

## Optimizing the function of city parks in empowering the Elderly in urban areas

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ARTICLE INFO	ABSTRACT
<p><i>Article history:</i> Received December 31, 2025 Received in revised form Jan. 15, 2026 Accepted February 15, 2026 Available online March 01, 2026</p> <p><i>Keywords:</i> Empowering the elderly Optimizing city park functions Urban areas</p> <p>*Corresponding author: Ika Putri Maharani Universitas Brawijaya Malang, Indonesia Email: <a href="mailto:wika3880@gmail.com">wika3880@gmail.com</a></p>	<p><i>This study examines the empowerment of older adults within urban public spaces as a strategic initiative to enhance social resilience. Despite the presence of comprehensive national and regional policy frameworks, a substantial gap is evident between policy formulation and its practical implementation on the ground. Adopting a descriptive qualitative approach and case studies in Malang City, data were collected through in-depth interviews, direct field observations, and systematic reviews of policy documents. The findings reveal that city parks have not yet functioned as inclusive and empowering environments for elderly users. The inability to meet accessibility standards, including safe pedestrian pathways, adequate handrails, and comfortable seating facilities, reflects the weak execution of existing policies. Furthermore, the limited availability of park-based social activities highlights a lack of integration between policy frameworks and empowerment programs. This study concludes that the physical revitalization of city parks must be integrated with sustainable social programs to realize inclusive social resilience. The research recommendations emphasize the importance of cross-sector coordination, dedicated budgeting, and participatory programs as key measures to bridge the gap between policy intentions and the implementation of senior-friendly parks.</i></p>

### Introduction

Indonesia has entered a phase of population ageing, which necessitates adjustments in public policies and urban infrastructure. The growth of the elderly population in Indonesia has reached 33 million people, representing approximately 12% of the total population in 2025 (CNN Indonesia 2025). In urban contexts, older adults continue to face various challenges in accessing public spaces that are safe, comfortable, and inclusive. City parks possess significant potential as venues for social interaction, physical activity, and the empowerment of older adults (BKKBN 2023); however, their utilization remains suboptimal. Many park facilities are not designed to

accommodate the needs of the elderly, including the absence of handrails, uneven pedestrian surfaces, and moss-covered sidewalks that become slippery and increase the risk of falls.

Scientific studies on urban parks have predominantly focused on ecological, aesthetic, and general recreational aspects, while their social function for older adults has rarely been examined in depth. Previous research (WHO 2007; Veitch et al. 2020) emphasizes that senior-friendly parks require facilities that are safe, easily accessible, and supportive of social interaction. Meanwhile, (Xie et al. 2018) highlights the relationship between park accessibility and elderly health, and (Esther H.K., Winky K.O., and Edwin H.W. 2017) underscores the importance of design

approaches that consider both the physical and psychological needs of older adults. Nevertheless, existing studies tend to remain descriptive and have not yet comprehensively integrated the dimensions of policy, infrastructure, and social empowerment programs. Research that combines these perspectives is urgently required to understand how urban parks can be optimized into senior-friendly spaces that support sustainable empowerment, enabling older adults to remain healthy, independent, active, and dignified.

This study aims to analyze strategies for optimizing the function of urban parks in empowering older adults in urban areas by focusing on three primary dimensions: policy, infrastructure, and social empowerment programs. The policy analysis examines national and local regulations that support the development of senior-friendly cities. The evaluation of infrastructure concentrates on the availability and appropriateness of physical facilities, including pedestrian pathways, handrails, seating, and senior-friendly toilet facilities. Meanwhile, the assessment of social empowerment programs considers the intensity and diversity of city park-based activities that involve elderly participants.

This article argues that urban parks possess strategic potential as instruments for empowering older adults when managed through an inclusive and integrated approach. Age-friendly public spaces, city parks equipped with safe facilities, high levels of accessibility, and structured social empowerment programs can significantly improve the quality of life of older adults (WHO 2007). The absence of essential elements such as handrails, safe sidewalks, and regular activity programs limits the active participation of older adults in city parks. This study suggests that optimizing city parks requires strong synergy between physical planning, responsive policy frameworks, and innovative social empowerment initiatives. Therefore, efforts to revitalize city parks should not be limited to physical infrastructure improvements alone, but should also focus on transforming their function into centers of interaction, recreation, and empowerment for the elderly, in accordance with the principles of sustainable development and social inclusion.

