

## Article

# A Qualitative Study on Leisure Benefits, Constraints, and Negotiations in Urban Parks Based on Perception of Chinese Older Adults

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**Abstract:** Urban parks, one of the most significant outdoor leisure areas, are particularly important for the physical and mental health of older adults. In order to investigate the benefits and constraints of leisure activities that older adults perceived in urban parks, as well as their negotiation mechanisms, this study was conducted using a qualitative method, interviewing 102 retired older adults aged 55 or older in Guangzhou, China, and using Rost CM 6.0 for word frequency analysis. The study findings indicated that due to the lack of age-friendly public leisure facilities in Guangzhou, Chinese older adults expressed multiple expectations regarding the benefits of urban parks, mainly in terms of physical, psychological, and social interaction, with physical benefits being their primary drivers. Leisure constraints can be intrapersonal, interpersonal, or structural. Older adults who visited parks and those who did not were affected by different levels of limitations, with the oldest people experiencing the most pronounced constraints. Older adults were able to access leisure opportunities through a variety of constraint negotiation strategies, including cognitive adaptability, spatiotemporal adaptation, interpersonal coordination, skill acquisition, and alternative leisure activities. The results of this study might assist related management departments in building more age-friendly parks based on the framework of the benefits and constraints of park recreation for older adults, in terms such as institutional design and planning to enhance the role of urban parks in healthy aging.



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**Keywords:** older adults; urban parks; leisure benefits; leisure constraints and negotiation; Guangzhou; healthy aging

## 1. Introduction

Healthy aging is an important issue for human development. According to the United Nations World Population Prospects (2022), by the year 2050, 16% of the world population will be 65 years of age or older [1]. To actively address the challenges of aging, the World Health Organization (WHO) has proposed measures to develop and maintain the functional capacity for healthy aging [2]. As a symbol of age-friendliness, green outdoor spaces characterize age-friendly cities that call for improving the quality of life of older adults by optimizing opportunities for health, participation, and safety [3]. Urban parks are common public green spaces in cities, which are important environments that promote healthy aging [3]. Urban parks meet the public's needs for places that are open, free, and close to nature and are a major place for older urban residents to engage in activities [4,5].

Research has shown that urban parks have many health benefits for older adults. Because most older adults prefer to stay at home [6], the role of urban parks near where older adults live is particularly important. Firstly, they provide older residents with access to the natural environment, which helps older adults gain positive physical and mental benefits [7–11]. Secondly, urban parks provide spatial places for doing physical activities. On the one hand, they enhance the level of physical activity of older adults to keep fit and reduce the risk of illness. Moreover, leisure activities in urban parks can help alleviate loneliness, boredom, and unhappiness in older adults [12–14]. Activities in parks can enrich

the daily lives of older adults, improve their quality of life, and enhance their subjective wellbeing [15–17]. Urban parks also provide a social environment for older adults to connect with other park users, enhancing social connections while promoting multiple forms of social interaction [18–21]. Collectively, the benefits of urban parks for older adults are physical, mental, and social health.

However, although these studies have explored the use of urban parks and their direct or indirect health benefits, they have mainly considered the health benefits of older adults' physical activity from the objective perspective of the researcher, using quantitative or experimental research methods [10,22,23]. They have paid less attention, from a qualitative research perspective, to the actual leisure experiences of older adults and their real feeling of benefits from urban parks [24]. Obviously, there are differences in the leisure benefits expected by older adults with different characteristics, mainly in terms of gender, age stage, social status, and even ethnic background [25,26]. There is therefore a need to explore the benefits that older adults themselves expect to derive from leisure activities in Asian countries' urban parks [14].

Despite the benefits of leisure participation in urban parks, older adults choose to partake or not partake in leisure activities due to a variety of considerations or concerns, which is what we call leisure constraints. They refer to numerous factors that limit leisure preferences or impede leisure participation [27]. The model of leisure constraints proposed by Crawford et al. is widely accepted; it classifies leisure constraints into three categories: intrapersonal, interpersonal, and structural [27,28]. Intrapersonal constraints generally include hobbies, physical condition, and body type. Interpersonal constraints mainly include family, neighbors, and friends, while structural factors include time, cost, venue facilities, and safety [29,30]. Deepening empirical research, scholars have found that leisure constraints do not have a fixed hierarchical order, and the degree of influence of constraints varies from person to person, from event to event, and are interrelated [31–33]. Therefore, it is necessary to conduct research on leisure constraints for different leisure activities and for specific population groups.

While some studies have explored common constraints on the public's access to urban parks, such as lack of time, family responsibilities and obligations, public transportation, park facilities, and park accessibility [34–37], scant research has been conducted on constraints on older adults' access to parks, as well as constraints they face inside parks [38]. Some studies have focused on factors that influence older adults' use of parks, but they have neglected the subjectivity of older adults in responding to leisure constraints in parks [39–41]. The exploration of such negotiation strategies has also been a relevant topic in the study of older adults' leisure [14]. Leisure constraint negotiation reflects the initiative of people when facing constraints [42]. Various scholars have extensively studied such negotiation strategies. Jackson et al. (1993) classified negotiation strategies into cognitive strategies (e.g., increasing confidence, ignoring problems), which focus on changing the perception of constraints, and behavioral strategies (e.g., skill learning, interpersonal coordination), which reduce the impact of constraints through specific behavioral changes.

In China, urban parks are the most popular outdoor recreational space for older adults [43]. China, with its sizable population, has seen a steady decrease in the rate of population increase in recent years, whereas the population's aging has continued to increase. Data from China's seventh national census show that 18.7% of the population is at least 60 years old or older, up 5.44% from 2010 [44]. The United Nations (UN) forecasts that by 2050, China's population aged 60 and above will reach 33.9%. In 2030, China will be aging faster than any other nation [45].

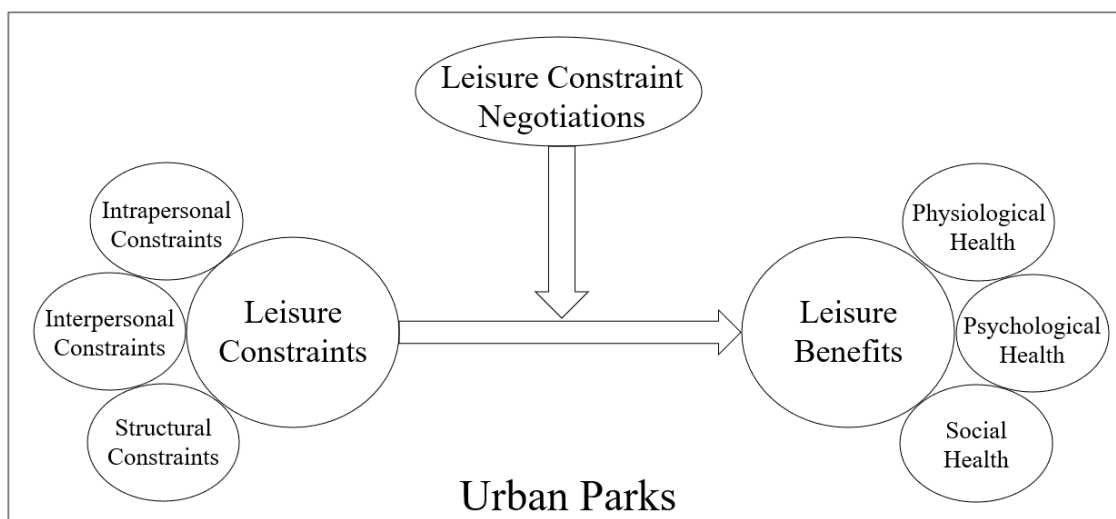
Although the Chinese government has made investments in nursing homes and the pension system, there is still a significant lag in outdoor leisure facilities for older adults when compared to more developed countries [46]. The Chinese government still pays relatively little attention to the daily leisure of older adults. In addition, due to the deterioration of physical functions and social relevance, older adults' engagement in leisure activities is constrained by individual, societal, economic, and family issues [47]. While

this has been extensively researched in Western societies, relatively little research has been conducted in Asian countries, especially in China, although these are countries with a large aging population. Several studies have pointed out the significance of urban parks for healthy aging [4,48,49], but little research, from the subjective perspective of older adults, focuses on their actual needs and leisure constraints concerning urban parks [49].

