

Evaluation of the quality of public space in Nostalgia Park Kupang, using the public space index method

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ARTICLE INFO	ABSTRACT
<p><i>Article history:</i> Received June 04, 2025 Received in revised form Sept. 13, 2025 Accepted Sept. 30, 2025 Available online October 01, 2025</p> <p><i>Keywords:</i> Public open space Public space index (PSI) Quality evaluation Taman Nostalgia</p> <p>Corresponding author: Sulih Ningsih Imelda Neonufa Department of Architecture, Faculty of Science and Engineering, Universitas Nusa Cendana, Indonesia Email: sulihaneonufa@staf.undana.ac.id ORCID: https://orcid.org/0000-0001-7356-3961</p>	<p><i>Taman Nostalgia has served as the main public open space in Kupang City since its inauguration in 2011. Designed as a space for recreation and social interaction, the park plays a significant role in the daily lives of city residents. After 14 years of operation, a quality assessment is necessary to evaluate how well the park functions as an inclusive space for all. This study evaluates the quality of Taman Nostalgia using the Public Space Index (PSI) method, supported by a behavioral mapping analysis conducted previously (Neonufa, 2024), which provides a foundation for assessing spatial quality. The results show that the park's average public space quality index is 63.4. The aspects of inclusiveness (75.9) and pleasurable activities (75.5) recorded the highest scores, while meaningful activities (56.2), safety (56.5), and comfort (52.7) indicated areas needing improvement. Overall, Taman Nostalgia is considered an inclusive public space with a strategic location, good accessibility, sufficient area, and a variety of existing activities. However, improvements are still needed in terms of activity diversity, facility provision, safety, and visitor comfort. These findings have important implications for the future design and management of public open spaces in Kupang. The combined approach of behavioral analysis and the PSI method provide comprehensive and context-responsive recommendations that address user needs and local characteristics.</i></p>

Introduction

Public open space (POS) constitutes an integral part of the urban environment, offering multiple benefits that enhance the quality of life for its inhabitants (Widati and Amiany 2024). Public open space promotes physical activity. It represents an essential component of urban quality, serving as a place for sports, recreation, and relaxation, thereby contributing to overall well-being (Putri et al. 2023; Mohammed and Abaas 2025). These spaces also support mental health by providing environments that reduce stress and improve mood. The presence of greenery and natural elements in POS can generate calming effects, which strengthen mental

health outcomes (Kaushal 2024). In relation to social cohesion, POS functions as a venue for social interaction, fostering community ties and social cohesion, while providing opportunities for people to gather, interact, and participate in communal activities, which reinforce community bonds (Bani 2024). These spaces are inclusive, accessible to all, and support diverse activities, making them essential for community engagement and participation (Shishido, Terada, and Kashihara 2025; Mehta 2024). From an aesthetic perspective, public open spaces enhance the visual appeal of urban areas, contributing to the identity and character of the city, reflecting local culture and heritage, and cultivating a sense of pride among residents (Bani 2024; Merylova,



Smilka, and Kovalska 2023). Well-designed public open spaces can elevate the city's visual landscape, making it more attractive for both residents and visitors (Kaushal 2024). From an environmental standpoint, these facilities play a crucial role in urban sustainability by providing green areas that improve air quality, mitigate urban heat, and support biodiversity. Such spaces are vital for creating sustainable urban environments that can adapt to climate change (Merylova, Smilka, and Kovalska 2023). Public open spaces also offer ecological benefits, such as stormwater management and carbon absorption, contributing to the overall environmental health of urban areas (Bani 2024). From an economic aspect, public open spaces can strengthen local economies by attracting tourists and increasing nearby property values, while also generating opportunities for local businesses and serving as catalysts for economic development in urban regions (Mehta 2024).