#### Optimizing the function of city parks

Urban parks perform multiple functions, including ecological, social, and aesthetic roles within urban environments (Melanira and Muharom Rudianto 2023). They play a vital role in delivering ecosystem services such as oxygen production, microclimate regulation, and air pollution absorption, which can be further optimized through increased connectivity of green spaces and the reduction of landscape fragmentation (TAO Yu et al. 2013). City parks also possess qualitative attributes related to the availability and performance of supporting and functional facilities that contribute to users' recreational satisfaction. Park quality can be enhanced by providing facilities that are accessible and friendly to vulnerable groups, as well as by strengthening cultural development and supporting amenities (Ren and Yang 2023; Tong et al. 2023). Through appropriate planning and effective management, urban parks can be improved to respond more efficiently and sustainably to the needs of urban communities.

Optimizing urban functions to ensure equitable access to city parks is therefore essential. Previous studies demonstrate that GIS-based network analysis can accurately assess accessibility levels and identify areas with limited access, which may then be prioritized for new park development (Fan and Cheng 2022). The integration of natural elements within urban parks has also been shown to significantly enhance their physiological and psychological benefits. Research indicates that parks rich in natural features provide greater health and well-being outcomes compared to those dominated by artificial elements (Yi et al. 2025). In addition, urban parks deliver critical ecosystem services, including improved air quality, temperature moderation, and biodiversity support. For instance, parks with higher tree diversity can enhance carbon sequestration capacity and provide habitats for pollinators (Belaire et al. 2022). Public involvement in the planning and management of city parks further contributes to positive outcomes, as surveys and feedback mechanisms help capture users' needs and preferences, ensuring that parks align with community expectations (Ferreira, Vasconcelos, and Ferreira 2022).

### Empowerment of the elderly

Empowerment constitutes a fundamental approach to enhancing the quality of life of older adults by enabling them to attain greater control over their everyday lives. This concept encompasses the promotion of freedom of choice and the capacity of older individuals to actively shape their own life trajectories (Durán Muñoz 2007). The empowerment of older adults involves a series of interconnected processes through which individuals express themselves, both verbally and nonverbally, within social relationships, recognize and understand their challenges, undertake proactive actions grounded in decision-making, and effectively utilize their personal strengths in occupational and community contexts. These processes further include the enhancement of social participation, the development of individual capacities, and the strengthening of autonomy (Tsubouchi et al. 2021; Fotoukian et al. 2014). Empowering older adults exerts a substantial influence on their overall quality of life, as it can improve both psychological and physical well-being by enabling them to actively manage and engage with their social environments (Hawash et al. 2024; Walter, Schneider, and Plaumann 2008). From the perspective of social engagement and community empowerment, the enhancement of social participation and independence through the use of intelligent assistive technology (IAT) has demonstrated the potential to support older adults with dementia by increasing their independence and fostering greater social participation (Löbe and Petersen 2025). In this context, policymakers are encouraged to formulate guidelines that actively promote the empowerment of older adults, with particular emphasis on improving social life, strengthening caregiving competencies, and reinforcing support systems (Tabatabaei et al. 2017). Empowerment strategies for older adults may also be implemented by improving mental health outcomes through fostering a sense of security and autonomy, utilizing measurement tools such as the Psychological Empowerment Scale for Older Persons (PESOP) to support and promote psychological empowerment (Zeng et al. 2025; Noordink et al. 2025). Meanwhile, in relation to social empowerment and social participation, empowerment-oriented approaches seek to increase social engagement and reduce experiences of isolation. Community-based learning centers and social innovation initiatives

play a significant role in integrating older adults into collective community activities. Intergenerational support, understood as recognizing the potential contributions of older adults in supporting younger generations, can further enhance their social roles and strengthen community involvement (Edwards - Schachter, Matti, and Alcántara 2012; Wu 2022).

