

After COVID-19: Urban Parks as Catalysts of Hope for the Common Good – The Costa Rican Case

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Abstract

Urban parks in Costa Rica, though limited in number, are widely frequented and have gained importance since the COVID-19 pandemic, with over half of visitors reporting increased use. This study investigates perceptions of metropolitan parks as spaces of well-being after the pandemic. Data were gathered in 2024 through walking interviews in the country's three largest metropolitan parks, differentiated by age groups, and analysed using thematic and geospatial methods. Findings reveal that parks are deeply valued for recreation, social interaction, and emotional support, especially among older adults and active users. However, concerns persist about safety and deteriorating infrastructure due to underfunding. The study underscores urban parks' vital role in fostering resilience, social connection, and collective well-being in post-pandemic urban life.

Keywords: post pandemic, urban parks, parks reappreciation, Costa Rica.

Introduction

During the COVID-19 pandemic, urban parks played a crucial role in supporting overall well-being and maintaining social connections, even amidst physical distancing measures (Powers, Pitas and Mowen, 2022). These green spaces offered a vital outlet for physical activity, stress relief, and safe social interaction during an unprecedented global health crisis. However, the extent to which parks can fulfil these roles effectively depends significantly on the quality of their infrastructure. Well-designed, accessible, and well-maintained facilities are essential for enhancing user experiences and encouraging frequent visitation. Moreover, diverse and inclusive infrastructure can support a wide range of recreational, social, and cultural activities, thereby meeting the varied needs of different community groups (Heckert and Bristowe, 2021).

Urban parks in Costa Rica are scarce but widely used by people of all ages. Following the COVID-19 pandemic, more than 50% of visitors to the country's main metropolitan parks reported an increase in their visitation frequency (Barrantes-Chaves, Centeno-Mora and Cruz-Zúñiga, 2024; Barrantes-Chaves, Cruz-Zúñiga and Centeno-Mora, 2024). This paper explores how their visitors perceived those places as agents of well-being, both before and after the pandemic, this is done through georeferenced walks with park's users (Evans and Jones, 2011; Barrantes-Chaves, 2025). The findings suggest that urban parks are highly valued for recreation and social interaction, particularly by older adults and individuals engaging in outdoor sports. Participants reflected on their experiences before and after COVID-19, highlighting how they have come to reappreciate these spaces. Key themes that emerged included social interaction, infrastructure, and available facilities. However, concerns were raised regarding safety and the deterioration of park infrastructure due to insufficient funding, which has negatively impacted services and amenities.

Both adults and older adults expressed their challenges and expectations for the future, emphasizing how urban parks have helped them navigate the social and emotional effects of the pandemic. These spaces have facilitated the creation of new support networks and reinforced their role as essential resources for collective well-being.

COVID-19 and Urban parks as space for hope.

Certain design features are especially important for specific groups of park users, particularly when it comes to encouraging walking and regular use. For instance, older adults often have specific needs that must be considered in park design. Key elements such as gentle slopes, shaded areas provided by tree cover, smooth and stable walking surfaces, and easy, direct access from parking lots are critical to ensuring comfort, safety, and accessibility for this demographic (Paudel *et al.*, 2023). When these features are thoughtfully incorporated, parks become more inclusive and supportive of active aging and overall public health.

Wong (2009) argues that older adults tend to use parks more intensively than other age groups, highlighting the important role these spaces play in their daily routines and overall well-being. However, accessibility remains a key factor in their usage patterns. Zhang *et al.* (2022) found that older adults generally prefer not to walk more than 15 minutes to reach a park, indicating that proximity is crucial in determining whether they will actually make use of these public spaces. This suggests that urban planning efforts should prioritise the equitable distribution of parks within walkable distances, particularly in neighbourhoods with a high proportion of older residents.