We use a qualitative approach to exploit the role of urban parks in healthy aging, because it is necessary to understand what expectations older adults have regarding the use of urban parks and what constraints they face while using them, and the use of qualitative research allows for a deeper and more comprehensive understanding of the phenomenon [50]. Based on the case of China, this study focused systematically on the benefits, constraints, and negotiations as perceived by older adults while visiting urban parks. This helps enrich the body of research on urban parks and healthy aging and complements the case based on Asian countries to provide a scientific basis for the development of more age-friendly park planning and leisure policies.

Therefore, based on the current research review, this study was based on the research framework illustrated in Figure 1 and focused on the following questions:

- (1) What are the main benefits of urban parks perceived by older adults?
- (2) What are the constraints that limit older adults' access to urban parks?
- (3) What are the constraints older adults encounter when they are in parks?
- (4) How do older adults address these constraints?



**Figure 1.** Research framework.

## 2. Materials and Methods

### 2.1. Study Site

Urban Parks and their surrounding communities in Guangzhou, China, were selected as the study site (Figure 2). Located in southeastern China, Guangzhou is the center city of the Guangdong–Hong Kong–Macao Greater Bay area and one of the four largest cities in China. At the end of 2021, Guangzhou had a total population of 18.81 million, with 18.27% aged 60 and above [51]. Guangzhou has the typical characteristics of a large city in China, so it is representative as the case city. From the perspective of regional population aging in Guangzhou, the degree of population aging in the central area is much higher than that in the suburbs (i.e., Liwan District (29.31% aged 60 and above), Yuexiu District (27.23%), and Haizhu District (26.72%) have already entered the stage of moderate aging, and Tianhe District (14.11%) has entered the stage of mild aging) [51]. Therefore, the central area of Guangzhou is the focus of this study.



**Figure 2.** The location of study sites.

According to the Standard for Classification of China's Urban Parks (CJJ/T85-2017), comprehensive parks are public parks with larger green spaces capable of supporting richer outdoor recreational activities [52]. Following this standard and considering the purpose of this study, the study sites we selected have these characteristics:

- (1) Surrounded by communities;
- (2) Free to enter;
- (3) Has lots of green space and various activity facilities;
- (4) Easily accessible;
- (5) Representative of the diverse geographic locations.

Four comprehensive parks in four districts of the central city of Guangzhou were selected as the research object: Liwan Lake Park (27.95 hectares), Yuexiu Park (64.35 hectares), Tianhe Park (70 hectares), and Xiaogang Park (17.03 hectares). Yuexiu Park is a municipal first-class park, and the other three parks are district first-class parks. Accessibility is an important factor for older adults to use parks [40,53]. Surrounded by a large number of communities within 15 min walking distance, these parks are all free to enter and have lots of green space and various activity facilities with convenient transportation. They are the most important places for the surrounding elderly to carry out outdoor leisure activities.

To verify the constraints on older adults' access to the parks, we conducted research regarding older adults visiting parks as well as older adults in the neighborhoods surrounding the parks who rarely or never visit the parks. Most of the interviewees lived in neighborhoods near parks. In addition, it should be noted that the focus of this study is to explore the common features of the elderly engaged in leisure activities (Figure 3) in comprehensive parks, rather than paying attention to differences.

## 2.2. Participants, Data Collection and Analysis

This study adopted a qualitative research method of in-depth interviews, which is more flexible and explanatory, as well as allowing for a better understanding the interviewees' thoughts and emotional reactions; in addition, it allows the interviewees to fully express their views and opinions while comparing with other qualitative methods [50].





**Figure 3.** (a,b) The leisure activities of older adults in parks.

Research subjects were retired older adults recruited in the field. In China, the statutory retirement age is 60 for men (in some special positions, the retirement age is 55) and 50 for women, although many women work until the age of 55 before applying for retirement [54]. Therefore, the research object of this paper consists of adults aged 55 or older.

After a presurvey in February 2019, we found that most adults over 70 had limited education, and many of them were illiterate, which made a large questionnaire inadequate. Therefore, in this research, we used in-depth oral semi-structured interviews, which comprised both open-ended and close-ended questions, including but not limited to the following:

- (1) What benefits did you expect from your visits to the parks?
- (2) What constraints did you perceive when you were in parks?
- (3) What corresponding strategies did you adopt when you confronted such constraints?

Interviewees who had never been to parks or rarely visited parks were additionally asked about their limitations to visiting parks.

In the selection of the sample, we used quota sampling and convenience sampling methods to select 30 older adults (including 25 park visitors and 5 community residents) in each of the four study sites according to the distribution of gender and age. In addition, through the presurvey, it was found that there were a few older adults who did not go to the park; therefore, the principle of information saturation was applied in actual research to determine when to terminate the interview. The actual number of interviewees involved in each study site was about 25–26 people.

To ensure the smooth progress of the interviews, we trained a team of 12 interviewers composed of undergraduates majoring in tourism management in groups of 2 or 3 to avoid personal bias. We audio-recorded the interviews according to the interviewees' wishes (only 5 interviewees refused to be audio-recorded in the end), and later transformed into a transcript; the interpretation of the interview content was discussed and integrated by both authors. In addition, a PhD student was invited to conduct a recheck to confirm that there was no personal bias. In case some interviewees did not allow audio recording, all interviewers prepared a paper outline of the interview and a portable pen in advance so that they could take notes promptly. In addition, we also asked interviewees to leave contact information so that we could contact them one week after compiling the interview transcripts to check and confirm their answers. On average, it took about 40–80 min to complete an interview. All interviewees were informed of the purpose of the study and relevant principles, that participation was voluntary, and participants could withdraw at any time, as well as they would be paid 100 yuan (about USD 15) with the assurance of confidentiality after finishing the interview. Lastly, Rost Content Mining 6.0 (Rost CM 6.0) is a commonly used text analysis software in China. Compared with other tools, it is more suitable for analyzing texts in Chinese [55–57]. Therefore, we used Rost CM 6.0 to analyze the word frequency of the interview transcripts.

The specific research process was divided into three stages. The first stage was conducted in April 2019, when 68 participants were interviewed. Due to the outbreak of COVID-19 in early 2020, the second stage was conducted on 16 individuals in September 2020 to explore whether the pandemic would affect the study findings. To ensure the validity and reliability of the data, in March 2023, after the COVID-19 restrictions were lifted, we conducted a third stage of supplementary research on 18 new older adults and also on a sample of 10 of the original interviewees to confirm that their previous views remained unchanged.