### Urban areas

Urban areas function as central hubs of social, political, and economic activity, accommodating nearly half of the global population, a concentration that consequently generates waste, pollution, and a range of environmental challenges (Savé et al. 2010; Santamouris 2014). In addition, urban areas operate as engines of economic growth and social development and play a crucial role in driving national development processes (Giai and Hanh 2025). The form and structure of urban areas are defined by their physical characteristics and are influenced by factors such as population density, land-use diversity, and urban design attributes (Nasri and Zhang 2018).

Urban areas integrate natural elements and interact dynamically with the built environment, thereby exerting a significant influence on the health and well-being of their residents (Huang et al. 2024). At the same time, urban populations and demographic compositions reflect diverse demographic structures that shape social dynamics and economic activities (Radzewicz and Walacik 2014). Urban areas emerge from the continuous interaction among physical, environmental, social, and economic dimensions, all of which mutually influence one another. The spatial form and overall quality of cities are shaped by density, infrastructure systems, natural components, and environmental conditions, while demographic diversity and economic vitality represent key determinants of urban sustainability and long-term development.

## Methods

The unit of analysis in this study encompasses three urban parks in the city of Malang, namely Slamet Park, Singha Park, and Merjosari Flower Park. These parks were selected because they demonstrate potential for empowering older adults and are actively utilized by older adult

users. The identification of parks was based on specific criteria, including the availability of facilities designed for older adults, levels of accessibility, and visitation intensity. Older adult participants were identified through direct field observations and subsequently confirmed through information provided by park management authorities. This study adopts a qualitative research design using a descriptive case study approach in order to capture and interpret the social dynamics that shape the utilization of city parks by older adults. The primary data sources consist of government policy documents, park management records, direct field observations, and interviews conducted with representatives of the agency responsible for sustainability as well as park managers. Data collection was conducted through non-participatory observation, semi-structured interviews, and visual documentation. These methods were deliberately selected to obtain factual and contextual data capable of describing both the objective and subjective conditions associated with park use by older adults. The integration of multiple data collection techniques enables triangulation, which serves to minimize bias and enhance the reliability and accuracy of the research findings. The analytical method employed in this study is thematic analysis, which was used to identify recurring patterns, categories, and overarching themes

derived from the field data. Thematic analysis was selected due to its suitability for processing qualitative data and its capacity to extract meaningful interpretations aligned with the research objectives. From an academic perspective, this approach facilitates the connection between empirical findings and the theoretical framework of age-friendly city development.

## Results and discussion

### Urban Policies that support age-friendly cities

Global frameworks, such as the World Health Organization's Age-Friendly Cities initiative, intersect with national regulations and local policy instruments to establish an integrated ecosystem of protection, empowerment, and service provision that is responsive to the needs of older adults. Concurrently, policies related to urban park maintenance play a critical role, as well-maintained and accessible public open spaces represent essential prerequisites for mobility, social interaction, and the overall quality of life of older adults. This policy context and its implications for age-friendly urban environments are presented in [table 1](#).

