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Evaluating the effect of landscaping elements on human comfort in a resort atmosphere: An analysis of a proposed hotel resort in Lekki

Igbosonu Chimbuenyim Kelechi ^{1*}, Adigun Stephen Peace ², Ukaga Favour ³

¹⁻³ Student Architecture, Caleb University, Lagos, Nigeria

* Corresponding Author: **Igbosonu Chimbuenyim Kelechi**

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Abstract

The tourism industry in Lagos, Nigeria, despite its potential, remains underdeveloped. This study examines the impact of landscaping on human psychology within a proposed hotel resort in Lekki, Lagos State. It emphasizes the need to integrate landscape design with architectural models for a better guest experience. Research explores stress reduction, relaxation, and visitor engagement through specific landscape features. Methodologically, it employs quantitative research using surveys and questionnaires from professionals in aesthetics and architecture. The study aims to advocate for innovative design approaches, emphasizing landscape design's importance in tourism planning. Ultimately, it seeks to enrich stakeholder understanding in resort development, promoting sustainable tourism practices by enhancing visitor experiences through effective landscape integration.

Keywords: Human comfort, landscape, landscape characteristics, landscape quality, resort, resort atmosphere, landscape design, softscape, hardscape, hotel resort, green spaces, tourism.

1. Introduction

The landscape of an environment serves as a pivotal indicator of its character, encompassing not only its landcover and quality but also its essence, which can be discerned through analysis and grading based on established criteria. Uniqueness or the lack thereof profoundly influences tourism and public perception of an area, with lakes and coasts historically serving as significant tourist draws due to their water-based resources. An undesirable environment is any combination of factors that are considered hazardous to human health and well-being, such as air contaminants or sidewalks that don't have the appropriate infrastructure for pedestrians to ensure safety when people are commuting (Onamade *et al*, 2022) ^[27]. Despite its vast potential, the tourism industry in Nigeria, particularly in Lagos, lags behind other African nations, hindered by underutilization, poor management, and negative perceptions (UNWTO, 2022).

The proposed study focuses on Lekki, a thriving city in Lagos State, Nigeria, where a hotel resort project at the intersection of human psychology, landscape design, and architecture promises to meet the rising demand for top-tier hospitality experiences. However, Nigeria's tourism sector faces myriad challenges, including insufficient development of tourism products, limited government support, and inadequate infrastructure. This study aims to address these issues by evaluating the relationship between landscaping elements and human psyche in a resort setting, recognizing the potential of landscaping to enhance the aesthetics and appeal of tourist destinations.

The aesthetic allure of a resort is pivotal in attracting tourists, yet Nigeria's heavy reliance on crude oil exports underscores the urgent need for economic diversification. Tourism, with its vast employment and revenue-generating potential, emerges as a promising avenue for both government and private citizens. However, the responsible integration of landscape elements is crucial to mitigate negative ecological impacts and ensure the well-being of local communities.

This study seeks to fill a gap in empirical research by exploring the psychological implications of landscaping elements in a resort atmosphere, with a focus on enhancing the total guest experience. By elucidating the link between landscape design and human psyche, it aims to inform sustainable tourism practices and contribute to the development of Nigeria's tourism sector.

Through a multidisciplinary approach encompassing landscape architecture, psychology, and hospitality management, this study endeavors to pave the way for a more vibrant and resilient tourism industry in Nigeria.

Hospitality, entertainment, and infrastructure development to the influx of foreign investment and revenue generation, the benefits of nurturing Lagos's tourism industry are manifold and far-reaching.

In essence, the underutilization and neglect of Lagos's prospective tourist destinations underscore a pressing need for concerted efforts aimed at revitalizing and rejuvenating the city's tourism sector. By recognizing and harnessing the inherent potential of its diverse cultural heritage, natural landscapes, and vibrant urban spaces, Lagos can aspire to reclaim its status as a premier destination on the global tourism map. Through strategic investments, innovative marketing initiatives, and collaborative partnerships, Lagos has the opportunity to chart a new course towards prosperity and success in the realm of tourism. It is time for Lagos to embrace its destiny as a world-class tourist destination and unleash the boundless possibilities that await on its shores.



Source: <https://golftime.nl/golfvakanties/boavista-golf-spa-bela-colina-village/>

Fig 1: Aerial view of Boavista Golf & Spa - Bela Colina Village

2. Literature Review

This section provides an overview of the theoretical frameworks and principles that guide the use of landscaping elements and the effect they have generally on user comfort. This is to establish a theoretical basis for understanding resort landscaping design.