Ultimately, 102 interviews were deemed valid based on the validity and saturation of the data. The four trustworthiness criteria of credibility, confirmability, dependability, and transferability proposed by Lincoln and Guba were used to guarantee the rigor and credibility of the data [58]. Credibility was supported via investigator, theoretical, and member checking. Confirmability was supported by 10 interviewees who confirmed that we had accurately captured the views as they understood them. Transferability was ensured by abundant data collection and meticulous description. Dependability was supported by other researchers not associated with this study who read and commented on the findings as proposed by the core research team.

### 2.3. Ethical Considerations

This study was conducted according to the guidelines of the Declaration of Helsinki and approved by the Research Ethics Committee of South China Agricultural University (approval code 2023218, 23 February 2023). Informed verbal consent was obtained from all interviewees involved in this study.

## 3. Results

### 3.1. Characteristics of the Sample

The study interviews involved a total of 102 participants. Ninety participants (codes GY01–GY90) who engaged in leisure activities in parks were interviewed either inside the park, at the park entrance, or at a nearby cafe. Twelve participants (codes SQ01–SQ12) were residents of nearby communities who never or rarely went to parks, and their interviews were conducted in their communities.

From the sample data (Table 1), the ratio of gender was close to 1:1, with a predominance of 60–69-year-olds (65.69%); the majority of older adults (74.51%) had an educational level of junior high school and below. In terms of living situation, most older people lived with their families (77.45%), 6.86% lived alone, and 9.81% who had physical limitations, lacked mobility, and were dependent on the care of others, lived with a caregiver. Most of the elderly visited parks more frequently (86.27%, four or more times per quarter), but there were still a few people who had rarely or never been to parks (1.96%, one or fewer times per quarter). Overall, the sample data were representative.

### 3.2. Qualitative Analysis

Word frequency analysis using Rost CM 6.0 revealed that the framework of older adults' perceptions of the benefits and constraints of parks were consistent with previous studies, although there were some minor differences, as shown in Table 2 [14].

Leisure benefits were mainly reflected in three dimensions: physical, psychological, and social, but the characteristics of each specific dimension differed somewhat from studies that focused on Western older adults; for example, through quantitative analysis, Ru Zhang found that the greatest perceived benefit for older Germans in the park was psychological health (i.e., efficacy, enjoyment) [59]. In this study, the physiological benefits were the most prominent, at 51.75%. Constraints were mainly internal, interpersonal, and structural, with structural constraints being the most significant, accounting for 50% of the total.

**Table 1.** Characteristics of the Sample.

Variable		Frequency	Ratio
Gender	Male	50	49.02%
	Female	52	50.98%
Age	55–59	26	25.49%
	60–64	44	43.14%
	65–69	23	22.55%
	70 and above	9	8.82%
Education	Junior high school and below	76	74.51%
	High school (college) to undergraduate	23	22.55%
	Postgraduate and above	3	2.94%
Living situation	Living alone	7	6.86%
	Living with family	79	77.45%
	Living with friends	6	5.88%
	Living with a caregiver	10	9.81%
Frequency of visits to parks	1 or fewer times per quarter (rarely/never)	2	1.96%
	2–3 times per quarter	7	11.77%
	4–5 times per quarter	41	50.98%
	6 times or more per quarter	23	35.29%

**Table 2.** Frequency of perceived benefits of leisure words.

Benefit Perception	Keywords	Frequency	Ratio	Constraint Perception	Keywords	Frequency	Ratio
Physiological benefits	Improving/maintaining physical condition	68	29.82%	Intrapersonal constraints	Physical condition	42	17.50%
	Enjoying pleasant scenery, greenery, and fresh air	50	21.93%		Being shy	16	6.67%
Psychological benefits	Developing hobbies	8	3.51%	Interpersonal constraints	Acquaintance	24	10.00%
	Spending time	22	9.65%		Dialects	18	7.50%
	Feeling lively	12	5.26%		The need to do housework	20	8.33%
	Enhancing life satisfaction and happiness (good mood)	30	13.16%		The lack of others' help	24	10.00%
Social benefits	Taking a walk with family	8	3.51%	Structural constraints	Time	46	19.17%
	Talking to others	4	1.75%	Transportation	14	5.83%	
	Meeting more people	26	11.40%	Weather	22	9.17%	
				Safety, noise, management	14	5.83%	
Total		228	100%	Total		240	100%

### 3.3. Older Adults' Perceptions of the Benefits of Leisure in Parks

#### 3.3.1. Physiological Benefits

In this study, the perceived benefits of leisure in urban parks were most evident among older adults in terms of physiological benefits. This was somewhat due to the special medical situation in China. Because medical services in urban public hospitals were in short supply, it was extremely troublesome and expensive for the elderly to seek medical treatment. As a result, many older adults expected urban parks as crucial venues for strengthening the immune system and reducing the risk of illness, and they increasingly perceived the serious consequences of illness. The expectation of physiological benefits was what initially motivated them to visit parks for recreation. However, the rapid development of China's aging population did not match the speed of development of public facilities such as health care and leisure services, and most older adults lacked opportunities and places for leisure and fitness. Most communities, especially old town areas, lacked open spaces and good natural environments for older adults to engage in leisure activities, making urban parks an important place to do so.

*“There are no suitable venues for activities near my home. I like the promenade here, with the guardrails, so I can grab and walk well, (to help) with my rehabilitation.”* (GY15, male, 65 years old)

During this study, it was found that a certain proportion of older adults participated in physical activities in the park, such as Baduanjin, Tai Chi, square dance, and sports like badminton. Participants indicated that they felt more physically relaxed after performing these activities.

*“(I have) Many diseases, so I come here to dance in the square. It is good for my heart, blood (circulation) ..... or else I would feel terrible.”* (GY28, male, 81 years old)

It was evident that older Chinese people perceived the benefits of physical health in park recreation very clearly, and they even treated the park as a free outdoor fitness place, with high expectations about its healing properties.

### 3.3.2. Psychological Benefits

Emotional relief, relief from loneliness, self-identity, and integration into the city were the benefits that older Chinese people perceived about leisure in parks. A particular characteristic of Chinese older adults was their perception of integration into the city.

As one of the largest cities in China, Guangzhou attracted many nonlocals, and a large proportion of older adults in the city who had settled with their children. These older adults were often from less developed or rural areas of China and were prone to feeling out of place when they arrived in a new city. The park provided a good outdoor space for these older adults to relax and adjust mentally, being an outlet to integrate into the big city so that release their psychological stress.

*“When I first came to Guangzhou, I was really lonely. I didn’t know anyone around me except my son, and I was getting sick at home. After I moved here, whenever I have time, I go for a walk in the parks, look at the flowers and trees, dance, and chat with others, and find that there are many people like me. I felt much more relaxed when I went home after walking around the park. I didn’t feel as helpless as when I first came here, and I think I am slowly integrating into Guangzhou.”* (GY12, female, 60 years old)

Benefits such as relief from loneliness and emotional wellbeing were common to most older adults (91.18%).

*“It’s no fun to watch TV alone at home, so I come to the park to meet people, take a walk, and get some fresh air, I feel that time passes quickly and I feel much happier, otherwise I always feel very lonely at home.”* (GY05, female, 70 years old)

Older adults also gained a sense of self-identity through leisure participation. In big cities, with the erosion of neighborhood care values and the nuclearization of the family, older adults developed a sense of social disengagement. City parks, while providing leisure opportunities, helped older adults to gain confidence in their leisure activities and find their identity and worth.

