

Evaluating Landscape Design Features and Their Influence on Social Interaction in Postgraduate Hostels in South-Western Nigeria

ATOLAGBE A. M. O.¹, AMAO F. L.², IJIYODE B. O.³

^{1, 2, 3}Department of Architectural Ladoke Akintola University of Technology Ogbomoso, Nigeria

Abstract- *This study evaluates the landscape design features in promoting social interaction, comfort, and well-being among postgraduate students in selected universities across South-western Nigeria. While landscape design is increasingly acknowledged for its aesthetic and environmental value, its role in shaping the social experiences of postgraduate hostel residents remains underexplored in Nigerian higher education contexts. The research employed a quantitative approach using structured questionnaires distributed to 334 postgraduate students across five purposively selected universities. Descriptive statistical tools, including frequency counts and average mean values, were used to analyze responses. The findings revealed that features promoting social interaction particularly green spaces and informal gathering zones were the most valued, followed closely by accessibility and aesthetic features. However, challenges such as poor drainage, inadequate shading, and limited recreational amenities negatively affected user satisfaction and overall landscape performance. The study concludes that landscape design in postgraduate hostels is not merely a visual enhancement but a crucial contributor to student well-being and community building. The study recommends the intentional integration of socially engaging, climate-responsive, and inclusive landscape design features in hostel environments, along with regular maintenance and participatory planning involving student users. These findings provide insights for university administrators seeking to improve the liability and social function of postgraduate hostels through effective landscape design.*

Indexed Terms- *Postgraduate Hostels, Landscape Design Features; South-western Nigeria; Green Spaces; University Environment.*

I. INTRODUCTION

Landscape design features represent a critical fusion of art and science in the planning of outdoor spaces that are not only aesthetically pleasing but also functional and environmentally sustainable (Tongyun, Wei, & Fei, 2024). These features ranging from vegetation and water bodies to build features such as walkways and seating areas are essential for fostering ecological balance while simultaneously addressing human comfort and social needs (Lorinc et al., 2020; Adams & Nelson, 2021). On university campuses, especially within residential hostels, landscape design plays a pivotal role in shaping students' daily experiences by enhancing visual appeal, promoting relaxation, and encouraging informal social interaction (Polat et al., 2016; Aliyu, 2017).

This role becomes even more pronounced in postgraduate hostels, where students often encounter high academic pressure, stress, and potential social isolation. Research has shown that access to well-designed green spaces and outdoor environments can significantly enhance mental health, foster social cohesion, and support academic success (Baur, 2022; John & Mamuzo, 2024). Features such as gardens, shaded seating, and recreational lawns contribute to the creation of inclusive, community-oriented spaces that offer relief from academic routines. Social interaction is foundational to the student experience, as it strengthens belonging, personal development, and emotional well-being (Su, 2022; Mendoza & Venables, 2023). Moreover, artistic features like murals, sculptures, and symbolic landscaping can serve as shared touch points that enrich campus life through visual engagement and communal expression (Brown and Dissanayake 2018).

Despite growing recognition of these benefits, there remains a notable gap in research specifically

examining how individual landscape design features influence social interaction within postgraduate hostel environments in Nigeria. Much of the existing literature centers on general campus planning, aesthetics, or undergraduate contexts, without directly addressing the spatial and social needs of postgraduate students (Bell et al., 2019). Consequently, important features such as seating arrangements, vegetation zones, walkways, and shaded open spaces are rarely evaluated in terms of their role in enhancing postgraduate students' social experiences.

This oversight is particularly concerning in the context of South-western Nigerian universities, where the climatic conditions necessitate climate-responsive and sustainable outdoor designs. In many cases, postgraduate hostels in the region are designed merely to meet basic residential needs, often with limited attention to the contribution of landscape spaces to social engagement and holistic student development. As Akinola (2017) notes, neglecting outdoor design in hostel environments can exacerbate psychosocial challenges among students, particularly those at the postgraduate level who may be more isolated in their academic routines.