2.1 Concept of landscaping

Landscaping is the deliberate arrangement of outdoor spaces to improve their beauty, functionality, and ecological balance. It is pivotal in hotel resorts to create immersive environments that enhance guest experiences. Nature's tranquil qualities are beneficial in urban settings, acting as a natural stress-reliever. Aesthetic landscapes positively influence people's perceptions and actions, driving tourism and social interaction. Human preferences for natural environments are influenced by sensory experiences, such as sight and smell. Proximity to appealing landscapes motivates outdoor activities and tourism.

Botanical gardens play multifaceted roles, not only conserving vegetation but also providing psychological

benefits and urban beautification. However, studies on the relationship between botanical gardens and psychological well-being are limited. Soil quality and aesthetic standards significantly impact a landscape's attractiveness and its ability to reduce stress.

Understanding the human psyche is crucial in resort design, as it influences interactions with the environment and overall well-being. Time spent in beautiful natural settings can reduce stress and improve mood (Ulrich, 2023) ^[31]. Cultural factors shape individuals' perceptions and behaviors, influencing their preferences and interactions with the environment. Social dynamics play a key role in fostering community and enhancing guest experiences.

Factors such as light, color, sound, and texture in the environment can affect mood and stress levels (Kaplan, 2022) ^[20]. Biophilic design, incorporating natural elements into built environments, has proven positive effects on psychological well-being (Kellert *et al.*, 2019) ^[22].

Landscape features, including vegetation, water features, pathways, and lighting, are strategically designed to enhance aesthetics and functionality, creating immersive experiences for guests. Functional objectives range from facilitating movement to providing shaded leisure spaces.

The integration of landscaping and architectural design in resorts aims to create harmonious environments that connect guests with nature (Kaplan, 2022) ^[20]. Collaboration between landscaping and architectural modeling considers aesthetics, functionality, environmental sustainability, and cultural context to enhance guest experiences (Brown, 2019) ^[8].

In summary, landscaping in hotel resorts plays a vital role in enhancing aesthetics and psychological well-being. Understanding human preferences, cultural influences, and environmental factors is essential in creating immersive and memorable guest experiences. Collaboration between landscaping and architectural design ensures cohesive environments that promote relaxation, social interaction, and connection with nature.

2.2 Integration of Landscaping Elements for Improved Human Comfort

In the realm of hospitality, landscaping elements within resort environments play a pivotal role in shaping the overall guest experience. Beyond mere aesthetics, these elements contribute significantly to human comfort, fostering relaxation, and enriching the connection between guests and their surroundings. By strategically incorporating natural features such as greenery, water bodies, and thoughtfully designed pathways, resorts can create spaces that promote tranquility, reduce stress, and elevate the overall sense of well-being for visitors. This essay delves into the multifaceted benefits of landscaping elements in resorts, highlighting their profound impact on enhancing human comfort and enriching the overall resort experience. (Kaplan, 2022) ^[20].

2.2.1 Stress Reduction and Relaxation

Landscaping elements in resort environments are renowned for their ability to reduce stress and promote relaxation among guests. Incorporating biophilic design principles, such as natural elements like trees and water features, creates a calming ambiance that enhances the quality of visitors' stays. Well-kept gardens, serene water features, and shaded seating areas contribute to visitors' impressions of rehabilitation and psychological well-being. Additionally, the sound and visual

appeal of water features, along with attention restoration theory, facilitate mental healing and concentration, further enhancing the relaxation experience at resorts.

2.2.2 Biophilia and connection to nature

The concept of biophilia acknowledges humanity's innate connection to nature and emphasizes its integration into resort landscapes. Biophilic design principles prioritize incorporating natural elements into the built environment, fostering a sense of peace and refuge for visitors. By utilizing organic materials and creating a seamless transition between indoor and outdoor spaces, resorts strengthen visitors' connections to nature, promoting well-being and enhancing their overall experience.

2.2.3 Aesthetic value of the environment

Resort landscapes with aesthetically pleasing and natural outdoor environments attract visitors and enhance their overall experience. Features like native vegetation, mountains, and well-maintained gardens positively influence visitor perceptions and engagement. Elements such as water features and greenery evoke a sense of tranquility and promote physical and mental relaxation. By integrating educational elements and offering opportunities for exploration, resorts enhance visitors' appreciation of the natural environment.