*“As the captain of the dance team, I am of course a bit proud of myself, so I do come to the park every day. I don’t feel safe any day if I don’t come.”* (GY14, female, 70 years old)

### 3.3.3. Social Benefits

Some studies have pointed out that urban retirees have a more active role in social activities, and their identification with people who share the same leisure topics is a potential factor in happiness and satisfaction [16]. Older adults were able to make new friends through park activities. Due to the collectivism in traditional Chinese culture, most older adults enjoyed a lively environment. Urban parks had interactive spaces that could accommodate many people, so older adults could participate in group activities, communicate with others, meet new friends, expand their social circles, and break interpersonal constraints.



*"I came to Guangzhou three years ago because I had to help take care of my grandchildren. At first, I was very uncomfortable because I couldn't speak Cantonese, and my neighbors didn't know or greet me; after I came to the park, I slowly got to know many friends."* (GY06, female, 70 years old)

Many older adults noted that one of the purposes of coming to the park was to chat with other older adults, maintain original social relationships, or gain new ones. An area in Tianhe Park was often filled with older adults in wheelchairs who were not able to exercise but chat with others in a similar situation as a way of seeking a sense of belonging.

*"The happiest part of the day is coming here, I'm too old to go anywhere, so I can only talk to my old friends here. Here is our 'base'."* (GY07, male, 65 years old)

It is worth noting that during the COVID-19 epidemic, the travel needs of the elderly were difficult to achieve due to China's control policies and the risk of infection. During this period, urban parks have become the most important place for outdoor leisure activities of elderly. Although many people avoided going out during this period, urban parks were still considered to be a relatively "safe" place:

*"I can't go anywhere right now, let alone traveling. However, it's impossible to stay at home all day, and a walk to the park is still needed. The air is good in the park and it's not too crowded, so it's still safe."* (GY81, male, 63 years old)

Through interviews, it was also found that the frequency of visits to parks by the elderly also decreased during the epidemic, but compared with other outdoor activities, visits to parks were less affected, and urban parks were even placed on greater expectations for benefit, particularly in terms of exercise and enhancing immunity:

*"I hope to get some exercise in the park, it's easier to get infected if you're too weak, and even if they're all infected, those in good health will recover faster. That's why I've been insisting on exercising inside the park, hoping to boost my immune system."* (GY73, female, 65 years old)

#### 3.4. Constraints and Negotiation of Older Adults' Leisure in Parks

Analysis of the interview data identified three factors that limited older adults' use of parks, including intrapersonal, interpersonal, and structural factors.

##### 3.4.1. Intrapersonal Constraints

Intrapersonal constraints refer to psychological states and attributes that may influence an individual's leisure preferences [60]. For example, physical health status and self-esteem were the most frequently mentioned by interviewees in this study (92.16%).

For senior citizens, physical health was the main leisure constraint. There was a high degree of passivity in their participation in park leisure. In addition, physical reasons were an important factor limiting the senior population from visiting parks. In interviews with older adults outside of parks, a significant proportion of those over 75 mentioned physical constraints, and the way they coped with such constraints was often by seeking social support.

*"Being sick, I am afraid to go to the park alone. The park is too big, so I will get tired easily with a short walk before I arrive there. I usually have to get a nanny to go with me."* (GY22, female, 78 years old)

Most older adults (79.41%), however, chose alternative forms of leisure that suited their health conditions.

*"With high blood pressure, I can't exercise vigorously, so I come here to exercise on the exercise equipment, it's good for my health."* (GY23, female, 58 years old)

"Self-esteem" was also one of the constraints on leisure for older adults. They needed a sense of social acceptance and to be recognized by others for the activities they were good at. When they thought that they could not participate well in an activity in which they were

really interested, they tended to first acquire the needed skills acquisition, e.g., interviewee GY25, who enjoyed square dance but could not keep up with others' moves, chose to watch, and learned before looking for the right opportunity to participate.

*"If you can't dance well, just don't dance, don't make a fool of yourself out there ..... I'll watch first and then join them when the moves are more familiar, then I can keep up and not be laughed at."* (GY25, female, 64 years old)

### 3.4.2. Interpersonal Constraints

Interpersonal constraints relate to social interactions between individuals and others. The main interpersonal constraints on older adults visiting parks for leisure activities in Guangzhou were "lack of acquaintances", "dialect barriers", and "family expectations".

Although most older adults (81.37%) found it "more fun" to go to a large urban park for leisure activities, some would be less likely to participate in them because of the lack of acquaintances.

*"I usually come with people I know: it is more fun if you have acquaintances. If my friends who often come together are not available, I won't come so often. It's not much fun without acquaintances."* (GY27, female, 60 years old)

At the same time, due to the large number of nonlocals in Guangzhou, which is the result of China's rapid urbanization, the population is characterized by diversity. There were differences in the dialects from various places, and many local older adults in Guangzhou in particular, spoke Cantonese, so there were certain barriers to communication between nonlocals and local older adults, which to some extent made them feel interpersonal constraints.

*"I don't have any new friends because I've only been here a short while and the dialect in Henan is not quite the same. I think if I come more frequently and I make new friends, I will hopefully meet some fellow villagers."* (GY26, female, 63 years old)

To cope with the constraints of a lack of acquaintances and dialect barriers, some older adults adopted a cognitive adaptation strategy, converting their thinking to: "more visits, more friends", while a small number adopted a "less-communication or no-communication" approach to reducing the impact of those constraints.

At the same time, family expectations were one of the important leisure constraints for older adults. It was common in China for older adults to take care of their grandchildren, and many older adults (72.55%) interviewed expressed that they needed to take on some family responsibilities like this. Respondents in the community, although they wanted to do leisure activities in the park, also preferred to do so in a closer place due to the need to take care of their grandchildren, which was a way of achieving leisure participation through spatial and temporal adjustment:

*"We usually need to buy food and cook and take care of the kids, so we don't spend much time in the park every time we go there. Of course, we want to stay longer, but we can't just enjoy ourselves. We come to Guangzhou mainly to help the children. It's okay to relax in the neighborhood."* (GY24, female, 66 years old)

### 3.4.3. Structural Constraints

Structural constraints are non-interpersonal external environmental factors. The main structural constraints for older adults were social support, time, transport, weather, and park management. Apart from park management, all other aspects were important constraints on whether older adults, especially those in their advanced years, go to parks for leisure.

Social support from others, like friends and family, helped older adults to participate actively in leisure [61–63]. In this study, lack of social support, on the other hand, emerged as a significant constraint to older adults' leisure involvement, most notably for those who were in their advanced years. Unlike the interpersonal constraint of being unaccompanied,

social support was more likely to come from family, friends, society, and other parties. Older adults who had no acquaintances other than family members or caregivers tended to not visit the parks because of their limited mobility.

*“I want to go, but I can’t go without someone to accompany me.” (SQ02, male, 82 years old)*

Facing this structural constraint, some older adults negotiated through interpersonal coordination (i.e., seeking help from others), but often the success of this negotiation was only fortuitous, and the lack of social support at government and societal levels made these negotiations even more limited.

*“Sometimes I get too bored at home and call relatives who are free to come and take me to the park. Sometimes I also ask for help from volunteers in the community, but only if they happen to be free, so most of the time I still can’t go to the park.” (SQ01, female, 89 years old)*

In addition to social support, time was one of the most important structural constraints for older adults to visit urban parks, but in most situations, this limitation just affected their length of stay in the park. Respondents in the survey did not have a lot of time available for leisure activities due to the need to be busy with household chores, taking care of grandchildren, or other things, and subsequently, they coordinated this through spatial and temporal accommodation. Spatial accommodation was mainly the choice for those who do not or rarely go to parks, as demonstrated by the choice of leisure spaces in closer proximity to leisure activities. This was consistent with previous research [64]. Temporal accommodation, on the other hand, was seen in those who go to parks for leisure despite time constraints, and they tended to coordinate this by reducing the time spent in parks or the frequency of their activities.