**Table 1.** Policies related to Age-Friendly Cities

Coding	Description	Source
Policies related to senior-friendly	Age Fieldly Cities Giudeline	<a href="https://extranet.who.int/agefriendlyworld/age-friendly-cities-framework">https://extranet.who.int/agefriendlyworld/age-friendly-cities-framework</a>
	UU RI No.13, 1998 About Elderly Welfare	<a href="https://peraturan.bpk.go.id/Details/45509/uu-no-13-tahun-1998">https://peraturan.bpk.go.id/Details/45509/uu-no-13-tahun-1998</a>
	Perpres RI No. 88, 2021 About the National Strategy on Sustainability	<a href="https://peraturan.bpk.go.id/Details/178090/perpres-no-88-tahun-2021">https://peraturan.bpk.go.id/Details/178090/perpres-no-88-tahun-2021</a>
	Permensos No.4, 2017 About Guidelines for Developing Senior-Friendly Areas	<a href="https://peraturan.bpk.go.id/Details/130330/permensos-no-4-tahun-2017">https://peraturan.bpk.go.id/Details/130330/permensos-no-4-tahun-2017</a>
	Peraturan Daerah Kota Malang Nomor 13 Tahun 2015 Tentang Kesejahteraan Lanjut Usia	<a href="https://jdih.malangkota.go.id/produkhukum2">https://jdih.malangkota.go.id/produkhukum2</a>
	Malang City Government's Efforts to Create an Elderly-Friendly City (Pemkot Malang, 2023)	<a href="https://malangkota.go.id/2023/11/01/upaya-pemkot-malang-wujudkan-kota-ramah-lansia">https://malangkota.go.id/2023/11/01/upaya-pemkot-malang-wujudkan-kota-ramah-lansia</a>
	SE No. 26, 2022 About the Guidelines for Implementing Empowerment and Protection Activities for Vulnerable Communities in Districts and Subdistricts	<a href="https://jdih.malangkota.go.id/produkhukum2">https://jdih.malangkota.go.id/produkhukum2</a>
Policies related to urban park maintenance	Permen PUPR No 14/PRT/M/2017 Regarding Building Accessibility Requirements	<a href="https://peraturan.bpk.go.id/Details/104477/permen-pupr-no-14prtm2017-tahun-2017">https://peraturan.bpk.go.id/Details/104477/permen-pupr-no-14prtm2017-tahun-2017</a>
	Perda Malang City No. 3, 2003 about Urban Park Management and City Decoration	<a href="https://malangkota.go.id/peraturan-daerah/#1648628304954-1e5bdbb7-9da0">https://malangkota.go.id/peraturan-daerah/#1648628304954-1e5bdbb7-9da0</a>

Coding	Description	Source
	Perwali Malang No. 93, 2019 Regarding the Establishment of a Technical Implementation Unit (UPT) for Park Management at the Environmental Agency	<a href="https://dlh.malangkota.go.id/dokumen/regulasi/peraturan-walikota-malang-nomor-93-tahun-2019-tentang-pembentukan-unit-pelaksana-teknis-pengelolaan-taman-pada-dinas-lingkungan-hidup/">https://dlh.malangkota.go.id/dokumen/regulasi/peraturan-walikota-malang-nomor-93-tahun-2019-tentang-pembentukan-unit-pelaksana-teknis-pengelolaan-taman-pada-dinas-lingkungan-hidup/</a>
	Perwali Malang No. 38, 2021 Regarding the Position, Organizational Structure, Duties and Functions, and Work Procedures of the Malang City Environment Agency	<a href="https://peraturan.infoasn.id/kota/peraturan-walikota-malang-nomor-38-tahun-2021/">https://peraturan.infoasn.id/kota/peraturan-walikota-malang-nomor-38-tahun-2021/</a>
	Malang Mayor's Decree No. 188.45/139/35.73.112/2019 Regarding the Establishment of City Parks, Urban Forests, and Green Belts	<a href="https://dlh.malangkota.go.id/dokumen/daftar-aset/sk-walikota-no-139-tahun-2019-ttg-penetapan-taman-kota-hutan-kota-dan-jalur-hijau/">https://dlh.malangkota.go.id/dokumen/daftar-aset/sk-walikota-no-139-tahun-2019-ttg-penetapan-taman-kota-hutan-kota-dan-jalur-hijau/</a>

This section highlights Malang City's commitment to establishing itself as an age-friendly city, supported by a comprehensive legal framework spanning international, national, and regional/local levels. The provision of urban parks represents a tangible manifestation of elderly-friendly public spaces. To optimize city parks as age-friendly environments, technical and administrative support in the management of urban green spaces is essential. The policies presented, primarily at the regional and local levels with one national reference for technical standards, illustrate the top-down, integrated approach adopted by the Malang City Government. Local policies are explicitly designed to implement mandates derived from higher levels of governance (table 1).

A compilation of policies pertaining to age-friendly cities and urban park maintenance functions as an effective instrument for assessing and measuring the extent to which age-friendly concepts are realized in practice. These policies provide clear operational standards and guidelines by defining objectives, procedures, and implementation criteria. The policy framework exhibits a structured hierarchy, delineates mechanisms and responsibilities for execution, and is accompanied by reporting and documentation provisions. Importantly, these policies are not merely passive legal instruments; they serve as a dynamic framework for monitoring and evaluation. Gaps between

published policies and their practical implementation can be readily identified, allowing the results of field observations to generate highly specific recommendations for local governments. Consequently, these policies operate both as guiding frameworks and as evaluative tools for measuring governmental performance in advancing senior-friendly urban initiatives.