Nostalgia Park is a major public open space in the city of Kupang, serving a vital role in supporting the quality of life of urban residents. Strategically located along El Tari Street, the park is easily accessible from various parts of the city. Having functioned as a space for community activities for 14 years, Nostalgia Park requires evaluation to assess its effectiveness in fulfilling its role as a space for all. Such an evaluation must be undertaken to measure the quality of public space from multiple aspects, including inclusiveness, meaningful activities, safety, comfort, and pleasurability (Mehta 2024). Previously published findings on the behavior of public space users (Neonufa, Tualaka, and Hendrik 2025) provide a strong foundation for analyzing the quality of this space, measured through the Public Space Index (PSI) method. This study will yield a quality index for the POS of Nostalgia Park as well as recommendations for addressing its various spatial variables, thereby enabling it to function optimally in improving the quality of life of urban inhabitants.

Methods

This research employs a qualitative approach using the Public Space Index (PSI) method developed by Vikas Mehta in 2014. This method is applied to evaluate the quality of public open space based on five main dimensions, namely

inclusiveness, meaningful activities, safety, comfort, and pleasurability (Mehta 2014).

The study was conducted at the Public Open Space (POS) of Nostalgia Park, Kupang City, over a period of 1.5 months (14 June – 22 July 2024). To obtain the required data, data collection techniques consisted of structured observation, interviews, and questionnaires.

Structured observation was carried out by directly examining the physical conditions and user activities of Nostalgia Park POS based on evaluation guidelines formulated by Vikas Mehta 2014. The objective of this observation was to obtain a factual picture of how the public space was utilized by the community and to identify various aspects influencing its quality.

In addition to observation, interviews were also conducted with users of Nostalgia Park POS. The interviews were semi-structured, which allowed for deeper exploration regarding the experiences and perceptions of users about the quality of the park. This method enabled the research to gather more comprehensive insights into the needs and expectations of the community toward the public space.

To complement the data, questionnaires were distributed to 102 respondents present in the public space. The survey was conducted on weekdays as well as weekends. The questionnaire consisted of questions related to the five dimensions of public space quality as outlined by Mehta (2014). The collected data were analyzed descriptively to illustrate the existing condition of Nostalgia Park POS. Moreover, the questionnaire results were processed to calculate the Public Space Index, thereby providing a quantitative representation of the public space's quality.

Previous research had been conducted and published regarding the identification of visitor activities in Nostalgia Park using behavioral mapping (Neonufa, Tualaka, and Hendrik 2025). The results, combined with the PSI output, served as the basis for formulating recommendations. By integrating PSI analysis with prior behavioral mapping findings, this research further developed recommendations to enhance the quality of Nostalgia Park POS, optimizing its function as a public space for the people of Kupang City. These recommendations were arranged by considering the five key aspects evaluated, thus offering a useful reference for stakeholders in the management and future development of Nostalgia Park POS. The integration of both methods provided a comprehensive overview of spatial

quality and user interaction in Nostalgia Park, Kupang.

Results and discussion

Nostalgia Park is located on El Tari Street, Kelapa Lima District, Kupang City, East Nusa Tenggara. Nostalgia Park forms part of the old town area of Kupang, encompassing $\pm 49,483$ m² or 4.9 hectares. Situated in the city center and adjacent to strategic facilities such as Lippo Mall, the Finance Building, and the Kupang Mayor's Office complex, the park is easily accessible and functions as a principal POS. With its strategic location along El Tari Street, which serves as the

city's main thoroughfare, the park is reachable from various parts of Kupang. Managed by the government, Nostalgia Park is accessible to the public at all times without restrictions on visiting hours. In addition to unlimited access, the park offers several facilities for the community, serving as venues for socializing, exercising, recreation, children's play, as well as stalls for street vendors. In this park, the community engages in activities such as relaxing, playing football, jogging, playing, and trading. Nostalgia Park is also commonly used as a site for hosting public events, including national commemorations often celebrated through competitions and entertainment programs (Liem and Lake 2018; Neonufa, Tualaka, and Hendrik 2025).



