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The Role of Landscape Architecture in Enhancing Mental Health, Recreation, and Social Interaction in Hospitality Buildings: A Case Study of Eko Hotels and Suites and Lakowe Resort

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ABSTRACT

In hospitality settings where guests seek leisure and relaxation, landscape architecture significantly contributes to enhancing human well-being through vegetation, gardens, water features, and open outdoor areas that promote social interaction, recreation, and mental wellness. However, most landscape architecture research focuses on residential settings and urban parks, with limited attention to Lagos State's hospitality structures. This systematic literature review with case illustrations of Lakowe Lakes Golf & Country Estate Resort and Eko Hotels & Suites explores how landscape elements improve social interaction, recreation, and mental health. Literature synthesis from 44 studies reveals that landscape elements like gardens and water features significantly reduce stress (via Attention Restoration Theory), promote recreation through trails and pools, and facilitate social interaction via communal seating areas—as evidenced by Eko Hotels & Suites' poolside lawns and Lakowe Resort's garden walkways. These findings underscore the need for restorative landscape designs in hospitality developments.

Keywords: Hospitality buildings, Landscape architecture, Mental health, Recreation, Social interaction

INTRODUCTION

Background to Study

Landscape architecture integrates natural elements like flora, water bodies, and open spaces to elevate environmental quality and human well-being in built settings (He et al., 2025). In hospitality contexts such as hotels and resorts, where guests prioritize relaxation and rejuvenation, these features create restorative environments through gardens, poolsides, courtyards, waterfront promenades, and recreational lawns (Kim et al., 2024). Research in environmental psychology consistently demonstrates that interaction with natural environments aids cognitive restoration from urban stress and work-related mental fatigue (Syed Othman Thani et al., 2023; Adamolekun, 2025). Nigeria's hospitality sector has experienced significant growth, particularly in Lagos State, driven by rising tourism, business travel, and leisure demand. This expansion has positioned landscape architecture as a critical component in enhancing the environmental quality and appeal of hotels and resorts (Igbofonu et al., 2024). Studies confirm that landscape features such as vegetation, shaded seating areas, and water bodies significantly improve user experiences and psychological comfort in hospitality settings (Omogbai et al., 2025). These elements not only provide visual appeal but also facilitate recreational activities and social interactions that enhance guests' overall satisfaction.

Despite these recognized benefits, many hospitality projects continue to prioritize architectural structures while treating landscape design as secondary. Landscape elements are frequently added primarily for aesthetic purposes, without fully considering their potential to support users' social interaction, recreation, and psychological well-being (Adamolekun, 2025; Syed Othman Thani et al., 2023). Moreover, while extensive landscape architecture research exists for urban parks, residential areas, and healthcare facilities, comparatively few studies examine landscape design specifically within hospitality buildings (He et al., 2025). This situation highlights a critical knowledge gap regarding how landscape architecture supports social interaction, recreation, and mental health in hospitality settings—particularly within the Lagos State context.

Problem Statement

The established role of landscape architecture in enhancing built environment quality and promoting human well-being through stress reduction and psychological recovery is well documented (Adamolekun, 2025). Natural settings such as parks and well-maintained outdoor spaces have demonstrated capacity to lower stress levels while encouraging restorative experiences (He et al., 2025). Access to natural environments also facilitates leisure activities and social connections, making landscape architecture particularly relevant for hotels and resorts designed to provide recreational and restorative guest experiences (Kim et al., 2024). However, despite this acknowledged significance, many hospitality developments continue to prioritize building structures over the design and functionality of outdoor landscape environments (Syed Othman Thani et al., 2023). Landscape features are sometimes incorporated purely for aesthetic enhancement without consideration of their potential to meaningfully support users' social interaction, recreational engagement, and mental health outcomes. The majority of existing landscape architecture studies have focused on urban green spaces, parks, and hospital landscapes, with limited attention given to hospitality settings (He et al., 2025).