Internal accessibility within parks is equally essential, particularly for older adults and individuals with limited mobility. Ensuring that paths, facilities, and recreational areas are easily navigable can significantly enhance the usability and inclusiveness of these spaces. Initiatives aimed at improving accessibility often focus on upgrading infrastructure and providing services that accommodate people with disabilities, such as smooth pathways, ramps, accessible restrooms, and seating areas (Pivetta *et al.*, 2020). As a result, the emphasis on accessibility has driven continuous improvements in park design and management. These enhancements not only promote greater inclusivity but also contribute positively to public health and quality of life, especially for vulnerable populations (Santana-Santana, Peña-Alonso and Pérez-Chacón Espino, 2020). Importantly, when public spaces are designed with the needs of older adults, children, and people with limited mobility in mind, they ultimately benefit everyone. Universal design principles create environments that are safer, more comfortable, and more welcoming for all users, regardless of age or ability.

While the need for improved infrastructure in parks is undeniable—particularly to enhance accessibility and inclusivity—it's important that such developments are thoughtfully planned and not result in the overbuilding of unnecessary structures. Excessive or poorly integrated infrastructure can detract from the natural character of green spaces and reduce their appeal. In fact, research has shown that many park users, often express a strong preference for walking through natural environments such as forests and wooded areas (Matasov *et al.*, 2023), where the experience of tranquillity and contact with nature is prioritized over built features. Therefore, park design should strike a careful balance between providing essential amenities and preserving the natural landscape to support users' psychological well-being and desire for authentic outdoor experiences.

Although existing research has recognised the importance of urban parks during the COVID-19 pandemic, few studies have captured the evolving emotional, social, and functional perceptions of park users in the post-pandemic context, particularly through in-situ (Zhang and Li, 2023), qualitative, and geospatial methods in underrepresented regions like Central America. Even fewer have focused on how older adults and vulnerable groups articulate aspirations, perceived safety, and accessibility barriers, all of which are essential for inclusive urban policy and design.

In this regard, this article aims to explore how urban parks in Costa Rica have been reappreciated as essential spaces for social interaction, emotional resilience, and public well-being in the aftermath of the COVID-19 pandemic. By analysing georeferenced walking interviews conducted with adult and older adult users in the country's three main metropolitan parks, the study seeks to uncover how different age and gender groups perceive these spaces, the challenges they encounter, particularly in terms of safety and infrastructure, and the aspirations they hold for more inclusive and accessible urban environments.

Methods

Data were collected through walking interviews conducted in 2024 across Costa Rica's three largest metropolitan parks. In each location, two separate walks were undertaken—one with participants under the age of 65 and another with participants aged 65 and above. These walks were tracked using Global Positioning System (GPS) devices and synchronised with audio recordings to accurately document spatial and verbal data.

The walking interview recordings were transcribed and subsequently analysed using thematic analysis, following the methodological framework proposed by Braun and Clarke (2006). The identified themes were coding and then georeferenced using Geographic Information Systems (GIS) to spatially represent participants' experiences and perceptions within the park environments.

In addition, each participant was provided with a printed map of the respective park and a set of colour-coded stickers representing different levels of fear. Participants were asked to place these stickers on the map to indicate areas where they felt varying degrees of safety or vulnerability. This process generated a series of visual data outputs, including maps illustrating the intensity of fear and others depicting a broader spectrum of emotional responses experienced throughout the parks.

The participants were regular users of the three metropolitan parks included in the study. Recruitment was carried out through collaboration with park administrative staff and local community organisations, including organised user groups and neighbourhood associations.

Administrative officers played a crucial role in identifying frequent visitors and initiating contact with potential participants. Established community networks further supported the recruitment process by ensuring diverse representation across age groups and user experiences. Each walking interview consisted of groups ranging from five to fifteen participants. This approach allowed for the inclusion of individuals with varying degrees of familiarity and engagement with the park spaces, thereby enhancing the richness and depth of the data collected.