Figure 1. Nostalgia Park
Source: (Neonufa, Tualaka, and Hendrik 2025)

In earlier research, Neonufa, 2024 identified visitor activities in Nostalgia Park by dividing the site into three zones of utilization (Neonufa,

Tualaka, and Hendrik 2025). Visitor surveys and behavioral mapping analyses indicated an uneven distribution of activities, strongly correlated with

the availability of facilities. Zone B recorded the highest activity levels due to its vibrant atmosphere and adequate facilities. In contrast, Zone A had the lowest activity levels, largely due to the absence of essential amenities such as lighting and seating. Issues of safety and security, particularly at night, were of major concern in Zones A and C, where insufficient lighting affected visitor comfort and well-being. The highest activity occurred in the morning (06:00–08:00 WITA) and evening (17:00–19:00 WITA), with jogging and leisurely walking as the most common morning activities. However, daytime

activity declined significantly due to high temperatures, limiting the park's use during that period. These findings underscore the need for facility adjustments in accordance with activity patterns in each zone. Further research is necessary to gain deeper understanding of visitor characteristics and the overall quality of Nostalgia Park, so that future facility development can be aligned with user needs and strengthen its function as an inclusive public space. The full results of this study can be accessed in the cited publication.



Figure 2. Distribution of visitor activities in Nostalgia Park
 Source: (Neonufa, Tualaka, and Hendrik 2025)

Identification of public space quality using the public space index

The identification of public space quality through the Public Space Index applied 42 variables to evaluate the five dimensions of public space (Mehta 2014). In this study, 42 variables were employed, with 29 derived from surveys observed and assessed by researchers through examining the space and interactions between the space and its users, while 13 were perceptual variables assessed by the community utilizing the public space. The assessment criteria for each variable were based on a rating scale from 0 to 3, with individual variable weights.

From the survey of 102 respondents in Nostalgia Park POS, data revealed a highly diverse group in terms of gender, ethnicity, occupation, motivations, and other factors. The

visitors represented broad variation in age, gender, ethnicity, and employment. In terms of gender, female visitors were more dominant (67%). Age distribution indicated that visitors were mostly young people within the age range of 18–24 years (76%), whereas those aged over 45 constituted a very small proportion (3%). Nostalgia Park POS also attracted diverse groups based on occupation and ethnicity. Regarding transportation, the majority of visitors accessed the park by motorcycle (53.9%) and on foot (31.4%). Data on visit purposes showed that most visitors came for recreation (88.1%). As for visit frequency, the majority did not maintain a fixed schedule and visited occasionally (56.9%).

After analyzing the survey results, which included both observations and questionnaires, the Public Space Index score for Nostalgia Park

POS was calculated, as presented in the following table and graph.

Table 1. Detailed results of the public space index calculation for Nostalgia Park

Public space quality aspect	Sub-variable/indicator	Weight	Score	Score × Weight
Inclusiveness	Diversity of age	0.4	3	1.20
	Gender differences	0.4	3	1.20
	Presence of people from different social classes	0.4	3	1.20
	Racial differences	0.4	3	1.20
	Presence of visitors with different physical abilities	0.4	1.6	0.64
	Control of entrances to public space (existence of fences, locked gates, etc.)	1	3	3.00
	Diversity of activities/behaviors	1	2	2.00
	Opening/operational hours of public space	1	2	2.00
	Exemptions for certain people/behaviors	1	3	3.00
	Existence of surveillance cameras, security guards, guides, etc. that intimidate/restrict activity/privacy	1	1.69	1.69
Perceived openness and accessibility	2	2.10	4.20	
Capacity of location to host and participate in activities/events	1	1.46	1.46	
Subtotal		10		22.78
Index				75.94
Meaningful Activities	Availability of places for community gatherings	2	2	4.00
	Diversity of activities and behaviors	1	2	2.00
	Flexibility of space to meet user needs	1	2	2.00