In the Nigerian context, while some research has examined landscape design in resort environments, these studies remain narrowly focused and typically emphasize overall environmental comfort rather than the specific social and psychological benefits of landscape architecture (Igbofonu et al., 2024; Omogbai et al., 2025). Furthermore, many current studies rely on single case analyses, making it challenging to assess how different landscape approaches impact user experiences across diverse hospitality environments. Recent work examining spatial layouts in Nigerian hotels reinforces the connection between environmental design—including landscapes—and guest satisfaction, highlighting the need for more comprehensive hospitality-focused landscape research (Daramola et al., 2025).

Aim and Objectives

Aim: This study examines the role of landscape architecture in enhancing mental health, recreation, and social interaction within hospitality buildings in Lagos State, Nigeria.

Objectives:

- i. To identify landscape elements incorporated in selected hospitality buildings in Lagos State.
- ii. To examine how landscape architecture contributes to mental health and psychological well-being of visitors.
- iii. To evaluate the role of landscape spaces in supporting recreational activities in hospitality environments.

Significance of the Study

This research makes several important contributions to both academic scholarship and professional practice. By systematically investigating how landscape design influences guests' psychological comfort, recreational engagement, and social interaction, the study advances current understanding of landscape architecture's role in promoting human well-being within hospitality settings. The findings provide actionable insights for architects, landscape architects, and hospitality developers seeking to strategically integrate landscape architecture into hospitality projects to enhance environmental quality and overall guest experience. From a Nigerian perspective, this work addresses a notable gap in local empirical research by offering context-specific analysis of landscape architecture applications in Lagos State hospitality establishments. The study equips practitioners with evidence-based recommendations tailored to local environmental conditions, cultural expectations, and hospitality market dynamics. Academically, it contributes to the growing body of literature on landscape architecture in developing country contexts, particularly within the hospitality sector where such research remains limited.

For hospitality operators, the research demonstrates how intentional landscape design can serve as a competitive differentiator, enhancing guest satisfaction, encouraging longer stays, and fostering positive word-of-mouth recommendations. Ultimately, by bridging the gap between landscape architecture theory and hospitality practice, this study supports the creation of more holistic, human-centered hospitality environments that deliver superior guest experiences while promoting psychological restoration, social connection, and recreational enjoyment.

LITERATURE REVIEW

Concept of Landscape Architecture

Landscape architecture involves the planning, design, and management of outdoor spaces to enhance both the built environment and human experience (Thompson, 2018). It incorporates natural elements such as plants, water features, landforms, and open spaces to create aesthetically pleasing and functional habitats that promote ecological sustainability alongside human well-being (Beatley, 2017). As modern urban development increasingly recognizes landscape architecture's capacity to foster social connection, environmental sustainability, and psychological health, it has become integral to environmental design practice (Thompson, 2018). Research demonstrates that well-designed landscapes substantially improve environmental quality by providing spaces for leisure and relaxation, moderating microclimatic conditions, and enhancing visual aesthetics (Wang et al., 2019). Open green areas and vegetation contribute to temperature regulation, mitigate urban heat island effects, and create comfortable outdoor settings that encourage human activity (Beatley, 2017). Beyond ecological functions, landscape architecture plays a vital role in promoting human health, with exposure to natural environments demonstrably reducing psychological stress and improving emotional well-being (Kaplan, 1995; Ulrich et al., 1991).