*“The main reason for older adults like us is that we really don’t have enough time (especially when taking grandchildren) ... It takes twenty minutes to walk to the park with our grandchildren. We usually don’t have time to go there until 9:30 am, and when we get there it’s almost 10 am, and at 10:30 am we have to rush back to prepare our grandchildren’s lunch” (GY30, male, 75 years old)*

Related to time factors, transportation was also a factor that affected older adults’ access to parks. Older adults tended to choose parks that were closer to them to reduce the time spent on transportation. Accessibility to the park and availability of direct public transport were factors that seniors considered.

*“I came by bus, 20 min, it’s quick by BRT, and it’s free in Guangzhou for over 65. If there were no direct bus route, then I’m sure I wouldn’t come.” (GY05, female, 70 years old)*

Weather was also a factor that affected older adults’ ability to visit city parks. As Guangzhou has hot summers with thunderstorms, it has a significant negative impact on the quality of their leisure if the park has limited sheltered space. For most older adults (92.16%), however, only extreme weather and prolonged heavy rainfall would prevent them from visiting parks.

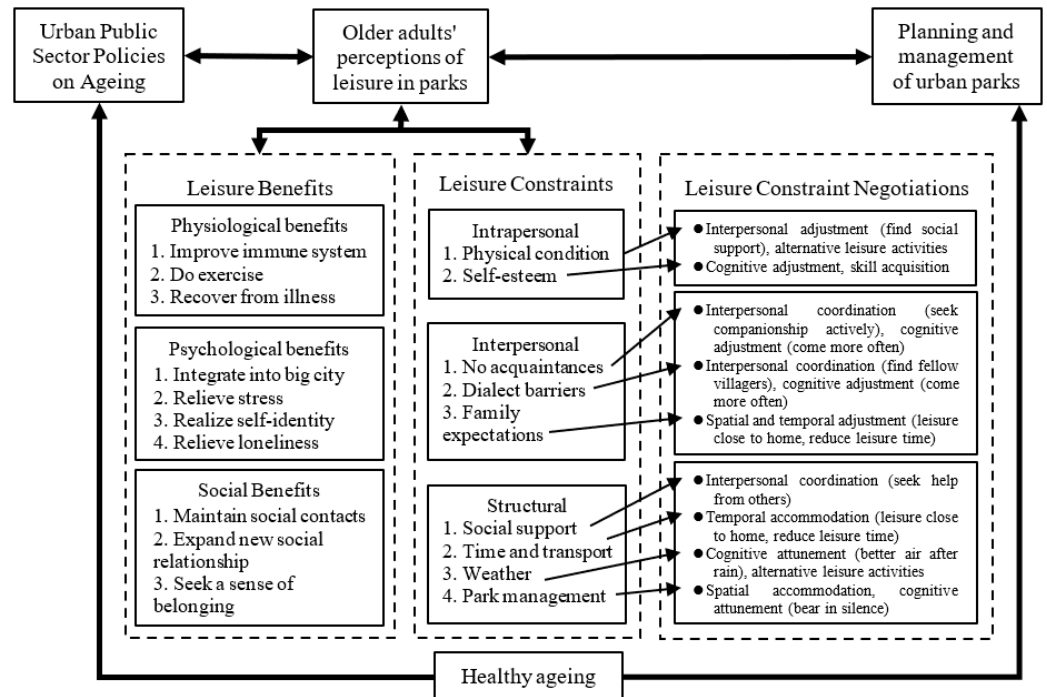
Structural constraints associated with park management included sanitation management such as smoking in nonsmoking areas and pets defecating in the open, noise from activities and construction, safety management including arguments and fights in the park as well as fraudulent people entering the park and posing a threat to other people engaged in leisure activities, and the infrastructures being mainly inadequate in terms of the construction of toilets and the provision of leisure facilities.

Unlike Hung Kam’s study of parks in Hong Kong, in Guangzhou’s case, older adults were more inclusive of the structural constraints associated with park management [14]. In most cases, they went to the park in spite of these constraints, and they either turned to a cognitive strategy of silent tolerance or a behavioral strategy such as “spatial shifting” to cope, as interviewee GY31 did.

*“I rarely take part in choruses; I like best to play with 2 or 3 persons. If the music is too loud, I will walk anywhere where it’s less loud.” (GY31, male, 70 years old)*

#### 4. Discussion

This study examined the perceived benefits, constraints, and negotiation mechanisms of older adults’ visits to urban parks and made the following findings (Figure 4).



**Figure 4.** Negotiation mechanisms for park recreation benefits and constraints based on older adults’ perceptions.

The findings of this study further support research based in Western countries on the benefits of visiting parks for older adults in three main areas: physical, psychological, and social interaction [14,64]. However, from the perspective of the specific manifestations of health benefits, this study differed from the findings in Western countries by further new specific explorations of perceived benefits [65].

1. **Physiological benefits:** In China’s case, older adults had the highest expectations of the physical health benefits of urban parks; in contrast to previous studies that emphasized the pure relaxation function of parks [4,8,48], many older adults even perceived urban parks as a place to “boost immunity” and “cure” diseases. This was largely attributed to the inadequacy of the healthcare system and public healing facilities for older adults in urban China.
2. **Psychological benefits:** Consistent with previous studies, urban parks provided a place for older adults to spend time, relieve stress, and relax [7,8,48,66,67]. But since many older adults in China’s big cities were nonlocal, urban parks also provided a place for them to integrate into the city, and because parks also served as a location for cultural and recreational activities, they also provided a chance for them to learn leisure skills, demonstrate their talents, and develop their sense of self-identity; these are important findings that differ from the Western study, where efficacy and enjoyment were cited as the most significant benefits [59].
3. **Social benefits:** In the case of China, leisure participation in the park is conducive to the maintenance of old social networks, the development of new social relationships, and even the accumulation of social capital. Particularly in Guangzhou, a city with a large

nonlocal population where many older adults have moved with their children, urban parks provide a space for them to meet new people and even find fellow villagers.

In brief, the perceived benefits of parks for older adults are often interrelated through leisure activities, which ultimately lead to a diversity of benefits that can contribute significantly to healthy aging. Especially in the post-pandemic era, the elderly have become more aware of their own health status, and they also have more expectations of urban parks in terms of physical and mental healing, improving immunity, etc. Therefore, in the post-pandemic era, it is necessary to pay more attention to how urban parks can better play a role in these aspects.

The main aspects of older adults' perceived constraints to visit the park are intrapersonal, interpersonal, and structural factors. These three dimensions are similar to those of previous studies, but the specifics are different [27,28].

