园，作为针对游憩者的研究场地，分别是越秀公园、流花湖公园、天河公园及珠江公园。

3.4 数据收集

研究团队事先针对不同的访谈对象类型设置不同的访谈提纲（表2），在获得受访者同意的前提下进行记录和录音。研究人员对具体提问内容及顺序根据现场情况灵活调整，并对直接涉及包容性评价观点的理由进行追问。研究人员同时进行备忘录及编码笔记的撰写，记录当天访谈的具体过程和情景，受访者细微表情与情绪变化，以及访谈及编码过程中研究人员对所获信息的思考等。

4 分析过程与模型构建

研究团队收集到表意清晰、回答内容总体围绕访谈提纲的有效访谈样本共95份，整理得到23万余字的访谈文本，并按照以下步骤进行了数据分析处理。

4.1 开放式编码

开放式编码是将文字资料中的特定现象进行概念化与范畴化的过程，大致包含三个步骤。

1）研究团队利用质性分析软件NVivo 12的词云分析功能大致了解文本所涉及的概念信息，然后逐字、逐句地提取校对访谈记录中的编码要素，精炼语言信息，形成初始概念。

2）初始阶段未经筛选的初始概念数量相对较多，存在一定表意重叠或偏离研究主题的情况。为了保证后期数据分析的准确性，有必要对初始概念进行筛减。本研究在编码过程中剔除了环境卫生整洁度、自然景观美景度、空气质量水平等不会造成游憩者游憩机会及体验不平等的无关概念，往来公园交通便利性等不属于本次研究范畴的概念，以及编码频次少于2次的概念，最终确定了与本研究主题直接相关的150余条初始概念。

3）通过对筛选后初始概念的分类与合并，形成隶属同一范畴的概念集，并将其抽象及命名为30个范畴（表3）。

4.2 主轴编码

主轴编码的目的在于发现范畴间的各种逻辑关系，包括因果关系、

表 2：访谈提纲			
访谈对象	访谈时间	访谈形式	内容提纲
公园游憩者	2021 年 10~12 月	一对一、焦点小组 (以游憩活动团体为单位)	您认为公园的环境对您而言包容或友好吗？表现在哪些方面？ 您在游园过程中可能遇到的障碍或困难有哪些？ 游园过程中哪些情况会给您带来负面情绪？ 您觉得这边的公园与您家乡的公园在游憩体验方面有什么不同？（针对外地游憩者） 您对城市公园未来的发展有什么建议或畅想？
城市公园管理者	2021 年 6~7 月	一对一、焦点小组 (每组 2~6 人不等)	您所管理的公园主要服务于哪些游憩群体？ 您认为目前公园的使用对哪些群体存在不友好现象？表现在哪些方面？ 您所观察到的公园中的弱势群体游憩状况如何？ 您经常接到的游客投诉建议有哪些？来自哪些游客群体？
专业从业者	2021 年 6~7 月	一对一	您如何理解城市公园的包容性？ 您认为城市公园的包容性水平受哪些因素的影响？ 您所接触的公园建设案例中会通过哪些手段改善和满足哪些群体的需求？ 您对城市公园包容性的主题研究有什么看法或建议？

表 3：开放式编码的概念化与范畴化示例		
原始访谈资料	初始概念	范畴
“有台阶的地方轮椅过不了，只能自己慢慢走，上台阶还好，下台阶更困难，因为对膝盖会有冲击……”	通行困难	可达性
“正门那里的拱桥虽然有斜坡，但是太斜太陡了，我们坐轮椅的也过不去……”	坡道坡度过大	
“以前没有注意到，做了妈妈才发现没有无障碍设施推婴儿车非常不方便……”	无障碍设施	
“现在厕所都增加了低位扶手，可以给腿脚不便的老年人用……”	服务人群针对性	空间及设施的人群匹配度
“洗手池都比较高，三四岁的小朋友用着就很困难，需要抱到台子上……”	设施尺寸合理性	
“我们声音稍微大一点保安就来赶我们走，要求 70 分贝以下才可以……”	管理者禁止活动开展	管理限制
“以前我们都在游泳馆前面的空地吹笛子，现在不允许了，很难找到合适的地方……”	活动场地被限制	
“这里不让搭帐篷，不能铺野餐垫也不能放风筝，所以就只能带小孩随便跑跑逛逛吧……”	活动类型被限制	