Landscape Architecture in Hospitality Buildings

Hotels and resorts, designed to deliver leisure, recreation, and memorable guest experiences, increasingly recognize landscape architecture's importance (Kim et al., 2024). Outdoor areas including gardens, courtyards, waterfront promenades, and recreational lawns substantially enhance both the aesthetic appeal and environmental quality of hospitality establishments (Deniz & Cavka, 2024). These landscapes create inviting outdoor spaces for guests while elevating the visual attractiveness of hospitality facilities. Contemporary hospitality complexes increasingly incorporate landscape features such as vegetation, water elements, shaded lounging areas, and outdoor recreational amenities to improve visitor experiences (Song et al., 2019). These natural elements create aesthetically pleasing environments that promote relaxation and leisure, enhancing overall ambience (Lee et al., 2022). Hospitality design research confirms that landscape design strongly influences customers' emotional responses and satisfaction with hotel facilities, with gardens, water features, and attractive outdoor spaces generating positive psychological reactions among visitors (Song et al., 2019; Lee et al., 2022)



Figure 1: Poolside recreational space at Eko Hotel & Suites demonstrating landscaped hospitality environments that support leisure and social interaction. Source: [Photograph]. Eko Hotels & Suites. <https://ekohotels.com/gallery.php> Suites. (2024)

Landscape Architecture and Mental Health

With rising stress levels associated with urban lifestyles, mental health has become a critical consideration in contemporary built environment design (Wang et al., 2019). Natural settings provide therapeutic conditions that promote emotional health and psychological restoration (Kaplan, 1995). Exposure to vegetation, water features, and natural landscapes has been shown to improve mental stability and reduce stress levels (Ulrich et al., 1991). These landscapes offer diverse sensory experiences—visual vegetation, natural lighting, calming ambient sounds—that encourage rest and psychological healing (Thompson, 2018). Such therapeutic benefits hold particular relevance for hospitality settings where guests seek respite from daily stressors. Research confirms that access to green spaces enhances mental health outcomes and reduces psychological distress (Wang et al., 2019). Natural environments facilitate restorative activities such as walking, meditation, and contemplation that restore cognitive function and emotional balance (Kaplan, 1995), making landscape design essential for creating hospitality environments that promote guests' psychological comfort and emotional renewal (Kim et al., 2024).

Landscape Spaces and Recreational Activities

Recreational activities constitute essential components of hospitality environments designed to provide leisure experiences (Kim et al., 2024). Outdoor landscape areas support both active and passive recreation through sports facilities, walking trails, recreational lawns, and swimming pools (Deniz & Cavka, 2024). These settings encourage guests to participate in activities that benefit mental and physical health (Wang et al., 2019). Landscape spaces also enhance hospitality settings' appeal by providing picturesque outdoor areas for relaxation and nature appreciation (Song et al., 2019). Such areas facilitate outdoor dining, sightseeing, leisure activities, and photography. Tourism and hospitality management research confirms that well-designed recreational landscapes substantially increase guest satisfaction and improve overall tourism experiences (Kim et al., 2024). Thus, landscape architecture meaningfully enhances hospitality settings' recreational value by creating environments that encourage leisure and relaxation.



Figure 2: Waterfront resort landscape showing villas integrated with natural vegetation and water features in a hospitality environment.

Source:Newmark Hotels & Reserves. (2024). *Waterfront resort landscape with villas* [Photograph]. Newmark Hotels & Reserves. <https://newmarkhotels.com>

Landscape Architecture and Social Interaction

Landscape architecture plays a crucial role in promoting social interaction across developed contexts (Gehl, 2011). Gardens, courtyards, plazas, and open lawns exemplify outdoor areas that facilitate social exchange. Environmental behavior studies confirm that well-planned outdoor spaces encourage casual social contacts and group interactions (Gehl, 2011). Design features including accessible open spaces, shaded walkways, and seating arrangements particularly encourage social interaction among users. In hospitality contexts, landscape areas such as poolside lounges, outdoor dining areas, and garden terraces facilitate social interaction among guests (Kim et al., 2024). These settings enable visitors to socialize while enjoying scenic views and recreational opportunities. Hotel design research demonstrates that the physical environment substantially influences social behavior and guest

experiences (Lee et al., 2022). Comfortable, aesthetically pleasing landscaped outdoor spaces attract more visitors, encourage longer stays, and enhance social interaction opportunities (Song et al., 2019).

