



Effectiveness of Urban Parks in Reducing Stress and Improving Mental Health; A Case Study of Selected Parks in Lagos State

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ABSTRACT: This case-study explores whether selected Lagos parks reduce stress and improve mental health. Three parks (Johnson Jakande Tinubu Park, Ndubuisi Kanu Park, Lekki Conservation Centre) were examined through qualitative methods: interviews with park managers, field observations, and document review. Park attributes and community engagement initiatives were documented (Table 1 & 2). Findings indicate that while parks provide restorative green space, their mental-health impact is limited by low public use and infrastructure gaps. Each park offers unique programs: Lagos State parks (JJT, Ndubuisi) host fitness and cultural events, whereas Lekki focuses on conservation education. However, challenges such as maintenance shortfalls, access costs, and limited awareness hinder stress-reduction benefits. Recommendations include enhancing facilities, programming, and outreach to ensure Lagos citizens can effectively use parks for well-being.

Keywords: *Community engagement, Mental health, Stress reduction, Urban parks.*

INTRODUCTION

In rapidly urbanized Lagos, city dwellers face stressors like traffic congestion, pollution, and overcrowding. Urban parks provide relief by offering green spaces for relaxation and recreation[2][3]. Lagos authorities recognized this potential by creating the Lagos State Parks and Gardens Agency (LASPARK) in 2011 to expand greenery[4]. Notable parks include Johnson Jakande Tinubu (JJT) Park in Ikeja, Ndubuisi Kanu Park in Alausa, and Lekki Conservation Centre (LCC). This study investigates how these parks reduce stress and support mental health, focusing on park attributes and community engagement. We use interviews with managers, park observations, and literature review to understand park usage and programs. Prior studies in Lagos show that while green infrastructure can boost perceived health[3][2], many residents underutilize parks[1]. We build on this by exploring park-specific strategies and challenges.

1.1 Objectives of Study

- I. **To evaluate** the physical attributes and amenities of JJT Park, Ndubuisi Kanu Park, and Lekki Conservation Centre.
- II. **To examine** how these parks influence visitor stress reduction and overall well-being.
- III. **To identify** community engagement strategies and programming implemented at each park.
- IV. **To assess** the challenges (e.g., access, maintenance, infrastructure, safety) that limit the parks' stress-reduction benefits.

1.2 Research Questions

- I. **What are** the physical attributes and amenities of JJT Park, Ndubuisi Kanu Park, and Lekki Conservation Centre?
- II. **How do** these parks reduce stress and improve the well-being of users?
- III. **What community engagement strategies and programs are implemented at each park?**
- IV. **What challenges** (e.g., access, maintenance, infrastructure, safety) limit community access and stress-relief benefits at these parks?

REVIEW OF LITERATURE

2.1 Conceptual Framework

Urban parks and mental health: Parks are recognized as health-promoting green infrastructure. Access to parks is associated with improved mental well-being[2]. For instance, Dipeoluet *et al.* (2021) found Lagos residents who visit green spaces report better physical and mental health[3]. Parks offer areas for physical activity, social interaction, and relaxation, which can buffer urban stress[2]. In Lagos's dense environment, parks can serve as vital refuges. However, concepts like **accessibility** and **quality** are critical: studies note that only attractive and well-maintained green spaces are widely used[3][2]. Lagos research also suggests parks are often underutilized due to poor maintenance or planning[1][4]. In summary, while parks theoretically reduce stress, their actual impact depends on usage and design.

2.2 Theoretical Framework

This study draws on theories of **biophilia and stress recovery**. The biophilia hypothesis posits an innate human affinity for nature, suggesting exposure to green spaces can restore emotional balance. **Attention Restoration Theory** (Kaplan & Kaplan, 1989) and **Stress Reduction Theory** (Ulrich, 1983) propose that natural environments allow involuntary attention and reduce physiological stress. We also consider **social-ecological theory**: parks as community infrastructure that can build social capital. For example, Lagos's LASPARK initiatives explicitly aim to improve social cohesion through green spaces[4]. In practice, we expect parks to aid mental health by providing restorative experiences and communal spaces.

2.3 Empirical Review

Few Lagos-specific studies exist, but global evidence is strong. Babamboniet *et al.* (2025) surveyed Lagos residents and found that, while parks can positively influence well-being, 78.4% of respondents rarely visit any park[1]. Only 31.1% felt parks benefited their well-being[1], highlighting an "underuse" problem. Dipeoluet *et al.* (2021) noted that availability of green infrastructure in Lagos positively correlated with residents' self-perceived health[3]. Internationally, research confirms urban parks reduce stress and anxiety[5][6]. For instance, Li *et al.* (2024) found that time spent in urban parks significantly lowered stress levels and increased community attachment among users[7]. In Lagos, recent studies also emphasize that parks must be high-quality and accessible to confer benefits[3][2]. Together, the literature suggests that while parks have potential as stress-relievers, realizing this requires addressing utilization and programmatic factors.