表 3：开放式编码的概念化与范畴化示例

原始访谈资料	初始概念	范畴
“这里晚上照明不好，我都不敢来的，感到很害怕……”	恐惧感	心理安全感
“每次要经过那里我都有很大的心理负担……”	心理负担	
“每次看到他们唱红歌都会回想起自己以前，感到很温暖，对这里很有感情……”	触发回忆	情感投入
“我在这边住了十几年了，经常来，所以对这里已经很有感情了……”	长久伴随	

注
因篇幅所限，仅节选部分内容以作示例。

情景关系、语义关系等。“主轴”指研究者每次仅对某一范畴的其中一种关系进行分析，再通过不断比较的方法挖掘与其相关的范畴和逻辑关系，生成主范畴。同时，需要不断将所推敲出的逻辑关系放置回原始数据与实际情景中检验其真实性与可靠性。经过以上步骤的分析处理，研究团队进一步归纳30个初始范畴，得到8个主范畴（表4），其所对应的初始范畴即被视为城市公园包容性感知的影响因素。

4.3 选择性编码

选择性编码是从已发现的主范畴中进一步甄别出核心范畴，并在此基础上围绕核心范畴系统分析其他主范畴、范畴的关系脉络，最终发展出新的理论框架。它同样需要再次回到原始数据中验证理论框架的解释力和完整性。本研究在该阶段确定了“城市公园包容性感知”这一核心范畴，与其他主范畴间均具有一定的关联关系；而后分析与建构主范畴与核心范畴间的关系结构，构建出一个由8个维度构成的城市公园游憩者包容性感知影响因素模型（图1），并不断利用原始数据验证理论框架的解释力和完整性。

4.4 理论饱和度检验

研究团队在数据收集阶段即同步循环开展了数据整理、分析及备忘录撰写的工作。当文本数据的分析总量达到70份左右时，模型已开始显现出理论饱和特征；研究团队继续按照原本的研究计划对剩余25份目标对象访谈资料的数据进行了梳理分析，发现未额外发展出新的范畴或范畴的其他特征，由此确定本研究所构建的城市公园包容性水平感知影响因素模型已达理论饱和。

4.5 编码比较检验

本研究主要采用三角互证中研究者互证的方法对编码结果的可靠性进行验证，即比较不同研究者或研究小组在同一研究议题下对数据材料进行编码处理的一致性程度。研究团队在文本编码之前通过讨论会等方式讨论与明确了城市公园包容性的相关内涵及概念，而后分为A、B两个研究小组，分别独立对数据材料进行编码，并借助Nvivo 12的编码比较分析工具，按照编码内容和数据来源逐条比较分析编码结果，计算加权后所有编码与数据来源的编码比较均值（表5）。本研究获得的最终Kappa值显示为0.8732（大于0.75），编码一致性程度为91.58%，认为两个研究小组的编码结果具备较高一致性，对数据材料的分析结果具备较高可靠性。

5 模型阐述

本章节将详细阐述城市公园包容性感知影响因素模型（图1）的具体释义。通过对主范畴及其影响因素（表4）的内容分析可以看出，游憩者对城市公园包容性的感知评价可整体划分为两个维度。其中，主范畴F1和F2是游憩者对场地基本情况的观察感知，它包含了游憩者对公园面积与定位的感知与理解（F1），以及对场地内其他游憩者活动情况的观察（F2）。而主范畴F3~F8则是游憩者自身使用体验的感知评价。具体而言，在主范畴F3~F5中，游憩者关注的是自身能力与城市公园环境需求的匹配度，以及使用需求的满足情况，更加聚焦于客观、物理空间层面的游憩机会，符合“被动排斥”的概念视角。在主范畴F6~F8中，游憩者更多从内在情感和参与体验的维度出发对场地包容性做出评价，聚焦