- (1) **Intrapersonal constraints:** Intrapersonal constraints are mainly reflected in physical health and self-esteem. The physical condition constraint is particularly pronounced in the case of people of advanced age, which directly influences whether they will visit the park or not.
- (2) **Interpersonal constraints:** In the specific sociocultural context of China, lack of friends, dialect barriers, and family expectations were all important constraints. The lack of friends mainly constrained the leisure behavior of older adults who preferred to visit parks in groups. Dialect barriers were found to be a major constraint for newcomers, affecting their leisure participation in the park but not their attendance. Family expectations are reflected in older adults living with their children. Their kids usually place expectations on them to do household chores or assist in caring for grandchildren, which affects the frequency and length of their visits to the park.
- (3) **Structural constraints:** Structural constraints were linked to the first two, including social support, time, transport, weather, and park management. Of these, social support, transport, and weather had the most significant impact on those of advanced age, with social support and accessibility having a direct impact on whether they visited the park or not. While factors of park management were important in previous studies of older adults' leisure constraints [14], it was found that most older adults chose to accept these constraints silently in Guangzhou, as they affected the quality of their leisure but did not affect their visits to the park, mainly because of the scarcity of other public leisure facilities. Furthermore, structural constraints were the most important factor influencing whether older adults went to parks for leisure in the Chinese case, which diverges from the outcomes of other studies where these constraints had the least significant impact [27,28].

The differences in leisure perception of benefits and constraints between China and the West are obvious. In addition to different social backgrounds and national policies, the reasons for these differences between Chinese and Western older adults' perceptions are more related to China's specific cultural background (e.g., Chinese traditional family structure, China's rapid urbanization, a public medical system with demand exceeding supply, and so on). However, the difference between Chinese and Western perception is complex, and a deeper and more comprehensive comparative investigation could be carried out in the future.

In the negotiation of the leisure constraints, older adults who went to parks for leisure actively adopted various negotiation strategies.

- (1) **Intrapersonal constraints negotiation:** Older adults were more motivated to satisfy their leisure needs through various strategies such as cognitive adaptation, interpersonal coordination, skill acquisition, and seeking alternative leisure activities.
- (2) **Interpersonal constraints negotiation:** Older adults usually actively adopted spatiotemporal and cognitive adaptation to maintain leisure participation, but in negotiating family expectations, older Chinese tended to prioritize family at the expense of personal leisure opportunities.



- (3) Structural constraints negotiation: Older adults were rather passive in their negotiation strategies; they might choose alternative leisure activities or tolerate uncomfortable environments in the park, among other cognitive or spatial adaptations [64]. Older adults who rarely or never went to parks for leisure often did not adopt active negotiation strategies and simply gave up going to the park because they did not have sufficient capacity to negotiate on their own, which was most evident in people of advanced age.

This study showed the perceived benefits, leisure constraints, and negotiation mechanisms of visiting urban parks among Chinese older adults in detail through a case study in Guangzhou, China. This study enriches the body of research on healthy aging and parks, and remedies the lack of attention paid to the Asian older population in the field of urban park recreation research. It has important implications for the planning and management of age-friendly parks based on leisure benefits and leisure constraints:

- (1) For policymakers, local governments should pay more attention to the leisure needs of the elderly, not only for locals but also for immigrants. At the same time, they should specify age-friendly policies to effectively ensure the leisure rights of the elderly.
- (2) For city planners, they need to consider the reality and enhance the creation of parks near communities. Furthermore, urban planning should aim to meet the actual needs and reduce the constraints of senior citizens by constructing appropriate and accessible public leisure spaces. In the post-pandemic era, it is also necessary to strengthen the planning of urban parks in playing a role in physical and mental healing, as well as promoting physical activities of the elderly.
- (3) For recreational service providers, they should consider practical improvements of service and facilities for the elderly, such as installing more shelters in parks to alleviate the limitations of negative weather, providing sufficient accessibility facilities to meet the needs of disabled individuals or the elderly, and increasing the number of volunteers to provide leisure guidance and assistance to the senior citizens.

Giving enough attention to the perception of the elderly is a crucial prerequisite for building a sustainable senior citizen-friendly city. Besides the diversified benefits and the constraints on their leisure activities that have been pointed out by this study in urban parks, it is also essential to incorporate park design and planning that aligns with the needs of the elderly. The construction of senior citizen-friendly urban parks in the city enables the concept of sustainable development of senior citizen friendliness and green ecology to run through all aspects of urban policy formulation, service support, urban planning, and cultural promotion. Furthermore, it is important for promoting the harmonious development of healthy aging.

## 5. Conclusions

This study validated the physical, psychological, and social benefits of parks that have been mentioned in previous studies. It also revealed that in the specific sociocultural context of China, older adults expect more benefits from urban parks and that urban parks assume more healing functions. At the same time, there are many constraints on older adults' access to and activities in parks. The lack of outdoor recreational facilities for older adults in China's cities has led older adults to adopt a variety of negotiated strategies to address these constraints. Because older adults do not have enough alternatives to outdoor recreation, cognitive adjustment, spatiotemporal adjustment, interpersonal coordination, and skill acquisition are the most common means by which they negotiate their access to recreational opportunities in parks. However, the presence of constraints, particularly structural constraints, affects the quality of older adults' leisure and they should thus be a concern for the public sector.

In addition, many older adults of advanced age in this study were unable to visit parks due to a lack of social support. The urban public sector needs to pay more attention to the views and usage habits of older adults using parks and consider providing social support for senior citizens to visit them. Further, the urban public sector and park management

agencies should try to build more age-friendly parks based on the framework of the benefits and constraints of park recreation for older adults, in terms of aspects such as institutional design and planning, to enhance the role of urban parks in healthy aging.

The limitation of this study is that only one urban park and its surrounding communities were selected for an in-depth qualitative study. Future research could expand the sample size and use quantitative research methods to explore the relationships between different variables. Furthermore, regional differences could be further explored. For instance, there may be differences in the perceptions of older adults in urban or rural areas. Finally, the design of urban parks can be further explored in view of the preferences and needs of the elderly in the context of China.

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## References

1. United Nations; Department of Economic and Social Affairs; Population Division. World Population Prospects 2022: Summary of Results. Available online: [https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/wpp2022\\_summary\\_of\\_results.pdf](https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/wpp2022_summary_of_results.pdf) (accessed on 23 December 2022).
2. World Health Organization. *Decade of Healthy Ageing: Baseline Report*; World Health Organization: Geneva, Switzerland, 2020.
3. World Health Organization. *Global Age-Friendly Cities: A Guide*; World Health Organization: Geneva, Switzerland, 2007.
4. Thompson, C.W. Urban open space in the 21st century. *Landsc. Urban Plan.* **2002**, *60*, 59–72. [[CrossRef](#)]
5. McCormack, G.R.; Rock, M.; Toohey, A.M.; Hignell, D. Characteristics of urban parks associated with park use and physical activity: A review of qualitative research. *Health Place* **2010**, *16*, 712–726. [[CrossRef](#)]
6. Liu, J.-E.; Tian, J.-Y.; Yue, P.; Wang, Y.-L.; Du, X.-P.; Chen, S.-Q. Living experience and care needs of Chinese empty-nest elderly people in urban communities in Beijing, China: A qualitative study. *Int. J. Nurs. Sci.* **2015**, *2*, 15–22. [[CrossRef](#)]
7. Kaplan, R.S.-W.; Kaplan, S. *The Experience of Nature: A Psychological Perspective*; Cambridge University Press: Cambridge, UK, 1989.
8. Wen, C.; Albert, C.; Von Haaren, C. The elderly in green spaces: Exploring requirements and preferences concerning nature-based recreation. *Sustain. Cities Soc.* **2018**, *38*, 582–593. [[CrossRef](#)]
9. Meidenbauer, K.L.; Stenfors, C.U.D.; Bratman, G.N.; Gross, J.J.; Schertz, K.E.; Choe, K.W.; Berman, M.G. The affective benefits of nature exposure: What's nature got to do with it? *J. Environ. Psychol.* **2020**, *72*, 101498. [[CrossRef](#)] [[PubMed](#)]
10. Yue, Y.; Yang, D.; Van Dyck, D. Urban greenspace and mental health in Chinese older adults: Associations across different greenspace measures and mediating effects of environmental perceptions. *Health Place* **2022**, *76*, 102856. [[CrossRef](#)] [[PubMed](#)]
11. Szkopiecka, A.; Wyrwa, J.P.; Chrobak, G.; Kołodyńska, I.; Szewrański, S. Perceived Restorative Potential of Urban Parks by Citizens—A Case Study from Wrocław, Poland. *Sustainability* **2023**, *15*, 7912. [[CrossRef](#)]
12. Berger, B.G.; Motl, R.W. Exercise and mood: A selective review and synthesis of research employing the profile of mood states. *J. Appl. Sport Psychol.* **2000**, *12*, 69–92. [[CrossRef](#)]
13. Chi, I.; Chou, K.-L. Social Support and Depression among Elderly Chinese People in Hong Kong. *Int. J. Aging Hum. Dev.* **2001**, *52*, 231–252. [[CrossRef](#)]