Public space quality aspect	Sub-variable/indicator	Weight	Score	Score × Weight
	Availability of food within or along the edges of the space	2	1.2	2.40
	Diversity of commercial or other activities along the space's edges	1	1	1.00
	Perceived suitability of spatial layout and design with activities/behaviors	2	1.60	3.20
	Perceived benefits from trade and other uses	1	2.26	2.26
Subtotal		10		16.86
Index				56.20
Comfort	Availability of free seating	2	3	6.00
	Seating provided by companies/third parties	1	0	0.00
	Presence of furniture and other artifacts in the space	1	1	1.00
	Climatic comfort	2	1	2.00
	Design elements preventing reduction in space use	1	3	3.00
	Perceived physical condition and maintenance of facilities	2	1.23	2.45
	Noise disturbance from traffic or other sources	1	1.35	1.35
	Subtotal		10	
Index				52.68
Safety	Visual/physical connection and openness to adjacent streets/spaces	1	3	3.00
	Appropriate physical condition and maintenance	1	1	1.00
	Quality of lighting at night	1	1	1.00
	Feeling of safety from surveillance cameras, guards,	1	1.79	1.79

Public space quality aspect	Sub-variable/indicator	Weight	Score	Score × Weight
	guides, receptionists, etc.			
	Perceived safety from crime during the day	2	1.76	3.53
	Perceived safety from crime at night	2	1.51	3.02
	Perceived safety from traffic	2	1.80	3.61
Subtotal		10		16.95
Index				56.50
Pleasurability	Presence of impressive architectural/landscape features (imageability)	1	2	2.00
	Sense of enclosure/protection	1	2	2.00
	Diversity of sub-spaces	1	3	3.00
	Density of elements providing sensory complexity	1	2	2.00
	Diversity of elements providing sensory complexity	1	3	3.00
	Existence of design elements as focal points	1	3	3.00
	Visual/physical connection and openness to adjacent streets/spaces	1	3	3.00
	Perceived attractiveness of the space	2	1.56	3.12
	Perceived interest in the space	1	1.53	1.53
Subtotal		10		22.65
Index				75.49
Total Score				95.05
Average Public Space Index				63.36

Notes:

The maximum score per indicator is 30. The total score is 150 for 5 indicators.

Table 2. Index of public open space quality in Nostalgia Park

Public Space Quality Aspect	Value*	Index**
Inclusiveness	22.8	75.9
Meaningful Activities	16.9	56.2
Comfort	15.8	52.7
Safety	17.0	56.5
Pleasurability	22.6	75.5
Public Space Index	95.0	63.4

Notes:

*Maximum of 30 per aspect and 150 per public open space location.

**Range: 0–100

Source: Table 1



Figure 3. Distribution graph of public space index components in Nostalgia Park

Source: Table 2

From the table, it can be seen that Nostalgia Park as a public open space (POS) has a Public Space Index of 63.4. Among the five aspects, inclusiveness and pleasurability achieved the highest index values, namely 75.9 and 75.5, while the other three indicators meaningful activities, safety, and comfort scored relatively lower. This condition generally illustrates that Nostalgia Park has potential to be further developed into a high-quality public open space due to its locational advantages, accessibility, adequate area, and existing activities. However, attention needs to be given to the aspects of diversity of activities and facilities, visitor safety, and comfort, as an effort to enhance the overall quality of this POS.

Recommendations for the development of Nostalgia Park, Kupang City

Based on the results of the survey and analysis of visitor data and the condition of the POS in relation to the five aspects of public space quality (Mehta 2014), as well as the identification of visitor behavior in the POS through Behavior Mapping (Neonufa, Tualaka, and Hendrik 2025),

several recommendations for the management of Nostalgia Park can be formulated.

1. Inclusiveness

Nostalgia Park functions as an important public space by providing an area accessible and enjoyable for all social groups, including low-income individuals, women, and children. This is evident in its highest index score of 75.9. To improve inclusiveness, the spatial distribution and facilities should be arranged to meet the needs of diverse community segments. One crucial element requiring improvement is universal accessibility. At present, the pedestrian pathways in Nostalgia Park are not fully accommodating for people with disabilities, the elderly, and other vulnerable groups. Several paths still lack supporting elements such as tactile paving or adequate ramps. Accessibility is a key factor in creating inclusive public spaces (Yildirim, Keshavarzi, and Aman 2022). Therefore, improvements should focus on pedestrian pathways, the provision of disability-friendly access routes, as well as the addition of ergonomic benches and accessible toilets.