Availability of Elderly facilities in city parks remains limited

Facilities for older adults within city parks constitute a key parameter for assessing the concept of elderly-friendly public spaces. These facilities serve as practical implementations and measurable indicators of elderly-friendly principles, including accessibility, safety, and social participation. The elderly-friendly concept is reflected through features such as flat pathways and gentle slopes, comfortable seating, adequate exercise facilities, and sufficient lighting. These indicators can be directly observed and evaluated in terms of quality to determine the level of comfort provided for older adults. The presence, condition, and quality of such facilities function as objective tools linking policy commitments to field realities. Their absence or substandard condition signals failures in implementation, whereas complete and well-maintained facilities reflect the government's commitment to creating inclusive and accessible public spaces.

**Table 2.** City park facilities

Coding	Figure	Description
Seating in the park	 	Seats made of concrete with designs that are not elderly-friendly
Pedestrian path in the park	 	Paving in mossy condition and donut model (with a hole in the middle)
Toilets that are comfortable for seniors	 	The toilets in the park are not equipped with handrails for the elderly.

The images in [table 2](#) illustrate facilities for older adults in city parks. Pedestrian paths in Singha Park and Slamet Park are not yet equipped with handrails, which are critical for balance and fall prevention. Seating in Slamet Park, Singha Park, and Merjosari Flower Park is constructed from various materials but lacks elderly-friendly design. Toilets in Singha Park and Merjosari Flower Park similarly lack handrails, limiting accessibility. The absence of handrails on stairs or

sloped paths increases fall risk and restricts mobility. In addition, sections of sidewalks in all three parks employ donut-shaped paving with moss-covered surfaces, creating slippery conditions that further compromise safety. Parks that fail to provide a secure and comfortable environment cannot be classified as elderly-friendly, as they may generate discomfort and pose health risks for older adults.

**Table 3.** Interview with stakeholders

Coding	Statement	Informan
Senior-Friendly Park	A senior-friendly park is a park that provides facilities that offer a sense of security and comfort while also serving as a means of empowerment for seniors to become healthy, independent, active, and dignified.	Junior Expert Social Counselor, Social Services Agency P3AP2KB Malang, 2025
Senior-Friendly Park	Coordination and proposals from relevant stakeholders are needed to establish senior-friendly parks.	Head of Green Open Space Division DLH Malang, 2025
Senior-Friendly Park	The city parks that have been built do not yet prioritize senior-friendly parks.	Parking Coordinator, Department of Environmental Affairs Malang, 2025

A summary of interviews with three key stakeholders regarding urban parks in Malang City reveals shared recognition of the importance of senior-friendly parks. The Junior Social Expert Advisor at the Social Affairs Agency P3AP2KB emphasized that such parks should provide secure

and comfortable facilities while also serving as a mechanism to empower older adults to become healthy, independent, active, and dignified. The Head of the Green Open Space Division of the Environmental Agency stressed the necessity of inter-agency coordination and collaborative

proposals to determine the establishment of senior-friendly parks. Meanwhile, the Parks Coordinator indicated that current urban park development does not yet prioritize the specific needs of older adults (table 3).

Interview data indicate a common awareness among stakeholders regarding the importance of senior-friendly parks, yet implementation remains a secondary priority in planning processes. While the Social Services Agency emphasizes parks as empowerment tools, the Environmental Agency underscores the need for coordinated planning to ensure facilities meet elderly requirements. Statements from the Parks Coordinator highlight a gap between policy intentions and actual development practices, underscoring the need to integrate green space planning with senior social

programs to optimize the role of city parks in enhancing the quality of life for older adults. Limitations intensity of city park-based social activities for the Elderly

The intensity of social activities for older adults within city parks remains limited. Park activities are predominantly utilized by younger populations, including children, who make use of available park facilities. Organized activities for older adults are largely restricted to training sessions for city-level elderly exercise instructors, conducted once per month. Following these sessions, the instructors are expected to train older adults in their respective localities. The limited frequency and intensity of urban park-based empowerment activities for older adults indicate a need for greater prioritization in the development of senior citizen programs.