14. Hung, K.; Crompton, J.L. Benefits and Constraints Associated with the Use of an Urban Park Reported by a Sample of Elderly in Hong Kong. *Leis. Stud.* **2006**, *25*, 291–311. [[CrossRef](#)]
15. Sugiyama, T.; Thompson, C.W.; Alves, S. Associations Between Neighborhood Open Space Attributes and Quality of Life for Older People in Britain. *Environ. Behav.* **2009**, *41*, 3–21. [[CrossRef](#)]
16. Zhang, W.; Feng, Q.; Lacanienta, J.; Zhen, Z. Leisure participation and subjective well-being: Exploring gender differences among elderly in Shanghai, China. *Arch. Gerontol. Geriatr.* **2017**, *69*, 45–54. [[CrossRef](#)]
17. Fjaestad, S.L.; Mackelprang, J.L.; Sugiyama, T.; Chandrabose, M.; Owen, N.; Turrell, G.; Kingsley, J. Associations of time spent gardening with mental wellbeing and life satisfaction in mid-to-late adulthood. *J. Environ. Psychol.* **2023**, *87*, 101993. [[CrossRef](#)]
18. Barnett, D.W.; Barnett, A.; Nathan, A.; Van Cauwenberg, J.; Cerin, E. Built environmental correlates of older adults' total physical activity and walking: A systematic review and meta-analysis. *Int. J. Behav. Nutr. Phys. Act.* **2017**, *14*, 103. [[CrossRef](#)] [[PubMed](#)]
19. Gaikwad, A.; Shinde, K. Use of parks by older persons and perceived health benefits: A developing country context. *Cities* **2019**, *84*, 134–142. [[CrossRef](#)]
20. Enssle, F.; Kabisch, N. Urban green spaces for the social interaction, health and well-being of older people—An integrated view of urban ecosystem services and socio-environmental justice. *Environ. Sci. Policy* **2020**, *109*, 36–44. [[CrossRef](#)]
21. Cunningham, C.; O'Sullivan, R.; Caserotti, P.; Tully, M.A. Consequences of physical inactivity in older adults: A systematic review of reviews and meta-analyses. *Scand. J. Med. Sci. Sports* **2020**, *30*, 816–827. [[CrossRef](#)]
22. Browning, M.H.E.M.; Rigolon, A.; McAnirlin, O.; Yoon, H. Where greenspace matters most: A systematic review of urbanicity, greenspace, and physical health. *Landsch. Urban Plan.* **2022**, *217*, 104233. [[CrossRef](#)]
23. Lin, D.; Sun, Y.; Yang, Y.; Han, Y.; Xu, C. Urban park use and self-reported physical, mental, and social health during the COVID-19 pandemic: An on-site survey in Beijing, China. *Urban For. Urban Green.* **2023**, *79*, 127804. [[CrossRef](#)]
24. Bustamante, G.; Guzman, V.; Kobayashi, L.C.; Finlay, J. Mental health and well-being in times of COVID-19: A mixed-methods study of the role of neighborhood parks, outdoor spaces, and nature among US older adults. *Health Place* **2022**, *76*, 102813. [[CrossRef](#)]
25. Tinsley, H.E.A.; Colbs, S.L.; Teaff, J.D.; Kaufman, N. The relationship of age, gender, health and economic status to the psychological benefits older persons report from participation in leisure activities. *Leis. Sci.* **1987**, *9*, 53–65. [[CrossRef](#)]
26. McPherson, B.D. Aging and leisure benefits: A life cycle perspective. In *Benefits of Leisure*; Venture Pub.: State College, PA, USA, 1991; pp. 423–430.
27. Crawford, D.W.; Godbey, G. Reconceptualizing barriers to family leisure. *Leis. Sci.* **1987**, *9*, 119–127. [[CrossRef](#)]
28. Crawford, D.W.; Jackson, E.L.; Godbey, G. A hierarchical model of leisure constraints. *Leis. Sci.* **1991**, *13*, 309–320. [[CrossRef](#)]
29. Son, J.S.; Kerstetter, D.; Mowen, A.J. Illuminating Identity and Health in the Constraint Negotiation of Leisure-time Physical Activity in Mid to Late Life. *J. Park Recreat. Adm.* **2009**, *27*, 96–115.
30. Liechty, T.; Yarnal, C.M. The role of body image in older women's leisure. *J. Leis. Res.* **2010**, *42*, 443–467.
31. McQuarrie, F.; Jackson, E.L. Connections Between Negotiation of Leisure Constraints and Serious Leisure: An Exploratory Study of Adult Amateur Ice Skaters. *Loisir Et Société/Soc. Leis.* **1996**, *19*, 459–483. [[CrossRef](#)]
32. Gilbert, D.; Hudson, S. Tourism demand constraints: A skiing participation. *Ann. Tour. Res.* **2000**, *27*, 906–925. [[CrossRef](#)]
33. Zanon, D.; Doucouliagos, C.; Hall, J.; Lockstone-Binney, L. Constraints to Park Visitation: A Meta-Analysis of North American Studies. *Leis. Sci.* **2013**, *35*, 475–493. [[CrossRef](#)]
34. Wong, K.K. Urban park visiting habits and leisure activities of residents in Hong Kong, China. *Manag. Leis.* **2009**, *14*, 125–140. [[CrossRef](#)]
35. Liu, H.; Li, F.; Xu, L.; Han, B. The impact of socio-demographic, environmental, and individual factors on urban park visitation in Beijing, China. *J. Clean. Prod.* **2017**, *163*, S181–S188. [[CrossRef](#)]
36. Guo, S.; Song, C.; Pei, T.; Liu, Y.; Ma, T.; Du, Y.; Chen, J.; Fan, Z.; Tang, X.; Peng, Y.; et al. Accessibility to urban parks for elderly residents: Perspectives from mobile phone data. *Landsch. Urban Plan.* **2019**, *191*, 103642. [[CrossRef](#)]
37. Dawson, L.; Elbakidze, M.; Kraft van Ermel, L.E.; Olsson, U.; Ongena, Y.P.; Schaffer, C.; Johansson, K.-E. Why don't we go outside?—Perceived constraints for users of urban greenspace in Sweden. *Urban For. Urban Green.* **2023**, *82*, 127865. [[CrossRef](#)]
38. Zhou, B.; Huang, M.; Li, C.-L.; Xu, B. Leisure constraint and mental health: The case of park users in Ningbo, China. *J. Outdoor Recreat. Tour.* **2022**, *39*, 100562. [[CrossRef](#)]
39. Kou, R.; Hunter, R.F.; Cleland, C.; Ellis, G. Physical environmental factors influencing older adults' park use: A qualitative study. *Urban For. Urban Green.* **2021**, *65*, 127353. [[CrossRef](#)]
40. Wang, S.; Yung, E.H.K.; Jayantha, W.M.; Chan, E.H.W. Elderly's intention and use behavior of urban parks: Planned behavior perspective. *Habitat Int.* **2023**, *134*, 102780. [[CrossRef](#)]
41. Onose, D.A.; Iojă, I.C.; Niță, M.R.; Vânău, G.O.; Popa, A.M. Too Old for Recreation? How Friendly Are Urban Parks for Elderly People? *Sustainability* **2020**, *12*, 790. [[CrossRef](#)]
42. Kay, T.; Jackson, G. Leisure Despite Constraint: The Impact of Leisure Constraints on Leisure Participation. *J. Leis. Res.* **1991**, *23*, 301–313. [[CrossRef](#)]
43. Lin, M.; Dong, E. Place construction and public space: Cantonese opera as leisure in the urban parks of Guangzhou, China. *Leis. Stud.* **2018**, *37*, 117–131. [[CrossRef](#)]
44. Jizhe, N.; National Bureau of Statistics of China. Main Data of the Seventh National Population Census. Available online: [http://www.stats.gov.cn/english/PressRelease/202105/t20210510\\_1817185.html#](http://www.stats.gov.cn/english/PressRelease/202105/t20210510_1817185.html#) (accessed on 1 January 2023).