Diversity of facilities for different groups should also be prioritized. Currently, the park facilities are predominantly utilized by young people, while families, children, and the elderly still struggle to find spaces suited to their needs (Itair, Shahrour, and Hijazi 2023). To enhance inclusivity, the existing facilities should be improved and complemented with children's playgrounds, family recreation areas, and zones for social interaction. Security and comfort must also be strengthened.

A previous study Neonufa, Tualaka, and Hendrik (2025) divided Nostalgia Park into three utilization zones. Zone B recorded the highest level of activity due to its vibrant atmosphere and adequate facilities, while Zone A had the lowest activity due to the lack of essential amenities such as lighting and seating. Issues of safety and security, particularly at night, are prominent in Zones A and C, where insufficient lighting affects visitor comfort and well-being. Thus, more evenly distributed lighting across the park is essential, especially in the jogging track and rear areas. Installing better lighting, guard posts at strategic points, and CCTV surveillance is recommended to enhance safety.

Nostalgia Park also holds potential as a center for social and recreational activities. However, certain facilities such as the amphitheater in Zone

C remain underutilized, and community involvement is still limited (He, Li, and Li 2022). Optimizing the amphitheater for cultural and artistic events and engaging local communities to organize regular programs are strongly recommended. Moreover, openness and spatial flexibility should be improved so that the park can accommodate a variety of activities without altering its existing functions.

Equity in the use of public space should also be considered. In general, individuals from lower socioeconomic backgrounds tend to use the park less frequently due to the lack of facilities that meet their needs (Landman 2020). Therefore, educational programs and outreach on the benefits of the park, alongside the provision of affordable facilities, should be developed to ensure that public spaces can be enjoyed by all layers of society.

2. Meaningful activities

Nostalgia Park has the potential to become a hub of inclusive and meaningful social and recreational activities, but improvements are necessary in terms of activity diversity, as indicated by its relatively low index score of 56.2. To enhance the quality of activities, diversification of functions and programming must be implemented. At present, activities are limited, particularly in Zone B, with a lack of diverse functions that support various forms of social, recreational, and cultural interaction (Purwanti 2022). Thus, developing Zones A and C with the addition of multifunctional plaza areas is highly recommended to enrich social and recreational experiences.

Previous research (Neonufa, Tualaka, and Hendrik 2025) found that the highest activity levels occur in the morning (06:00–08:00 WITA) and evening (17:00–19:00 WITA), with jogging and leisurely walking being the most common morning activities. However, daytime activities drop significantly due to high temperatures, limiting the use of the park at those times. Accordingly, the addition of shade elements such as leafy trees and canopies along pedestrian paths is essential to improve comfort throughout the day. Facility and infrastructure enhancement is equally important. Currently, some facilities are damaged and not fully aligned with visitor behavior. Routine maintenance and facility improvements are critical for maintaining public space quality (Ahirrao and Khan 2022). Therefore, regular maintenance, improved

lighting in frequently used areas at night, and family-friendly amenities should be provided.

Collaboration with third parties can enrich visitor experiences, particularly through the development of culinary and trade areas. Establishing well-organized food courts along the northern and eastern edges of the park would allow visitors to enjoy meals while engaging in activities. Additionally, organizing trade areas such as markets or bazaars would stimulate economic activity within the park (Mehta 2014). Sustainable management should also be prioritized. Routine maintenance is vital to ensure cleanliness, safety, and functionality (Ahirrao and Khan 2022). Moreover, the stewardship of green areas and other natural elements must be emphasized to continue supporting the physical and mental well-being of visitors (Gao et al. 2025).