Results and discussion

Table 1 presents a breakdown of comments by gender (Women and Men), age (Older adults and adults) and sentiment (Positive, Neutral, Negative), categorised by thematic areas related to a park. For example, the category General Aspirations (GA) reflects desires for the park's future and potential improvements. Infrastructure (IN) refers to its physical features, while Interaction with the park mainly relates to activities taking place within it. Maintenance (M) concerns keeping the park in good condition. The Pandemic (P) category includes memories of COVID-19 and the park's role during that time. Perception of safety (PS) captures feelings related to crime and how vulnerable people feel in the park. Lastly, Perception of the environment (PE) involves the experience of moving through the park and includes elements such as vegetation, built structures, sounds, and the overall atmosphere.

Table 1. Summary of comments within the three analysed parks.

Category	Positive comments (N=282)		Neutral comments (N=558)		Negative comments (N=486)	
	Women	Men	Women	Men	Women	Men
General Aspirations (AG)						
Older Adults	2.66%	0.00%	5.26%	1.39%	1.36%	1.39%
Adults	2.66%	2.13%	4.68%	0.46%	2.73%	0.46%
Infrastructure (IN)						
Older Adults	19.15%	11.70%	9.65%	18.98%	25.45%	18.98%
Adults	2.66%	10.64%	9.06%	15.74%	15.00%	15.74%
Interaction with the Park (IP)						
Older Adults	7.98%	1.06%	15.50%	1.85%	3.64%	1.85%
Adults	7.98%	3.19%	14.33%	6.94%	4.09%	6.94%
Maintenance (M)						
Older Adults	5.85%	2.13%	2.63%	2.78%	3.64%	2.78%
Adults	0.53%	3.19%	1.17%	3.70%	5.45%	3.70%
Pandemic (P)						
Older Adults	0.53%	0.00%	7.31%	0.00%	0.91%	0.00%
Adults	2.13%	2.13%	2.92%	0.00%	0.45%	0.00%
Perception of Safety (PS)						
Older Adults	12.77%	10.64%	10.53%	30.09%	22.73%	30.09%
Adults	9.57%	18.09%	6.43%	12.50%	7.73%	12.50%
Perception of the Environment (PE)						
Older Adults	19.68%	15.96%	5.26%	3.70%	3.64%	3.70%
Adults	5.85%	19.15%	5.26%	1.85%	3.18%	1.85%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

General Aspirations

Within this category, women contributed a higher proportion of positive and neutral comments than men. The theme centres on aspirations and visions for the future of the park, including proposed interventions aimed at improving its attractiveness and functionality. One female participant, for instance, expressed a desire to repurpose underutilised areas, suggesting their transformation through aesthetic enhancements:

"If a space like this is not going to be used, gardens can be created – something with greater visual beauty."

This perspective invites broader reflection on the adaptive potential of public spaces and the importance of responsive design in addressing the changing needs of communities. It also highlights the need to consider the interplay between aesthetic, recreational, and social dimensions in urban planning. The proposal to enhance visual appeal through the creation of gardens not only responds to concerns about underuse but also underscores the role of beauty and environmental quality in shaping public experience and promoting well-being. In this regard, it is crucial to incorporate infrastructure that is adaptable to diverse user needs, along with improved safety measures – including the reduction of concealed or poorly visible areas and the provision of comprehensive facilities with integrated support services. (Zhang et al., 2022).

Infrastructure and maintenance

Infrastructure was one of the most frequently discussed topics, generating both positive and negative feedback. Within this category, older women shared more positive comments than any other demographic group. In contrast, adult women under 65 offered fewer positive remarks compared to men in the same age range.

A recurring complaint focused on one of the free-entry parks (La Sabana), where users must pay to use the toilets while parking remains free. One adult female participant remarked:

"The toilet over there next to La Sabana charges a fee, and it makes much more sense to charge for parking than for the toilet, as using the toilet is a physiological necessity – not everyone will have the money to pay for it."

Charging for toilet access can disproportionately affect vulnerable populations — such as low-income individuals and children — who may not be able to afford the fee. It also reflects urban policy choices that appear to prioritize car users over pedestrians and public health.