45. Mo, L.; Wei, Y. *China's Demographic Dilemma and Potential Solutions: Population Aging and Population Control*; Springer: Singapore, 2020.
46. Song, R.; Jin, H.L.W.; Wu, J. *Annual Report on China's Leisure Development (2019–2020)*; Social Sciences Academic Press: Beijing, China, 2020; p. 279.
47. Shin, W. Analysis of the Life Satisfaction on the Leisure Constraints and Leisure Activities Participation of the Aged. *J. Tour. Ind. Stud.* **2011**, *5*, 32–45.
48. Dzhambov, A.M.; Dimitrova, D.D. Elderly visitors of an urban park, health anxiety and individual awareness of nature experiences. *Urban For. Urban Green.* **2014**, *13*, 806–813. [[CrossRef](#)]
49. Xie, B.; An, Z.; Zheng, Y.; Li, Z. Healthy aging with parks: Association between park accessibility and the health status of older adults in urban China. *Sustain. Cities Soc.* **2018**, *43*, 476–486. [[CrossRef](#)]
50. Chen, X. *Qualitative Research in Social Sciences*; Educational Science Publishing House: Beijing, China, 2000; p. 521.
51. Commission, G.M.H. *Guangzhou Elderly Population Data Book 2021*. Available online: [http://wjw.gz.gov.cn/gkmlpt/content/8/8722/post\\_8722218.html#562](http://wjw.gz.gov.cn/gkmlpt/content/8/8722/post_8722218.html#562) (accessed on 2 January 2023).
52. Li, F.; Yao, N.; Liu, D.; Liu, W.; Sun, Y.; Cheng, W.; Li, X.; Wang, X.; Zhao, Y. Explore the recreational service of large urban parks and its influential factors in city clusters—Experiments from 11 cities in the Beijing-Tianjin-Hebei region. *J. Clean. Prod.* **2021**, *314*, 128261. [[CrossRef](#)]
53. Bu, J.; Yin, J.; Yu, Y.; Zhan, Y. Identifying the Daily Activity Spaces of Older Adults Living in a High-Density Urban Area: A Study Using the Smartphone-Based Global Positioning System Trajectory in Shanghai. *Sustainability* **2021**, *13*, 5003. [[CrossRef](#)]
54. Office of the Leading Group of the State Council for the Seventh National Population Census. *China Population Census Yearbook 2020 (BOOK 2)*; China Statistics Press: Beijing, China, 2022.
55. Cong, L.; Wu, B.; Morrison, A.M.; Shu, H.; Wang, M. Analysis of wildlife tourism experiences with endangered species: An exploratory study of encounters with giant pandas in Chengdu, China. *Tour. Manag.* **2014**, *40*, 300–310. [[CrossRef](#)]
56. Xu, X.; Le, T.H.; Kwek, A.; Wang, Y. Exploring cultural tourist towns: Does authenticity matter? *Tour. Manag. Perspect.* **2022**, *41*, 100935. [[CrossRef](#)]
57. Yang, S.; Li, S.; Ye, X.; He, F. Content Mining and Network Analysis of Microblog Spam. *J. Conver. Inf. Technol.* **2010**, *5*, 135–140.
58. Lincoln, Y.S.; Guba, E.G.; Pilotta, J.J. *Naturalistic inquiry*; Beverly Hills, CA: Sage Publications, 1985, 416 pp., \$25.00 (Cloth). *Int. J. Intercult. Relat.* **1985**, *9*, 438–439. [[CrossRef](#)]
59. Zhang, R.; Duan, Y.; Brehm, W.; Wagner, P. Socioecological Correlates of Park-based Physical Activity in Older Adults: A Comparison of Hong Kong and Leipzig Parks. *Int. J. Environ. Res. Public Health* **2019**, *16*, 3048. [[CrossRef](#)]
60. Alexandris, K.; Funk, D.C.; Pritchard, M. The Impact of Constraints on Motivation, Activity Attachment, and Skier Intentions to Continue. *J. Leis. Res.* **2011**, *43*, 56–79. [[CrossRef](#)]
61. Sasidharan, V.; Payne, L.; Orsega-Smith, E.; Godbey, G. Older adults' physical activity participation and perceptions of wellbeing: Examining the role of social support for leisure. *Manag. Leis.* **2006**, *11*, 164–185. [[CrossRef](#)]
62. Orsega-Smith, E.M.; Payne, L.L.; Mowen, A.J.; Ho, C.-H.; Godbey, G.C. The Role of Social Support and Self-Efficacy in Shaping the Leisure Time Physical Activity of Older Adults. *J. Leis. Res.* **2007**, *39*, 705–727. [[CrossRef](#)]
63. Chen, F.; Dai, S.; Xu, H.; Abliz, A. Senior's travel constraint, negotiation strategy and travel intention: Examining the role of social support. *Int. J. Tour. Res.* **2021**, *23*, 363–377. [[CrossRef](#)]
64. Son, J.S.; Mowen, A.J.; Kerstetter, D.L. Interactive social cognitive model of leisure-time physical activity in mid to late life. *Am. J. Health Behav.* **2011**, *35*, 60–70. [[CrossRef](#)] [[PubMed](#)]
65. Orsega-Smith, E.; Mowen, A.J.; Payne, L.L.; Godbey, G. The Interaction of Stress and Park Use on Psycho-physiological Health in Older Adults. *J. Leis. Res.* **2004**, *36*, 232–256. [[CrossRef](#)]
66. Chiesura, A. The role of urban parks for the sustainable city. *Landsc. Urban Plan.* **2004**, *68*, 129–138. [[CrossRef](#)]
67. Yung, E.H.K.; Conejos, S.; Chan, E.H.W. Social needs of the elderly and active aging in public open spaces in urban renewal. *Cities* **2016**, *52*, 114–122. [[CrossRef](#)]

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