3. Comfort

Comfort in public open spaces, particularly in urban parks such as Nostalgia Park, is a crucial factor influencing how extensively the space is used and appreciated by the community. Comfort encompasses multiple dimensions that must be addressed to create spaces that are not only attractive but also functional and enjoyable for diverse user groups. In this study, the comfort aspect scored the lowest index of 52.5, thereby requiring specific attention.

One of the most influential factors affecting park comfort is thermal comfort, which relates to air temperature, humidity, and solar exposure. A park that lacks protection against solar heat can make visitors uncomfortable during daytime activities, especially in a dry-climate city like Kupang. The addition of shade trees suitable for dry climates can help reduce heat and enhance thermal comfort. Broad-canopy trees providing extensive shade would be particularly effective in creating cooler zones for visitors, especially during midday. Pergolas in strategic locations would also provide additional shelter for resting visitors. For nighttime comfort, adequate lighting is essential. Studies on other public spaces indicate that good lighting increases visitor comfort and a sense of safety, especially in parks frequently used at night (Zamanifard et al. 2019; Masullo et al. 2023).

The availability of adequate seating is another critical element in creating comfort in urban parks. Research demonstrates that comfortable seating is a major factor in user satisfaction, as it

offers opportunities for rest and relaxation, particularly for older adults. Key aspects such as backrests, seating density, and aesthetic appeal are essential to enhance visitor satisfaction (Lin, Li, and Lin 2024). In Nostalgia Park, additional seating in Zones A and C is urgently needed, as these areas are currently lacking in suitable seating. Seating should also be accessible for all groups, including individuals with special needs. Good accessibility ensures that everyone can enjoy the park without barriers, including pedestrian paths designed for people with disabilities (Błaszczuk et al. 2020; Wang et al. 2023).

Cleanliness and facility maintenance are further determinants of comfort in public open spaces. Dirty environments and damaged facilities reduce visitor comfort. In Nostalgia Park, many facilities, particularly in Zones A and C, are broken or poorly maintained. Studies indicate that well-maintained and clean parks are more favored by visitors (Choirunnisa, Setiawan, and Masruri 2017). Therefore, park management should prioritize regular maintenance, repair of damaged facilities, and the provision of additional trash bins in strategic points. Hiring routine cleaning staff would also help maintain cleanliness and improve visitor comfort.

Noise from surrounding traffic presents another challenge in creating comfort. As shown in other research, noise in public open spaces can decrease visitor comfort, especially in areas adjacent to main roads (Vukmirovic, Gavrilovic, and Stojanovic 2019). To address this, the addition of vegetation along the El Tari Road edge could serve as a noise buffer and provide visitors with a greater sense of security. Vegetation would also create a calmer atmosphere and contribute to overall comfort.

Good Park design also plays a crucial role in enhancing comfort. The presence of greenery and elements such as water features can significantly increase visitor comfort. Research shows that such elements mitigate extreme weather conditions and create cooler, more pleasant environments (Vukmirovic, Gavrilovic, and Stojanovic 2019). Furthermore, a design that integrates aesthetics and functionality can generate attractive and comfortable spaces. For instance, distinctive furniture or artifacts relevant to the park's theme can reinforce its identity while also enhancing comfort (Paliwoda and Priess 2021).

Visitor perception of comfort is essential in assessing the quality of public open spaces. User experiences may be shaped by factors including accessibility, available facilities, and cleanliness. Field studies demonstrate that visitors value parks offering comfort in terms of seating facilities, cleanliness, and environmental conditions (Ahirrao and Khan 2022). Therefore, periodic visitor surveys or feedback collection are crucial to evaluate how well the park meets user needs and how comfort can be further improved.

4. Safety

Based on the collected data and related references, Nostalgia Park requires several improvements to enhance safety and security aspects for visitors, as the index for this aspect is only 56.5. One major issue identified is the lack of adequate lighting, particularly at night. This condition leaves many areas of the park, especially Zones A and C, in darkness, which in turn increases the perception of insecurity. To address this, it is necessary to repair and add lighting with appropriate spacing throughout the park, especially in Zones A and C. Proper lighting will improve visibility in the park and help reduce fear. Sufficient lighting is a crucial element in improving the sense of security, particularly at night (Vukmirovic, Gavrilovic, and Stojanovic 2019; Felappi et al. 2024).