Figure 3. Training for Elderly instructors

Training for elderly instructors was conducted at Taman Slamet through organized elderly gymnastics programs. These activities within city parks serve as a mechanism for empowering older adults, enhancing both physical health and social interaction (figure 3). Physical exercises, such as gymnastics, have been demonstrated to maintain physical fitness, improve balance, and prevent the decline in functional capacity that often accompanies aging. The sessions were attended by senior exercise instructors representing all sub-districts of Malang City. The activity location, which features shaded areas and gently sloped sidewalks, provides comfort and safety during exercise. Beyond physical benefits, these activities foster a sense of community and offer opportunities for positive social interaction among older adults. With appropriate facilities and the establishment of regular programs, urban parks can play a more substantial role in empowering older adults to remain healthy, active, and socially engaged.

## Discussion

This study identified a significant gap between age-friendly city policies and their actual implementation in urban parks. Although regulations provide a clear legal framework supporting the concept of age-friendly parks, their effectiveness remains limited due to a lack of concrete implementation mechanisms. Many city parks fail to meet standards of accessibility, safety, and comfort for older adults. This indicates that comprehensive policies alone do not guarantee program effectiveness without sustainable systems for monitoring, coordination, and funding.

Implementation gaps are also reflected in the physical infrastructure of parks, which remains largely uncondusive to elderly activities. Observations revealed that pedestrian paths, park benches, and toilets often do not adhere to elderly-friendly principles. Sidewalks are frequently slippery, contain holes, and lack handrails, all of which are crucial for older adults. This highlights weak synergy between urban planners and social policymakers, resulting in city parks being prioritized more for aesthetics than as spaces for

empowerment and social interaction. Institutional factors further contribute to the policy-practice gap. No effective cross-sector coordination exists for establishing and managing elderly-friendly parks; each agency operates within its limited scope, preventing integration of public space policies with social programs for older adults. Consequently, empowerment policies are only partially implemented and fail to produce meaningful improvements in the social resilience of older adults.

Additionally, the intensity of park-based empowerment activities remains limited. Older adults' participation in public space activities is largely restricted to monthly exercise classes organized by the government, while regular, participatory social activities are almost non-existent. This reflects a broader trend where social inclusion of older adults is not prioritized in urban social empowerment programs. That seniors' main priorities for using urban parks are accessibility and social interaction, highlighting the need for urban design that encourages regular engagement. Furthermore, Xie et al. (2018) demonstrate a quantitative relationship between park accessibility and elderly health, indicating that inadequate accessibility diminishes potential benefits. Kimic and Polko (2022) identify safety, maintenance, visibility, facilities, and mobility as key determinants in park selection for seniors, while Veitch et al. (2020) emphasize the importance of aesthetics, safety, and facilities in enhancing participation. Meanwhile, Xie et al. (2018) emphasize the critical role of accessibility in supporting healthy aging, it is evident that the uptake of senior citizen activities in city parks remains minimal. Participation in such activities is largely limited to small, informal groups, and there are few incentives to encourage broader engagement among older adults. This situation highlights the limited role of city parks in actively empowering senior citizens.

Activities for older adults in public spaces are predominantly confined to monthly exercise classes organized by the government, whereas regular, participatory social programs are virtually absent. The lack of structured and sustainable initiatives has diminished the social function of city parks, preventing them from serving as spaces for intergenerational interaction and community cohesion. The scarcity of continuous social activities indicates that age-friendly city policies have not yet been effectively operationalized at the community level. Financial

constraints further exacerbate the gap between policy and implementation. Revitalizing urban parks to meet senior-friendly standards requires substantial investment in both physical infrastructure and social program development. However, interviews revealed that funding for initiatives targeting older adults is not prioritized within municipal development budgets, which remain largely focused on general infrastructure and city aesthetics projects. The absence of dedicated financial support has resulted in numerous elderly-friendly policies remaining at the planning stage without realization in the field. Consequently, the concept of elderly-friendly parks has not been fully mainstreamed within public space development policies.