Another frequent concern involved the poor condition of pavements and footpaths. One older male participant commented on this issue during a visit to La Paz Park in August 2024:

"These pavements are a disaster. You should see how people fall and trip. They had done just some patchwork repairs..."

This highlights ongoing issues with accessibility and safety — particularly for older adults, who have become some of the most frequent park visitors since the pandemic (Barrantes-Chaves, Cruz-Zúñiga and Centeno-Mora, 2024). For many in this group, the park serves as an important space for socialising and maintaining physical and mental well-being. However, damaged or poorly maintained walkways can pose a serious risk of falls and injuries, undermining the park's role as a safe and welcoming environment. Addressing these issues is essential to ensure the space remains inclusive and secure for all users, especially older adults.

Conversely, well-designed park pathways can significantly encourage physical activity among older adults. As one older male participant observed during a visit to La Sabana Park in September 2024:

"Very nice for people who ride bicycles or who want to come and run among the trees."

This positive remark underscores the value of well-maintained infrastructure in promoting active lifestyles and meaningful contact with nature. His appreciation suggests that the park supports inclusive recreational activities — such as cycling and running — within a natural setting that enhances the overall experience.

Regarding maintenance, older women tend to express more positive comments compared to other age groups. In contrast, women under 65 are more likely to offer negative feedback than other participant groups. This difference may reflect varying expectations or experiences with park upkeep across age demographics.

For example, one older female participant praised recent improvements, saying:

"They installed that over there — that basketball court was just newly built, very nice. That one as well. Look at the condition of this soccer field. Everything is lovely. Over there, look — the maintenance is excellent. Just look at the grass."

Her remarks highlight an appreciation for visible efforts to maintain and upgrade park facilities. This positive feedback suggests that good maintenance resonates strongly with some visitors, particularly older women, who may value well-kept spaces for recreation and socialising. Research has highlighted the disproportionate impact of the pandemic on older adults; however, there remains a lack of public policies that promote inclusive design and the development of age-friendly cities (Buffel et al., 2023).

Interaction with the Park and Perception of the environment

In terms of social interaction, women—both under and over the age of 65—tended to express more positive views about the park as a space for connection and shared experiences than their male counterparts. One adult woman in La Sabana described:

"These are free, accessible entertainment spaces where you do not have to pay an entry fee or do a lot to enjoy yourself. You can even bring your own food. You can have a good time — even if there are concerts, you can listen from outside if your group is not going in. There is plenty to do: play sports, eat, watch, talk."

She highlights how these parks are intentionally inclusive, offering a welcoming environment for people of all socioeconomic backgrounds. She emphasises their appeal as spaces for casual, low-pressure recreation, where people can participate in communal activities or simply enjoy the atmosphere—even without engaging directly in formal events like concerts. This perspective underscores the importance of informal, spontaneous social interactions, especially for individuals or families with limited financial resources.

Men also expressed positive views about the parks, particularly in relation to their role as communal gathering spaces. One older male participant at El Este Park remarked:

"We celebrate birthdays and weddings here..."

This comment highlights the park's function as a vital and inclusive setting for family and community celebrations. Figures 1 and 2 illustrate various views of the park, including the designated area used for weddings and other social events. The images reflect a forested and tranquil environment conducive to relaxation and connection. For older adults in particular, such accessible public spaces are essential for sustaining social bonds and commemorating significant life milestones. These parks thus operate not only as recreational environments but also as meaningful venues for collective memory, identity, and intergenerational engagement.



Figure 1 and 2. Views from El Este park.

Another significant aspect of public space design is the incorporation of natural elements—such as water—which can enhance both social interaction and emotional well-being. In this context, an older female participant reflected during the walking interview in El Este Park in July 2024:

"I love it, the river sounds so beautiful."