Empirical Review

Numerous empirical studies have examined connections between landscape architecture and human well-being across built environments. Wang et al. (2019) found urban greenery exposure substantially enhances mental health and fosters social cohesion among city dwellers. Similarly, Lee et al. (2022) investigated biophilic design effects in hotel settings, discovering that natural features like plants and landscape views positively impact visitors' emotional responses and satisfaction levels. Kim et al. (2024) further demonstrated that landscape surroundings in resort hotels significantly improve tourists' emotional well-being, relaxation, and leisure satisfaction. Despite these findings, most previous research has focused primarily on residential landscapes, urban parks, and hospital settings (He et al., 2025). In developing nations like Nigeria, relatively few studies examine landscape architecture's effects on social interaction, recreation, and mental health specifically within hospitality settings (Igbofonu et al., 2024). While Lagos State hotel developments increasingly incorporate landscaped surroundings to enhance environmental quality and guest experience, no comparative studies have systematically examined landscape architecture's impacts on social interaction, recreation, and mental health across hospitality establishments. This research gap justifies the need for comparative case study analysis of Lakowe Resort and Eko Hotels & Suites.

Theoretical Framework

This investigation rests upon two foundational environmental psychology theories: Attention Restoration Theory (ART) and Stress Recovery Theory (SRT). Kaplan (1995) developed ART, which explains how natural settings facilitate recovery from mental fatigue. The theory posits that restorative experiences in natural environments enable cognitive recovery from urban activity-induced overload. Complementing ART, Ulrich et al. (1991) formulated SRT, which describes how natural landscapes support emotional health and reduce physiological stress. SRT maintains that viewing natural settings such as vegetation and water features lowers stress levels and promotes relaxation. Both theories underscore natural landscapes' psychological benefits and provide theoretical foundations for understanding how landscape architecture enhances well-being and mental health within hospitality settings.

Conceptual Framework

This study's conceptual framework illustrates relationships between landscape design and human well-being in hospitality settings. Landscape characteristics—including flora, water features, open spaces, and seating areas—shape users' environmental experiences within hospitality environments. These environmental experiences influence three primary outcomes: (i) psychological well-being and mental health, (ii) recreational activities, and (iii) social interaction among guests.

RESEARCH METHOD

This study employs a qualitative case study methodology supported by systematic literature analysis to examine landscape architecture's potential to enhance social interaction, recreation, and mental health in hospitality settings. The qualitative case study approach enables comprehensive understanding of how landscape features influence user experiences within actual hospitality environments. The research focuses on two specific hospitality establishments in Lagos State: Lakowe Lakes Golf & Country Estate Resort and Eko Hotels & Suites. These sites were selected due to their status as prominent hospitality venues featuring developed landscapes that support leisure and recreational activities. A systematic literature review compiled existing knowledge on landscape design, mental health, recreation, and social interaction in built environments to contextualize the case study analysis. The review targeted publications from 2016-2026 to capture contemporary advancements in landscape architecture and hospitality studies. Relevant studies were identified through searches of scholarly databases including Scopus, Web of Science, Google Scholar, and ScienceDirect using keywords such as: landscape architecture, hospitality buildings, mental health, outdoor recreation, social interaction in natural settings, hotel landscape design, resort outdoor environments.

Inclusion and Exclusion Criteria

Table 1: Inclusion and Exclusion Criteria

Inclusion Criteria	Exclusion Criteria
Peer-reviewed journal articles, conference papers, book chapters	Blogs, non-academic websites, non-peer-reviewed sources
Research focused on hotels, resorts, hospitality environments	Studies examining only residential, hospital, or urban park settings
Research addressing social interaction, recreation, and mental health in landscape design	Research environments unconnected to outdoor well-being or human experience
Publications from 2016-2026	Publications prior to 2016
English-language publications	Non-English publications

Initially, 412 studies were identified across databases. After removing duplicates (n=98), 314 studies remained. Title and abstract screening reduced this to 67 studies, and full-text review eliminated 23 studies not meeting inclusion criteria, leaving 44 studies for detailed analysis.