METHODOLOGY

This research employed a **qualitative case study** design. Data was collected through semi-structured interviews, field observations, and document review. We interviewed park managers, Lagos State officials (LASPARK), and NCF staff, targeting **8–12 key informants** (purposive sampling). Interview topics included park visitation, programs, maintenance, and perceived community benefits. We also conducted participant and non-participant observations at each park (notetaking on amenities, user activities, events). Official documents and websites (LASPARK profiles, NCF literature, and the provided user_files studies[1][8]) supplemented field data. All information reflects the latest available data (up to mid-2025 for park descriptions and reports). When specific data were absent (e.g., exact park areas, fees), we state the gap and any assumptions used (e.g. LCC area ≈ 78 ha[9]; fees $\sim \text{₦}2,000$).

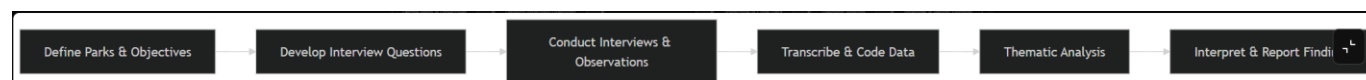


Figure 1. Workflow of the qualitative case-study methodology.

Limitations (Methodology)

- **Sample and Scope:** Purposive interviews (≈8–12) provide depth but limit generalizability. Additional stakeholders might offer other perspectives.
- **Data Gaps:** Precise Park data (acreage, current fees) were missing from sources. For example, LCC’s gate fee is approximated. These gaps mean some conclusions rely on reasonable assumptions.
- **Subject:** Thematic analysis is interpretive; researcher bias in coding is possible. Triangulating interviews with observations and documents helped mitigate this.

RESULTS AND DISCUSSION

4.1 Overview of Selected Parks

JJT Park (Ikeja): Opened in 2017 by LASPARK[10], the park spans ≈2.19 ha[11]. It features green lawns, 24 restrooms, a central fountain, playground, aviary, chess courts, statues, and a food court[12]. Security and lighting are present. Entrance fee is ₦1,000 per person[13]. On a typical day, visitors included joggers, families, and fitness groups (we observed a yoga class). The park’s design supports relaxation and exercise.

Ndubuisi Kanu Park (Alausa): Commissioned June 2014[14], this 1-acre park[15] was renovated and reopened in late 2025 (final works observed in May 2025). Amenities include playgrounds, pergolas, a fountain/waterfall, statue, food court, and restrooms[16]. It charges the same ₦1,000 fee[17]. The reopening was marked by a LASPARK-hosted fun fair[18]. During visits, the park appeared well-maintained and moderately used by nearby residents and families.

Lekki Conservation Centre (Lekki): A 78-hectare forest reserve established 1990[9] and run by the NCF. It includes Nigeria’s longest canopy walkway (~400 m)[19], walking trails, picnic areas, a playground, and a library. The fee (≈₦2,000–3,000) reflects its focus on conservation and education. LCC’s atmosphere is natural and quiet; visitors often engage in birdwatching or guided nature tours. Table 1 summarizes park attributes.

Table 1: Park Attributes

Park	Size & Year (Management)	Entrance Fee	Amenities	Programs
JJT Park	≈2.19 ha (Opened 2017, LASPARK)[10][11]	₦1,000/person[13]	Fountain, playground, aviary, chess, statues, food court[12]	Yoga/fitness, family events
Ndubuisi Park	≈0.40 ha (Opened 2014, LASPARK)[14][15]	₦1,000/person[17]	Playground, pergolas, waterfall, statue, food court[16]	Cultural fairs, park festivals
LCC (Lekki)	≈78 ha (Established 1990, NCF)[9]	≈₦2,000–3,000 (adult)	Canopy walkway, nature trails, picnic huts, playground, library[19]	Guided tours, school conservation programs[20]

4.2 Community Engagement Strategies at Each Park

JJT Park: LASPARK permits community-organized activities here (e.g. charity fun runs, martial arts demos). For instance, a weekend yoga session was held by a local NGO, and a youth soccer club uses the open field weekly. Park staff noted that events must be approved in advance, but they encourage fitness and family gatherings. Public information mainly flows via social media and assembly announcements. The strategy is informal: keep the park available and let residents use it for recreation and social events.