表 4：主范畴与对应影响因素

主范畴	影响因素	主范畴	影响因素
F1：场地条件感知	公园面积	F5：游憩干扰与限制	时间冲突
	公园定位		活动干扰
F2：场地使用情况	人群种类丰富度	F6：积极的情感体验	噪声干扰
	人群种类均衡度		管理限制
	活动类型丰富度		受尊重感
F3：可独立出行性	可达性	F7：广泛的社会参与	心理安全感
	安全性		公平感
	可识别性		社会互动
F4：空间与设施的供需匹配	空间与设施种类丰富度	F8：场所的精神认同	公众参与
	空间与设施数量充足度		意见反馈与采纳
	空间与设施布局合理性		场地民主
	空间与设施人群匹配度		文化认同与归属感
	空间与设施功能多样性		情感投入
	空间与设施使用便捷性		自我融入
	空间与设施使用舒适性		经济与社会资本

于主观、心理层面的游憩体验，符合“主动排斥”的概念视角。研究进一步通过各范畴编码频次统计分析（图2）、各主范畴在不同游憩者群体间编码比率的差异性分析（图3）、回归质性文本资料的情景分析及因果分析等手段，分析各主范畴作用原理及其关系。

5.1 游憩者对场地基本情况的观察感知

专业从业者多数认为场地包容性与公园面积和公园定位相关，并

认为公园应在保障公园服务范围内主要目标使用群体的服务质量的前提下，发挥最大的服务效益。游憩者也会因为公园面积和功能定位形成对场地包容性不同程度的期待与要求——当公园面积过小或公园主要定向服务于某特定群体时，游憩者将降低对公园整体包容性的期待，例如，游憩者通常不会对儿童专类公园提出过多服务于其他群体的设施的要求。在对游憩者的访谈中发现，场地条件感知这一主范畴更易被年轻人提及和理解。

表 5：编码比较检验示例

编码	文件名称	文件大小 (中文字符数)	Kappa	一致性 (%)	A 和 B (%)	非 A 且非 B (%)	不一致 (%)	A 且非 B (%)	B 且非 A (%)
可达性	管理者 1- 流花湖公园	4 227	0.9052	98.64	3.21	95.43	1.36	0	1.36
活动干扰	管理者 1- 流花湖公园	4 227	0.9278	92.01	0.99	91.02	7.99	7.05	0.94
.....									
空间及设施种类的丰富度	设计师 1	6 350	0.9177	88.26	17.23	71.03	11.74	8.35	3.39
安全性	设计师 1	6 350	0.8798	90.82	2.37	87.45	9.18	1.67	7.51
.....									
情感投入	游憩者 1- 越秀公园	3 447	0.9472	97.93	11.18	86.75	2.07	0.64	1.43
管理限制	游憩者 1- 越秀公园	3 447	0.8627	89.54	7.88	81.66	10.46	4.32	6.14
.....									
所有编码及文件的均值（加权后）			0.8732	91.58	3.96	87.62	8.42	2.51	5.91

注

因篇幅所限，对每条编码内容的比较分析仅截取部分数据以作示例。

研究同样发现，观看他人活动也是部分游憩者在公园中的活动类型之一。在此过程中，当游憩者发现场地游憩者类型较为多样时，尤其是残障等弱势群体的出现频率较高时，会对场地的包容性做出较高的评价。当场地能够承载较为丰富的游憩活动时，会使游憩者做出“这里非常热闹”“具有活力”等积极评价，从而被认为是更强包容性的表现。由此，可以将良好城市公园包容性的外在表现总结为场地空间能够接纳更多种类的人群，同时能够容纳更丰富的游憩活动类型。

5.2 游憩者自身使用体验的感知评价

游憩者所感知的城市公园包容性水平同时受物理环境特征和心理游憩情感两个维度影响，它们可通过被动与主动排斥的概念得到解释和归纳。访谈过程中发现，游憩者谈及游憩体验与情感的前提均建立在对场

地环境的评价的基础之上，从而认为，物理空间的环境品质又将影响游憩者心理层面的变化。

5.2.1 被动排斥视角分析

被动排斥视角所涉及的主范畴在所有主范畴的编码频次的占比高达50%以上，其中，“可达性”“空间与设施种类丰富度”“活动干扰”是所有范畴中编码频次最高的三个影响因素，它们分别隶属于“可独立出行性”“空间与设施的供需匹配”“游憩干扰与限制”三个主范畴，前两个主范畴是在人群与场地的交互的过程中产生，而最后一个主范畴则是在人群与人群的交互过程中产生。通过比较不同类型游憩群体的主范畴编码频次占比（图2），研究发现：