This comment illustrates the profound impact of sensory experiences in public spaces. Elements such as the sound of flowing water, the presence of greenery, and an overall sense of tranquillity contribute to feelings of peace, joy, and connectedness to the natural environment. For many older adults, these features offer a soothing retreat from urban stressors and play a vital role in promoting psychological well-being. Such observations suggest that aesthetic and sensory dimensions can be just as important as physical infrastructure in shaping meaningful and enjoyable experiences in public parks. This supports existing research indicating that natural settings may, in some cases, hold greater significance than built amenities (Matasov *et al.*, 2023).

However, in parks where lakes form a central part of the landscape, user perspectives are more divided. While some individuals value these features as untouched natural spaces, others express a desire for them to serve a

more recreational purpose. One older male participant, speaking about the lake in La Paz Park, during the walking interview in August 2024, stated:

"It's nice, but what's missing is recreation — recreational activities, little boats or something like that."

His response reflects an appreciation for the lake's aesthetic qualities while simultaneously identifying a lack of opportunities for active engagement. The suggestion to incorporate amenities such as small boats indicates a desire for age-appropriate, interactive features that move beyond passive enjoyment. This underscores the importance of recreational infrastructure that supports light physical activity, social participation, and meaningful interaction — all of which are crucial to promoting healthy ageing and fostering inclusive community environments. Figures 3 and 4 provide visual representations of the lakes referenced in his comments. As depicted, there is a noticeable absence of leisure-oriented activities surrounding these water bodies. However, it is also important to acknowledge that environmental factors—such as water contamination—may limit the feasibility of direct human interaction with natural features. In this regard, planning policies that incorporate community participation are crucial for guiding future administrative decisions about the park. For example, decisions concerning the management of the lakes could lead to public dissatisfaction if not properly addressed, as a lack of community engagement has been shown to negatively impact park usage (Kyriakidis et al., 2023).



Figure 3 and 4. Lakes from La Paz Park.

Taken together, these insights suggest that successful public spaces for older adults should strike a balance between calm, sensory-rich environments and opportunities for gentle recreation and interpersonal connection. Designing spaces that support both contemplation and active engagement may better meet the diverse needs of older populations and foster more inclusive, age-friendly public environments.

Perceived Safety

Fear of crime remains a persistent concern among both men and women. Negative perceptions regarding safety were more frequently expressed than positive ones, particularly in parks with free public access. For instance, an older man in La Paz stated:

"Well, it's just that I don't come at night. If I did, it would feel really unsafe. Of course, at night it becomes dangerous — after 7 p.m., this place is not safe."

This comment illustrates a perceived temporal shift in the safety of public spaces, where environments are considered acceptable during daylight hours but become threatening after dark. The interviewee draws a clear boundary: the space is usable by day but effectively off-limits at night. This perception underscores the significance of lighting, surveillance, and active community presence in shaping the experience of public spaces across different times of day. Figures 5 and 6 illustrate participants' perceptions of safety in La Paz Park during daytime (Figure 5) and nighttime hours (Figure 6). The comparison clearly indicates a heightened fear of crime

after dark, particularly in areas located farther from the main streets, where visibility and public presence are reduced.



Figure 5. Map illustrating the intensity of perceived fear during day as reported by users during walks-along in La Paz Park, conducted in August 2024.