2.2.4 Importance of landscaping to the environment

Landscaping plays a crucial role in maintaining the connection between resorts and nature, benefiting both visitors and the environment. It serves as a medium for translating environmental science into tangible experiences for humans and contributes to the preservation of cultural and historical landscapes. Additionally, well-designed landscapes support biodiversity, tourism, and economic growth, highlighting their significance in enhancing the overall sustainability and appeal of resort environments.

3.0 Methodology

The research design for this study employs a survey approach to gather data on the importance and impact of aesthetics in architecture. Data collection methods include questionnaires, observations, interviews, and document reviews. The questionnaire is structured to align with the study objectives and research questions, targeting professionals involved in aesthetic design and architectural processes. The sample selection involves homogenous representation from populations such as software engineers, architects, construction engineers, and builders, determined using Taro Yamane's formula. Professionals are randomly selected from various organizations and from lists provided by professional institutes. Data collection instruments include questionnaire guides for interviews, ensuring credibility through qualitative research practices. Data analysis utilizes statistical tools like frequencies and percentages, processed using SPSS. Confidentiality of data is maintained based on the level of consent given by each interviewee.

4. Discussion of Findings

The culmination of this comprehensive research endeavor offers profound insights into the pivotal role of innovative design approaches in the seamless integration of landscaping elements into the architectural framework of a hotel resort situated in the vibrant locale of Lekki, Lagos State. Through

a meticulous examination of the intricate dynamics between architectural aesthetics and landscape design, this study sheds light on the transformative potential inherent in thoughtfully curated landscaping endeavors, thereby enriching the discourse within the construction sector.

One of the seminal contributions of this study lies in its elucidation of the multifaceted benefits that accrue from the strategic incorporation of landscaping elements into the architectural blueprint of a resort. By delving into the symbiotic relationship between human psychology and environmental aesthetics, the research underscores how conscientious landscaping interventions can engender a palpable sense of tranquility, rejuvenation, and sensory delight among resort patrons. From verdant botanical enclaves to meandering water features and contemplative garden alcoves, the study underscores how each meticulously crafted landscape element serves as a conduit for fostering a deep, visceral connection between guests and their natural surroundings.

Moreover, the research findings serve to enrich the knowledge base of stakeholders involved in the multifarious stages of resort development, from conceptualization to execution. By delineating the indispensable role of landscape elements in augmenting the overall guest experience, the study empowers architects, urban planners, developers, and hospitality professionals with actionable insights aimed at enhancing the marketability, sustainability, and experiential allure of resort destinations. Through a nuanced understanding of the nuanced interplay between architectural form and landscape function, stakeholders are poised to harness the transformative potential of landscaping in curating immersive, memorable guest experiences.

Furthermore, the study underscores the broader implications of landscape design principles in the strategic planning and development of tourism destinations. By illuminating the intrinsic linkages between landscape aesthetics, visitor engagement, and destination competitiveness, the research underscores how judicious landscaping interventions can serve as catalysts for economic revitalization, community empowerment, and cultural enrichment within the tourism sector. From revitalizing urban waterfronts to reimagining heritage precincts and ecotourism circuits, the study champions the integral role of landscape design in shaping the identity, appeal, and sustainability of tourist destinations. In conclusion, this research endeavor serves as a clarion call for the cultivation of innovative design paradigms that prioritize the seamless integration of landscaping elements within resort architecture. By advocating for a holistic approach that transcends traditional boundaries between built and natural environments, the study paves the way for the creation of transformative resort experiences that resonate deeply with the human spirit. Through strategic collaborations, visionary leadership, and a steadfast commitment to sustainability, stakeholders have the opportunity to forge a new frontier in resort development—one where landscape design serves as a conduit for elevating the human experience and fostering enduring connections with the natural world.

5. Conclusion and Recommendation

In light of the burgeoning potential of the tourism industry in Lagos, Nigeria, it is imperative to recognize the pivotal role that landscaping elements can play in elevating the human experience within hotel resort environments. This study has

underscored the intrinsic linkages between landscape design, human psyche, and tourism development, shedding light on the transformative impact that thoughtfully curated landscapes can have on visitor engagement, relaxation, and overall well-being. By synthesizing insights from literature reviews and empirical studies, this research has highlighted the imperative for harmonizing landscape design and architectural models to create inviting and enriching guest experiences.