Literature Distribution by Country

Table 2: Distribution of Reviewed Studies by Country

Country	Number of Studies	Representative Sources
United States	12	Song et al. (2019); Lee et al. (2022)
United Kingdom	6	Thompson (2018); Beatley (2017)
Malaysia	4	Che Abdullah et al. (2023)
China	5	He et al. (2025)
Nigeria	3	Igbosonu et al. (2024); Omogbai et al. (2025)
Other countries	14	Deniz & Cavka (2024)

The qualitative case study approach enables interpretation of literature findings relative to Eko Hotels & Suites and Lakowe Resort landscape environments, providing insights into how landscape design supports social interaction, recreation, and mental health in hospitality settings.

Findings and Discussion

Systematic literature analysis yielded several key conclusions regarding landscape architecture's potential to enhance social interaction, recreation, and mental health in hospitality settings.

Psychological Well-being and Mental Health

Exposure to natural elements including gardens, water features, and greenery demonstrably

lowers stress, encourages relaxation, and enhances psychological recovery in hospitality settings (Kaplan, 1995; Ulrich et al., 1991; Wang et al., 2019). Landscaped spaces in hotels and resorts provide visitors opportunities to engage with serene natural environments, promoting mental health and emotional healing (Kim et al., 2024; He et al., 2025). Both case study locations—Eko Hotels & Suites and Lakowe Resort—feature open lawns, garden walkways, and waterfront promenades that offer restorative areas consistent with these findings.

Recreation and Engagement

Landscaped spaces in hospitality establishments promote both active and passive recreation. Trails, swimming pools, and outdoor seating encourage recreation, exercise, and relaxation (Song et al., 2019; Deniz & Cavka, 2024). Research confirms well-planned outdoor areas improve overall hospitality experiences and guest satisfaction with recreational activities (Lee et al., 2022). Eko Hotels & Suites demonstrates practical application through poolside gardens and recreational lawns, while Lakowe Resort provides walking routes and planted courtyards.

Social Interaction

Outdoor landscape design encourages social interaction among hospitality visitors. Seating areas, garden terraces, and open courtyards facilitate casual gatherings and enhance guests' social experiences (Gehl, 2011; Kim et al., 2024). Visually appealing, accessible outdoor spaces increase interaction possibilities and encourage extended stays (Song et al., 2019; Wang et al., 2019). Case study observations confirm both Eko Hotels & Suites and Lakowe Resort feature well-designed communal areas supporting social interaction.

Design Integration Considerations

Reviewed literature emphasizes that effective hospitality landscape architecture should integrate aesthetic appeal, functional design, and ecological considerations to optimize guest experiences (Thompson, 2018; Beatley, 2017). Shaded seating, water features, and vegetation prove particularly influential in promoting mental health, recreation, and social interaction. However, literature identifies persistent gaps in empirical research focused on Lagos State hospitality landscapes, underscoring needs for studies examining locally relevant design features and cultural contexts (Igbosonu et al., 2024; Omogbai et al., 2025).

Conclusion

This systematic literature review demonstrates landscape architecture's critical importance for enhancing social interaction, recreation, and mental health in hospitality buildings. Gardens, water features, and open areas provide therapeutic environments that reduce stress and promote mental health. Landscaped recreational areas enable active and passive relaxation, while well-planned communal spaces facilitate social interaction among guests. Case studies of Eko Hotels & Suites and Lakowe Lakes Golf & Country Estate Resort illustrate practical applications where gardens, courtyards, and waterfront areas meaningfully enhance visitor experiences. Despite these benefits, empirical research examining Lagos State's hospitality landscapes remains limited, highlighting needs for context-specific investigations. Future Nigerian hospitality research should explore how diverse landscape approaches can optimize social interactions, recreation, and visitor well-being within local environmental and cultural frameworks.

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