In addition, the lack of supervision constitutes a significant problem, whereby the park is relatively safe during the day, but the perception of safety decreases at night. Therefore, it is recommended to install CCTV in strategic areas and to place security officers or park supervisors to strengthen monitoring, particularly at night. The presence of surveillance either through CCTV or physical personnel can enhance visitors' perception of safety (Mohan and Chani 2025; Kaushal 2024).

Another problem is the lack of clear physical barriers between the park and the heavily trafficked road, which may increase the potential risk of accidents. As a solution, aesthetically designed physical barriers, such as strategically arranged vegetation, need to be added along the park's boundaries with the road. This will improve safety and increase the perception of security, highlighting the importance of physical boundaries and visual connectivity with the surrounding streets in creating a sense of safety in public space (Henrique, Botelho, and Magagnin

2023; Delgado da Silva, Bakay, and Batista de Moraes 2024).

In addition, regular maintenance of facilities and consistent cleanliness are also critical factors that cannot be overlooked. Several facilities at Taman Nostalgia, such as children's playgrounds, were found to be in a state of disrepair, posing potential hazards to visitors. Therefore, damaged facilities must be promptly repaired or replaced, and cleanliness management should be implemented through daily cleaning routines. The addition of adequate trash bins throughout the park will also help maintain cleanliness and support visitor comfort. Proper maintenance and sustained cleanliness can reduce visitors' perceptions of insecurity (Evans et al. 2019; Landman 2020).

Community involvement in park management and supervision is also of paramount importance. Parks managed with the participation of local communities, for example through park monitoring groups or volunteer cleaning programs, can enhance a sense of ownership and responsibility, which in turn increases feelings of safety and comfort within the park. Community engagement in public space management can strengthen security perceptions and enhance the actual safety of the space (Kaushal 2024).

Ultimately, park design should allow for accessibility and visual connectivity with surrounding streets. Parks designed with clear pathways and accessible facilities tend to have higher safety ratings (Henrique, Botelho, and Magagnin 2023). By designing the park with attention to visual and physical openness, visitors will feel safer, thereby improving their perception of safety.

5. Pleasurability

The Pleasurability aspect in public spaces, particularly at Taman Nostalgia (RTP), heavily relies on the aesthetic quality and spatial experience that can create attraction and satisfaction for visitors. Assessment results place this aspect at a relatively high index of 75.5. Pleasurability encompasses various elements, ranging from aesthetically designed spaces to the presence of natural features that enhance visitor comfort. Emphasizing spatial aesthetic quality is crucial because it can inspire visitors and increase their engagement. For instance, the presence of attractive design elements, particularly those with local cultural significance, such as the Peace Gong, which has become an icon at RTP, serves

as a focal point that enriches visitor experience (Vukmirovic, Gavrilovic, and Stojanovic 2019). Furthermore, optimizing the arrangement of the amphitheater in Zone C can provide space for community activities and cultural performances, which will undoubtedly attract more visitors.

It is also essential to add more natural elements, such as trees and water features, which serve not only as decorative elements but also as sources of tranquility and coolness for visitors. Trees providing shade and water features such as ponds or artificial streams can offer a refreshing sense of relaxation (Felappi et al. 2024). This aligns with research indicating that natural elements can enhance visitors' mental well-being and create a more enjoyable atmosphere (Selanon, Puggioni, and Dejnirattisai 2024). Parks with increased green spaces can also mitigate the negative impacts of extreme weather, such as heatwaves, creating a more comfortable environment (Vukmirovic, Gavrilovic, and Stojanovic 2019).

The diversity of sub-spaces within the park significantly influences visitor enjoyment. At RTP, especially in Zone B, there is already diversity of sub-spaces supporting various activities. However, to enhance sensory experiences and visitor enjoyment, further development is needed in Zones A and C. For instance, by creating multifunctional plazas in these zones, the park can provide more space for community and family recreational activities without interfering with the park's primary functions. Consequently, the park can offer a more diverse experience, from children's play areas to family relaxation zones, which in turn increases the sensory and aesthetic complexity of the space (Mehta 2014).