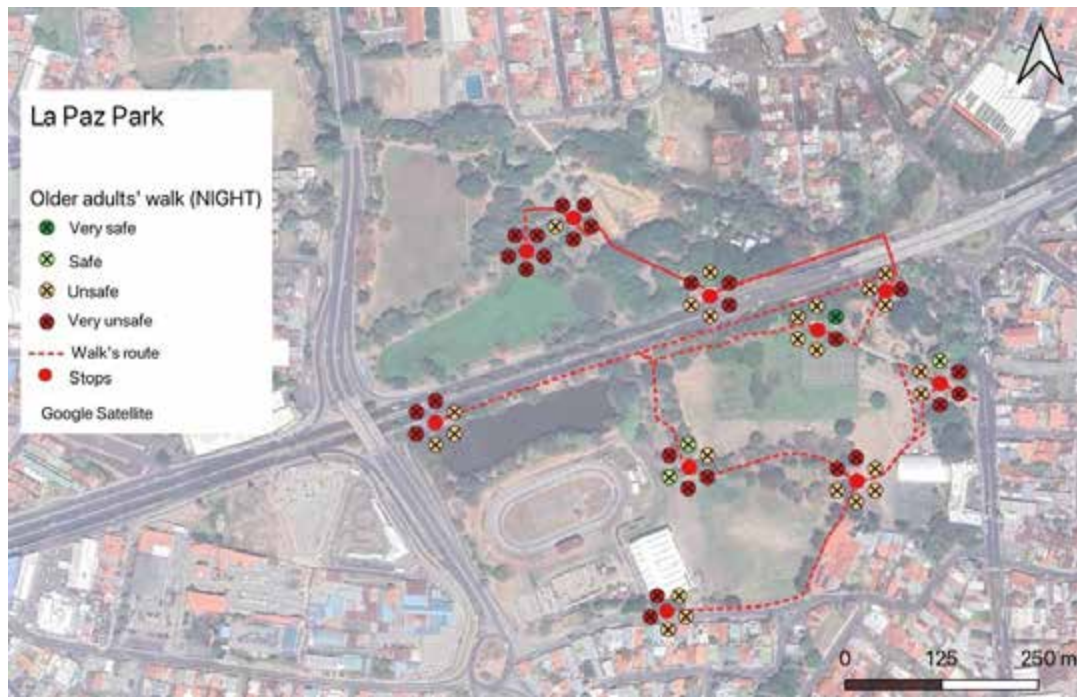


Figure 6. Map illustrating the intensity of perceived fear during night as reported by users during walks-along in La Paz Park, conducted in August 2024.

Despite concerns related to safety during nighttime hours, certain elements were identified as mitigating these fears. During a walking interview conducted in La Sabana Park in September 2024, an adult female participant observed:

"Just the fact that you see the police nearby already makes you feel a bit safer. Also, there are always lots of children around, which makes the environment feel more friendly — and because it's close to the street."

This reflection suggests that visible indicators of oversight—such as police presence—can reduce anxiety and enhance the perceived security of a space. The presence of children is highlighted as a further reassuring factor, symbolising normalcy, vitality, and a family-friendly environment. Such humanising features contribute to an emotional sense of safety beyond mere physical protection. The reference to proximity to the street introduces the idea that openness and integration into the urban fabric—rather than isolation or enclosure—foster greater comfort and perceived accessibility. In this regard, prior research within the Costa Rican context has demonstrated that the normalisation of gating contributes to a feedback loop that reinforces fear of crime, thereby intensifying perceptions of insecurity in the surrounding areas (Barrantes-Chaves, 2024).

Similarly, another woman interviewed in El Este Park expressed:

"I feel that it feels safe because... well, first of all, there are people who work here, and also there are structures around, so you kind of feel surrounded by things that give you the sense that if something were to happen, there would be support."

Here, safety is associated with the visible presence of workers and structural features within the park. These individuals may function as informal stewards or guardians, whose presence implies oversight and the potential for assistance if needed. Moreover, the respondent points to the psychological impact of the built environment: being "surrounded by things" conveys a sense of enclosure, familiarity, and orientation. Such spatial features enhance perceived safety by reducing feelings of exposure and isolation, instead offering cues of support and surveillance.

Overall, these findings underline the critical role of intentional design, visible care, and social presence in cultivating a sense of safety in public spaces. The physical and social composition of these environments significantly shapes users' emotional and psychological experiences, particularly in relation to fear, comfort, and belonging.

Pandemic Impacts on Public Space Use

During the COVID-19 pandemic in Costa Rica, many public parks were either entirely closed or only partially accessible due to lockdown restrictions. For families in vulnerable communities, these parks functioned as essential green spaces—effectively their only access to nature—yet became inaccessible under public health measures. Reflecting on this experience, an older male participant at La Paz Park recounted:

"Well, I used to come to the park during the pandemic, and the police made me leave. I told them, 'Look, there's no one around — I need to breathe, get some fresh air.' They said to me, 'You cannot, do it around the neighbourhood instead,' and I responded, 'No, because I have a broken ankle and the pavement and asphalt hurt me too much. I need to do it on the grass.'"