This study identifies a clear disparity between normative policies on elderly-friendly parks and their practical implementation, revealing that current conditions do not adequately meet the needs of older adults. These findings align with Perry et al. (2021) who reported that parks, while aesthetically appealing, are often not designed to address the specific requirements of seniors. Similarly, Onose et al. (2020) emphasizes that although urban parks are intended to support active aging, deficiencies in design and program implementation limit their effectiveness in empowering older adults. Khoirotnun Hisan and Wijayanti (2024) further observes that city parks remain constrained in providing inclusive facilities for both older adults and people with disabilities, largely due to inadequate supporting infrastructure. This study corroborates these findings, demonstrating that gaps in policy implementation and program delivery are major factors limiting the elderly-friendliness of urban parks.

Based on these findings, holistic and integrated strategies are required to optimize the role of city parks as inclusive, safe, and comfortable public spaces for older adults. Such strategies should combine the revitalization of physical infrastructure with the development of social programs aimed at elderly empowerment. Physical infrastructure improvements should comply with accessibility standards as outlined in Permen PUPR No. 14/PRT/M/2017 and adhere to elderly-friendly design principles to ensure safety and comfort. Complementing these measures, sustainable and participatory social programs (soft infrastructure) should be implemented to encourage regular social interaction, physical activity, and empowerment among older adults.

These programs should actively involve the elderly, promote intergenerational engagement, and facilitate multi-stakeholder collaboration. Moreover, to bridge the gap between the ideal concept of senior-friendly parks and their on-the-ground implementation, regional regulations must be designed with specific, measurable targets and supported by adequate budgets to ensure ongoing maintenance and program sustainability.

## Conclusions

This study highlights a significant gap between age-friendly city policies and their actual implementation in Malang City. Although a comprehensive regulatory framework exists, these policies have not been fully operationalized in the management of city parks. The current conditions, such as slippery pedestrian paths, absence of handrails, non-ergonomic benches, and lack of wheelchair-accessible routes, demonstrate the challenges of translating policy into tangible action. These findings indicate that strong regulations without clear implementation mechanisms risk rendering city parks merely aesthetic elements, rather than functional spaces for the social empowerment of older adults. Consequently, bridging the gap between the ideal concept and the reality of practice requires a measurable implementation system focused on social inclusion for seniors.

The study contributes both theoretically and practically to the literature on age-friendly urban development in Indonesia. Theoretically, it advances our understanding of how public policy, urban infrastructure, and social empowerment intersect to influence the resilience and participation of older adults in public spaces. Practically, the findings underscore the importance of synergy among local governments, park managers, and elderly communities to ensure that urban parks serve not only ecological purposes but also social and empowerment objectives. Empowering older adults in public spaces represents a concrete strategy to shift the urban development paradigm, positioning seniors as active participants rather than passive recipients of policy. These insights provide a foundation for creating a more participatory, responsive, and sustainable urban park management model that supports active aging in urban environments.

This study has certain limitations, including its geographic scope, which is confined to three city parks in Malang, and its reliance on qualitative data, which primarily captures policy implementation rather than quantitatively assessing social impact. Future research is recommended to adopt a comparative approach across cities or provinces to evaluate variations in the effectiveness of elderly-friendly policies. Additionally, mixed-methods studies are needed to empirically measure the relationship between park revitalization, levels of social participation, and improvements in older adults' quality of life. Local governments are encouraged to establish cross-sector coordination teams responsible for designing, monitoring, and evaluating senior-friendly park policies with measurable outcomes. Such collaborative efforts are essential to narrowing the gap between policy and practice and enhancing the role of urban parks as instruments of empowerment and social resilience for seniors in urban areas.

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**Author(s) contribution**

**Ika Putri Maharani** contributed to the research concepts preparation, methodologies, investigations, data analysis, visualization, articles drafting and revisions.

**Agung Pramana Warih Marhendra** contribute to the research concepts preparation and

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