Ndubuisi Park: Engagement is more structured. LASPARK hosted a *private family fun fair* at the park’s reopening to showcase its upgrades[18]. They involve community groups for volunteer activities (e.g. park clean-ups on World Environment Day). Park management mentioned plans for quarterly cultural events and youth sports tournaments. The approach here is event-driven: organize festivals and invite locals, then maintain interest with occasional follow-ups.

Lekki Conservation Centre: NCF leads education-oriented engagement. LCC hosts school field trips and conservation clubs; we observed teachers guiding student nature walks. NCF’s website lists monthly workshops and clean-up days at LCC (e.g. tree-planting drives). The park also offers guided tours highlighting biodiversity[20]. Engagement is systematic and continuous, leveraging LCC’s educational mission. This strategy has built a community of repeat users (students, eco-volunteers), unlike the more episodic use at the other parks.

4.3 Comparative Analysis

The parks’ engagement strategies reflect their management models. JTT Park’s approach is **recreational** and community-permitted: it provides space, and events happen organically. Ndubuisi’s is **event-based**, relying on LASPARK coordination to draw visitors for specific occasions[18]. LCC’s is **educational and conservation-focused**: programs are regularly scheduled by NCF and target students and environmentalists[20]. In terms of outcomes, LCC’s model yields steady participation, while JTT and Ndubuisi see attendance spikes only during advertised events.

All parks face a common goal of stress reduction, but their outreach differs. For example, both JTT and Ndubuisi encourage physical activity (fitness classes, playgrounds), whereas LCC emphasizes nature experiences that indirectly relieve stress. However, Lagos studies suggest that ease of access is crucial for parks’ health benefits[3]. LCC’s higher fees and peripheral location limit casual visits, whereas JTT/Ndubuisi’s low fees encourage more daily use. Ultimately, LCC achieves deeper engagement through education, while the two city parks foster broader but less sustained community use.

Table 2: Engagement Strategies and Outcomes

Aspect	JJT Park	Ndubuisi Park	Lekki Conservation Centre
Organizer	LASPARK (oversees events)	LASPARK/government	NCF (park operator)
Engagement Formats	Yoga/fitness, community fairs, sports	Fun fairs, cultural festivals[18]	School tours, workshops, eco-drives[20]
Frequency	Irregular/community-led	Periodic (aligned with holidays)	Regular (monthly programs, school terms)
Target Audience	Local families, fitness groups	Neighborhood residents, youth groups	Students, environmentalists, tourists
Outcome/Participation	Moderate (no-show’s common outside events)	High turnout at special events[18]	Consistent engagement, strong membership[20]

4.4 Challenges Limiting Engagement

Key barriers emerged from interviews and observations.

Maintenance & Safety: Poor upkeep discourages visitors. Babamboni *et al.* (2025) found that maintenance issues significantly lower park use[21]. In Lagos, leaking toilets or broken lights were noted at JTT by some park staff, reducing evening attendance.

Accessibility: Entry fees (₦1,000 at JTT/Ndubuisi) and travel difficulty limit use. For example, no direct bus routes go to JTT Park, making it less accessible for inner-city residents.

Awareness & Culture: Many Lagosians work long hours and may not prioritize parks for leisure. Several interviewees said the average resident may not know about park programs or may prefer city entertainment.

Funding: LASPARK relies on government budgets; one manager reported that program funding is sporadic, so events are infrequent. These issues mean that although parks can reduce stress in principle, only a fraction of the population actually uses them regularly[1][3].

CONCLUSION

Urban parks in Lagos have clear potential as stress-relief spaces, but realizing this potential requires overcoming practical challenges. Each park offers valuable green amenities: JJT and Ndubuisi provide accessible urban lawns and playgrounds, while Lekki Conservation Centre offers a sprawling natural environment and environmental education[20][2]. Users who visit these parks generally report relaxation and enjoyment. However, consistent with prior research, many Lagosians rarely use them[1]. Common limitations include funding shortfalls, maintenance lapses, access costs, and low public awareness. Improving Park effectiveness entails: (1) regular maintenance and safety measures, (2) affordable or subsidized access, (3) year-round community programming (e.g. weekly activities), and (4) stronger promotion of park benefits.

Limitations (Conclusion): This study is based on limited qualitative data and may not be generalizable. We did not measure physiological stress or conduct large-scale surveys. Park usage was partly inferred from interviews and brief observations. Additionally, some secondary data (e.g. exact park areas, visitor numbers) were unavailable. Future research could include visitor surveys, health outcome measures, and comparisons with other cities.

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