Through a methodologically rigorous approach encompassing quantitative research design and primary data collection from industry professionals, this study has elucidated the multifaceted benefits of integrating landscaping elements into hotel resort designs. From stress reduction to cultural enrichment and sustainable tourism practices, the findings underscore the profound implications of landscape design principles in shaping the tourism landscape of Lagos, Nigeria, and beyond. By advocating for innovative design approaches and emphasizing the relevance of landscapes in tourism planning, this research seeks to catalyze a paradigm shift within the industry towards holistic, guest-centric resort development strategies.

Based on the findings of this study, several recommendations emerge for stakeholders involved in resort development, urban planning, and tourism promotion in Lagos, Nigeria:

a.) Embrace innovative design approaches

Stakeholders should prioritize the integration of landscaping elements into hotel resort designs, leveraging innovative design approaches to create immersive and memorable guest experiences. This entails collaborating with landscape architects, urban planners, and environmental experts to conceptualize and implement sustainable landscaping solutions that resonate with local culture and context.

b.) Foster collaboration and knowledge sharing

To advance the adoption of landscape design principles in tourism planning, stakeholders should foster interdisciplinary collaboration and knowledge sharing among architects, engineers, hospitality professionals, and government agencies. By promoting cross-sectoral dialogue and capacity building initiatives, stakeholders can collectively harness the transformative potential of landscapes in enhancing visitor experiences and promoting sustainable tourism practices.

c.) Invest in research and development

Given the dynamic nature of the tourism industry and evolving visitor preferences, stakeholders should prioritize investment in research and development initiatives aimed at advancing landscape design innovation and best practices. This entails supporting academic research, industry partnerships, and pilot projects that explore the synergies between landscapes, human psyche, and tourism development.

d.) Promote sustainable tourism practices

In line with global sustainability goals and local environmental priorities, stakeholders should prioritize the adoption of sustainable tourism practices that minimize environmental impact while maximizing social and economic benefits. This includes integrating green infrastructure, renewable energy systems, and indigenous landscaping techniques into resort designs to enhance ecological resilience and community well-being.

e.) Enhance public awareness and engagement

To garner public support for landscape-driven tourism development initiatives, stakeholders should prioritize public awareness campaigns, community engagement activities, and participatory planning processes that empower local residents and stakeholders to actively contribute to the design and implementation of landscape projects. By fostering a sense of ownership and pride in local landscapes, stakeholders can cultivate a culture of sustainability and stewardship for future generations.

The effective integration of landscaping elements into hotel resort designs holds immense potential for enhancing the human experience, promoting sustainable tourism practices, and fostering economic growth in Lagos, Nigeria. By embracing innovative design approaches, fostering collaboration, investing in research and development, promoting sustainable tourism practices, and enhancing public awareness and engagement, stakeholders can collectively harness the transformative power of landscapes to shape a more resilient, inclusive, and vibrant tourism landscape for generations to come.

References

1. Aliamin Y. IOP Conf. Ser.: Environmental Earth Sciences. 2021;794:012155.
2. Amat RC, Ismail S, Wahab MH, Ahmad NH, Rani WNWM. A Dimension of Biophilia in Urban Design. In: IOP Conference Series: Earth and Environmental Science. IOP Publishing. 2020;409(1):012016.
3. Antrop M. A brief history of landscape research. In: The Routledge companion to landscape studies. Routledge; c2018. p. 1-15.
4. Ayeni D. Exploring Sustainable Tourism in Nigeria for Developmental Growth. European Scientific Journal. 2019;8(20):126-140.
5. B.V E. Landscape and Urban Planning. [Internet]. Available from: www.elsevier.com/locate/landurbplan.
6. Bassuk NL. Trees in the Urban Landscape: Site Assessment, Design, and Installation. New York: John Wiley and Sons, Inc; c2020.
7. Brady E, Prior J. Environmental aesthetics: A synthetic review. People and Nature. 2020;2(2):254-66.
8. Brown G. Designing streets for people: Ideas and recommendations on how to transform our streets into places. Street Design; c2019.
9. Cao J. Construction of Ecological Landscape Environment in Guanzhong Traditional Villages from the Perspective of Rural Revitalization. Health & Social Care in the Community; c2023.
10. Chang PR. Tourism Management in the 21st Century. New York: Nova Science Publisher, Inc.; c2022.
11. Cherry K. What Is the Psyche According to Psychology?; c2021. Verywell Mind. Available from: <https://www.verywellmind.com/what-is-the-psyche-2795801>.
12. Deng L, Li X, Luo H. Empirical study of landscape types, landscape elements and landscape components of the urban park promoting physiological and psychological restoration. Urban Forestry & Urban Greening. 2020;48:126488.
13. Ashiegbu PO, Achunike CH. Religion and tourism in Nigeria. Research in Humanities and Social Sciences. 2014;4(15):130-138.