1）主范畴“可独立出行性”中的可达性和安全性是大部分存在肢体

或行动障碍的老年人、推婴儿车的家长等人群最为关心的影响因素，这是因为行动障碍者开展的游憩类型多以游赏为主，公园内各空间组团及基础服务设施的安全可达成为了影响他们游憩感知的关键。目前，城市公园内部空间的可达性多取决于场地的无障碍设施建设水平，无障碍设施及服务较差的场地会大大减少行动障碍者的实际到访和使用机会。

2) 行动能力和身体状况稍好一些的老年人则较多受主范畴“空间与设施的供需匹配”等游憩服务设施的建设水平影响，对于他们来说，可开展的游憩活动包括器械健身、舞蹈体操、气功拳术等多种类型。“空间与设施的供需匹配”的核心应是通过空间及设施的多样化塑造，满足更多种类人群的游憩需求。游憩者最关心空间与设施的种类丰富度和数量充足度，而空间与设施使用的便捷性及舒适性等因素则是更加能够体现人群差异、彰显人性化的指标。

3) 主范畴“游憩干扰与限制”是指游憩者在游园过程中可能与他人发生的游憩冲突。其中，时间冲突的影响相对较小，且被游憩者认为是可以自行调和的因素；而游憩者间的活动及噪声干扰，以及来自管理者的活动限制等因素则是目前该主范畴下所面临的主要挑战。受到干扰或限制的一方常会认为产生了游憩权利或体验的失衡，从而降低对公园环境包容性的评价。该主范畴被专业从业者关注较少，但在公园管理者看来却是调和场地包容性方面所面临的主要困难。在游憩者中，身体机能较好的青壮年群体对该主范畴的关注度较高，因为对健康状况良好的使用者而言，场地与设施较少给他们带来游憩障碍，而游憩者间的交互关系则更可能影响他们的游憩体验。

由此看出，场地良好的可独立出行性是游憩者，尤其是存在行动障碍的弱势群体开展游憩活动的基础性保障，空间与设施的供需匹配则为顺利开展更加多样的游憩活动提供了进一步的支持，而克服游憩干扰与限制则能够更深程度地提高游憩体验。

5.2.2 主动排斥视角分析

主动排斥视角中，“积极的情感体验”与“场所的精神认同”等主范畴在专业从业者中的出现频次较高，而管理者和游憩者对该部分内容的谈及次数较少。原因可能是，公园管理者较难察觉或体会游憩者的内在情绪感知，而在中国的社会文化中，游憩者自身在接受研究者的访谈时也不习惯表达较为私密的个人情绪。如果说被动排斥视角的影响因素是强调了公园场地的“可用”，那么主动排斥视角下的影响因素则强调了游憩者的“想用”，这对空间环境的建设品质提出了更高的要求。

1) 在个体层面，游憩者对城市公园包容性的情感感知集中在主范畴“积极的情感体验”，包括受尊重感、心理安全感及公平感三个影响因素。通用设计理念强调无障碍设施等特殊服务设施的建设除了要重视其功能，还需推敲其形式，以更加“无声”的方式呈现。让大众共同参与使用的设计方式，将消减部分弱势群体的心理落差，给予他们足够的尊

重。合理的空间组织、夜间良好的照明系统等也能够保障游憩者游园过程中放松、自由的状态，提升心理安全感。

2) 在群体层面，游憩者通过公共参与提升对场地包容性的积极情感感知，主要包括与其他游憩者的互动和与公园建设者（包括管理者、设计者等）的互动两大维度。城市公园中的“社会互动”已被证实有利于维系旧的社会关系和促进新的社会关系产生^[33]，其对游憩者心理健康及社会健康的发展有着重要影响。与公园建设者的互动涉及“公众参与”“意见反馈与采纳”及“场地民主”三项影响因素。适当的公众参与以及对公众合理意见的及时反馈与采纳将保障所有公众——无论其身体状况或社会地位差异如何——都能够参与公园设计和决策的全过程，表达自身的真实需求或使用困难，是切实提升公园包容性的重要过程与途径。但受访游憩者中曾向公园反馈意见的样本数量不多，导致该影响因素的编码频次较低，公园管理者或应在未来增加或宣传公众意见征集的渠道。