This testimony reveals the tensions between pandemic-era public health enforcement and the specific needs of individuals, particularly those with mobility issues or chronic health conditions. The speaker's account underscores how uniform, top-down regulations—though well-intentioned—can unintentionally marginalise vulnerable populations. The reference to the physical pain caused by hard surfaces highlights the role of design and materiality in shaping accessibility. Parks, typically associated with health, recovery, and inclusion, were paradoxically rendered off-limits during a period when their therapeutic value may have been most urgently needed. This example emphasises the importance of empathy and flexibility in urban governance, particularly

in times of crisis.

However, the pandemic also led to some lasting, positive behavioural shifts. Two women interviewed in separate parks offered reflections on changes in public space use:

A female adult in La Sabana noted:

"What I think is that during the pandemic people had more time to dedicate to physical activity, and after the pandemic they kept that routine. So, there are more people exercising now than before the pandemic."

Similarly, a female adult in El Este observed a dramatic increase in visitation:

"Definitely. Much more. But, I mean, what can I say? About 300% more. After the pandemic."

These comments point to a durable transformation in the way public spaces are valued and used. The first highlights the role of the pandemic in catalysing new health-related behaviours, particularly physical exercise, which in many cases have persisted beyond the period of lockdown. This supports broader arguments about the importance of habit formation and access to supportive environments for long-term public health outcomes. The second, with its emphatic estimation of a "300%" increase in visitation, reflects a renewed public appreciation for parks as vital spaces of recreation, wellbeing, and social interaction, this aligns with previous research indicating that, following the COVID-19 pandemic, there has been an increased appreciation of urban parks. (Soares and Brasil, 2020; Wu et al., 2023).

Taken together, these narratives illustrate how the pandemic redefined public parks—not merely as sites of leisure but as critical urban infrastructure supporting physical, mental, and emotional resilience. The growing reliance on such spaces has, in turn, generated increased expectations that they remain open, inclusive, and well-maintained in order to meet heightened and sustained public demand.

Conclusions

The findings from this study highlight the multifaceted roles that urban parks play in the lives of diverse user groups, particularly older adults and women. Participants' aspirations for the future of these spaces underscore a desire for more responsive and inclusive urban design — one that balances aesthetic enhancements with functional utility. The recurring call to transform underused areas into visually appealing gardens, for instance, reflects broader public interest in making parks both more beautiful and more inviting. These visions suggest that public spaces should not be static but adaptive, evolving with community needs and expectations, and incorporating both sensory experiences and recreational functions.

Infrastructure and maintenance emerged as both enablers and barriers to inclusive park usage. While older women tended to express greater satisfaction with maintenance efforts, inconsistencies in infrastructure — particularly the condition of walkways and the policy of charging for toilet access — reveal underlying inequities. These issues disproportionately affect vulnerable users, such as older adults, people with mobility challenges, and low-income visitors. Conversely, positive feedback regarding well-maintained amenities, such as cycling paths and sports courts, suggests that quality infrastructure can significantly enhance engagement and well-being. The differential experiences across age and gender groups further illustrate how park infrastructure and maintenance are not neutral but have socially differentiated impacts that must be considered in future planning.

Finally, the COVID-19 pandemic reshaped the public's relationship with green spaces, illuminating both their essential function and the limitations of current governance frameworks. While restrictions rendered parks inaccessible for many, the crisis also fostered long-term behavioural shifts, including increased rates of exercise and park visitation. These changes reaffirm the vital status of parks as everyday public infrastructure supporting physical, mental, and social resilience. As expectations for access, safety, and quality rise, it is imperative for

urban policy to integrate inclusive, health-promoting, and flexible design strategies that recognise public spaces not merely as recreational luxuries, but as foundational components of equitable, age-friendly cities.

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