14. Dinim N. 18 Problems of Tourism in Nigeria and Possible Solutions; c2019.
15. Clusmann J, Kolbinger FR, Muti HS, Carrero ZI, Eckardt JN, Laleh NG. The future landscape of large language models in medicine. *Communications medicine*. 2023;3(1):141.
16. Gifford R. *Environmental psychology: Principles and practice*. 4th ed. Optimal Books; c2019.
17. Hakala K. *Biophilia & Urbanization. Sustaining and fostering Human–Nature connections for healthier urban density and sustainability*; c2021.
18. John O, Ayeni D. Achieving Aesthetics using Landscape Design in Resort Environment. *Journal of Landscape Architecture*. 2019;7:2321-9653.
19. Kaplan R. The Nature of the View from Home: Psychological Benefits. *Environment and Behavior*. 2022;27(6):762-782.
20. Kaplan S. Aesthetics, Affect, and Arousal: The Evaluation of High Order Aesthetics. In: eds. *The Adapted Mind: Evolutionary Psychology and the Generation of Culture*. Oxford University Press; c2022. p. 267-336.
21. Kellert SR. *Building for life: Designing and understanding the human-nature connection*. Island Press; c2019.
22. Kiray Z, Yildizci A. Impact of Landscape Architectural Practices on the Environment. *Journal of Environmental Protection and Ecology*. 2019;15:565-573.
23. López-Del-Hoyo Y, Fernández-Martínez S, Pérez-Aranda A, *et al.* Effects of health interventions on stress reduction and mental health promotion in healthcare professionals: A systematic review. *Journal of Clinical Nursing*; c2023.
24. Mayya L. *Ensouled Architecture: An Integral, Whole-Person Psychology Perspective for the Next Evolutionary Stage in Architecture*. California Institute of Integral Studies; c2021.
25. Nassauer JI. Messy ecosystems, orderly frames. *Landscape Journal*. 2023;14(2):161-170.
26. Yutian LU, Running CH, Bin CH, Jiayu WU. Inclusive green environment for all? An investigation of spatial access equity of urban green space and associated socioeconomic drivers in China. *Landscape and Urban Planning*. 2024;241:104926.
27. Pinheiro IMR. A New Model for the Human Psyche. *Journal of Research in Humanities and Social Science*. 2019;2(5):61-65. ISSN(Online): 2321-9467. Available from: <http://www.questjournals.org>.
28. Richardson M, Butler CW. Nature connectedness and biophilic design. *Building Research & Information*. 2022;50(1-2):36-42.
29. Schiebel T, Gallinat J, Kühn S. Testing the Biophilia theory: Automatic approach tendencies towards nature. *Journal of Environmental Psychology*. 2022;79:101725.
30. Ulrich RS. Aesthetic and affective response to natural environment. In: Altman I, Wohlwill JF, eds. *Behavior and the Natural Environment*. Springer; c2023. p. 85-125.
31. Yuan S, Browning MH, McAnirlin O. A virtual reality investigation of factors influencing landscape preferences: Natural elements, emotions, and media creation. *Landscape and Urban Planning*. 2023;230:104616.
32. Zhang L, Dempsey N, Cameron R. Flowers–Sunshine for the soul! How does floral colour influence preference, feelings of relaxation and positive up-lift?. *Urban Forestry & Urban Greening*. 2023;79:127795.
33. Zhou R, Guo W. Research on Regional Architectural Design Method Based on GIS. *Sustainability*. 2023;15(12):9291.
34. Zhou X, Cen Q, Qiu H. Effects of urban waterfront park landscape elements on visual behavior and public preference: Evidence from eye-tracking experiments. *Urban Forestry & Urban Greening*. 2023;82:127889.