3) 在场地层面，场所认同是人与场所之间的情感联系，强调从情感、文化等维度建立游憩者对场地的精神认同与社会融入^[34]。游憩者的个人经历和情感体验与场所认同的关系较为直接，社会参与也能提高游憩者的场所认同感。游憩者对场地文化的感知能够促进场所的认同程度，对于居住在公园周边且游园频率较高的本地居民而言，对于城市与公园的文化认同较多地转化为了场所的精神认同。例如，越秀公园中五羊雕塑等标志性城市文化符号起到了传承和宣扬广州传统文化的功能，增强了外地游客对于广州的文化认同感与情感融入。

6 结论与讨论

研究在梳理城市公园包容性与设计排斥等概念内涵的基础上，以广州市的9所城市公园为例，采用扎根理论的方法详细探究了游憩者对城市公园包容性感知的影响因素及其关系，建构了城市公园包容性感知影响因素模型。研究结果表明：

1) 游憩者对城市公园包容性的整体评价通常是基于对场地基本情况的观察和游憩者自身使用体验的感知两个层面。

2) 提升城市公园包容性的目标可以总结为场地空间能够接纳更多种类的人群，同时能够容纳更多类型的游憩活动。

3) 游憩者基于自身游憩体验所主观感知的包容性水平同时受物理环境特征和心理游憩情感两个维度影响，它们可通过设计排斥的概念得到解释和归纳——“可达性”“空间与设施的种类丰富度”及“游客间的活动干扰”是被动排斥视角下关注最多的影响因素，“心理安全感”和“公平感”是主动排斥视角下能够促进游憩者获得积极情感体验的主要因素；而物理空间的环境品质又将影响游憩者心理层面的变化。

“我们知道是给社会增添了负担，对我们的特别照顾需要额外投

入更多的建设成本，所以很多时候我们的想法不敢‘大声’地提，只敢‘小声’地提。多谢你们采访和关心我们的感受，希望你们今后能够顺利利。”这是对三位残障人士进行焦点小组访谈后所整理的原始资料。城市公园对他们而言是弥足珍贵的户外休闲场地，但有时享受与他人同等优良的游憩体验却成为了“奢望”，城市公园包容性理念的提出为抵抗设计排斥、实现不同群体的游憩公平性带来了契机。

本研究突破了过往城市公园包容性研究在评价对象上的单一性，综合多种类型游憩群体的感知情况，建立了从整体观视角出发评价城市公园包容性水平的框架模型，一方面比较了造成城市公园不同类型游憩者包容性水平差异的因素，另一方面补充了游憩者能够主观感知并做出评价的城市公园包容性感知影响因素及其路径与关系，为今后以景观公正为目标的城市建设与发展提供了理论参考。

与此同时，研究团队提出以下几点反思。第一，与西方学者发现的来自其他地区或不同文化背景的游憩者往往较难融入陌生公园环境的现象不同，本研究中的外地受访者——尤其是来自中国北方的大多数游客——表示能够较好融入甚至更加喜爱广州的城市公园环境，这可能与广州市多元开放的城市文化背景以及温暖适宜的亚热带气候特征有关。在未来，可以继续深入比较不同文化或气候特征的城市中，影响城市公园包容性的构成要素是否存在差别。

第二，本文的研究场地仅局限于广州市区，部分研究结论在其他城市或地区是否有效仍有待考证。

第三，受到设计排斥影响的游憩者还可能包括存在认知、感知障碍的弱势人群，但这部分人群无法完整表达自己的思想与观点，使访谈受到了限制，故本研究缺失了上述群体样本的获取。

此外，未来还应开发定量测度城市公园包容性水平的工具。一方面，定性和定量相结合的研究方式能够更为细致地探索城市公园包容性感知影响因素模型中各维度与各范畴间的相关性及其程度，并进一步分析影响因素模型背后的形成机制与原因；另一方面，引入设计要素和环境要素等作为自变量，深入分析其与城市公园包容性水平的作用关系，生成可直接指导设计实践的设计原理，能够更好地推动景观公正的发展。

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图 1. 城市公园游憩者包容性感知影响因素模型

图 2. 范畴编码频次统计图

图 3. 主范畴编码频次比率的群体差异比较图