Additionally, visual and physical connections between RTP and its surrounding areas are crucial to creating cohesion between the public space and the external environment. Although RTP already has adequate visual connections with streets and adjacent areas, adding vantage points that provide views outside the park, such as a food court or attractively designed kiosks on the north and east sides, can provide new experiences and serve as attractions for visitors (Hu et al. 2024; Abdulkarim and Nasar 2014). This allows visitors to enjoy external scenery while remaining within the public space of the park.

Cleanliness and maintenance of park facilities also play a significant role in creating a pleasurable experience. If existing facilities are

damaged or poorly maintained, visitors' perceptions of the space's attractiveness will decline. Therefore, repairing and upgrading facilities throughout the park, including the provision of adequate parking areas for both two- and four-wheeled vehicles and ensuring sufficient lighting, will enhance visitor comfort. Proper lighting not only provides a sense of security but also extends the time visitors can spend in the park, particularly at night (Masullo et al. 2023). Moreover, a sense of protection and safety within public spaces is vital for visitor enjoyment. Maintaining clear boundaries, especially from busy traffic on Jalan El Tari, can create a feeling of comfort and protection for visitors. One way to achieve this is by planting vegetation along park boundaries to create visual barriers while also helping mitigate noise and pollution (Akay and Önder 2022). However, careful consideration is needed to ensure that such vegetation does not obstruct airflow, natural light, or visibility, which could increase the risk of crime or accidents (Lis, Pardela, and Iwankowski 2019).

Overall, enhancing Pleasurability at Taman Nostalgia requires an integrated effort involving improvements in aesthetic design, the enhancement of natural elements, development of facilities that support diverse activities, and maintenance of cleanliness and safety. All these factors work together to create a public space that is not only comfortable but also enjoyable for all visitors.

Conclusions

1. Previous research on Visitor Activity Identification at Taman Nostalgia divided the park into three utilization zones. Surveys and visitor behavior analysis using behavior mapping techniques at Taman Nostalgia indicated an uneven distribution of activities, closely related to the availability of facilities. Zone B recorded the highest activity levels due to its lively atmosphere and adequate facilities. Conversely, Zone A showed the lowest activity levels, primarily due to the lack of essential facilities such as lighting and seating. Safety and security concerns, especially at night, were prominent in Zones A and C, where insufficient lighting affected visitor comfort and well-being. The highest activity occurred in the morning (06:00–08:00 WITA) and late afternoon (17:00–19:00 WITA), with jogging and leisurely

walking being the most common morning activities. However, daytime activities decreased significantly due to high temperatures, limiting park usage during these hours. These findings highlight the need for adjusting RTP Taman Nostalgia management recommendations according to activity patterns in each zone (Neonufa, Tualaka, and Hendrik 2025).

2. Evaluation of the quality of RTP Taman Nostalgia in Kupang City, considering aspects such as inclusiveness, meaningful activities, safety, comfort, and pleasurable (Mehta 2014), employed the Public Space Index (PSI) method to measure the quality of RTP, resulting in a public space quality index of 63.4. Among the five aspects, inclusiveness and pleasurable had higher indices of 75.9 and 75.5, while the other three indicators safety 56.5, meaningful activities 56.2, and comfort 52.7 recorded the lowest indices. Overall, this indicates that RTP Taman Nostalgia has potential to develop into an inclusive RTP due to its location, accessibility, area, and existing activities. However, attention must be given to the diversity of activities and facilities, as well as visitor safety and comfort, to enhance overall quality.

3. Recommendations for RTP management focus on the five aspects of public space quality, emphasizing findings from previous visitor behavior analyses, with facility adjustments based on activity patterns in each zone. Recommendations prioritize the three lowest-index indicators within safety, meaningful activities, and comfort.

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