In light of these gaps, this study investigates how landscape design features influence social interaction in postgraduate hostels across selected universities in South-western Nigeria. Using a combination of user surveys, spatial assessments, and observational analysis, the research evaluates both physical attributes and user perceptions of landscape design features to understand their impact on communal life. By identifying which landscape features support or hinder social interaction, this study aims to offer practical insights for improving hostel environments in Nigerian universities, ultimately contributing to the development of vibrant, inclusive, and socially supportive academic living spaces.

II. LITERATURE REVIEW

Conceptualizing Landscape Design Features in University Settings

Landscape design features are fundamental features in the physical planning of spaces that harmonize natural and artificial components to create environments that are not only aesthetically

appealing but also functional, accessible, and sustainable. According to Richter and Behnisch (2019), these features consist of both soft scape features (e.g., vegetation, grass, trees) and hardscape features (e.g., paving, lighting, seating, water features). Together, they serve as tools for shaping the physical, psychological, and ecological quality of an environment. In university campuses, landscape design extends beyond decoration to become a functional infrastructure that supports learning, relaxation, accessibility, and social interaction. Ayeni (2012) emphasized that features like terrain, natural forms, and water bodies contribute to the environmental identity of campuses, helping students connect more deeply with their surroundings. Polat et al. (2016) observed that well-planned landscape environments in educational settings significantly enhance spatial organization, contribute to physical comfort, and promote mental clarity among students.

In essence, landscape design acts as a facilitator of the academic and social experience, influencing how users perceive and interact with the environment. As such, its role becomes even more critical in residential areas like hostels, where students spend long hours and require spaces that support rest, personal development, and community life.

Landscape Design Features and Their Impact on Social Interaction

Social interaction is a cornerstone of student life, contributing to emotional well-being, peer learning, and community formation. Research has consistently shown that well-integrated landscape design features can facilitate both planned and spontaneous interactions among students. Aliyu (2017) notes that seating arrangements strategically located within shaded or visually prominent spaces invite conversation and group gatherings. Similarly, Kaplan and Kaplan (2015) highlight the importance of courtyards and gardens as central nodes for informal encounters, community-building activities, and moments of solitude within a communal space. Other features such as well-laid walkways and meandering paths not only guide movement but also encourage incidental interaction. Baur (2022) supports this by emphasizing that interactive outdoor settings such as recreational lawns and modular seating create 'social anchors' within educational spaces. These areas reduce stress and offer settings for both academic and social dialogue.

Lighting and artistic installations also play a notable role. According to Brown et al. (2018), the inclusion of sculptures, murals, and interactive public art increase collective memory, provides discussion starters, and encourages a shared sense of identity among users. Good lighting enhances safety and usability, especially during night time hours, extending the functionality of outdoor areas.

Together, these features do not function in isolation but as part of a holistic landscape system that stimulates community interaction, supports student well-being, and enhances place attachment.

Sustainability and Climatic Resilience in University Landscape Design

Sustainable landscape design integrates environmentally responsive features that reduce the ecological footprint of campuses while ensuring long-term usability and comfort for users. In the context of South-Western Nigeria, where climate conditions are characterized by heavy rainfall and intense heat, sustainable strategies become indispensable. Ezekiel (2017) discusses how the use of native plant species adapted to local conditions can minimize irrigation needs, promote biodiversity, and reduce maintenance costs. Features like permeable pavements, rain gardens, and bioswales facilitate natural water infiltration and reduce the risk of flooding, which is particularly important in regions prone to seasonal waterlogging.

Solar-powered lighting and efficient irrigation systems are also key innovations. They not only lower energy consumption but enhance security and night time engagement with outdoor spaces. These sustainability practices, as noted by Hartig et al. (2014), create a synergy between the natural and built environments, allowing landscape design to support educational goals while conserving resources.

In postgraduate hostel settings, sustainability translates into environments that are durable, cost-effective, and conducive to student life year-round. Climate resilience through shade provision, airflow design, and weather-proof furniture is central to ensuring that landscape features remain accessible and comfortable during both wet and dry seasons.

Landscape Design in Postgraduate Hostel Contexts
While numerous studies highlight the value of landscape design in general campus planning, few

directly examine its role within postgraduate hostel settings a space uniquely shaped by long study hours, stress, and often reduced social engagement. According to Baur (2022), green outdoor spaces play a significant role in reducing anxiety and improving social behaviour, particularly among individuals who may otherwise face academic isolation.

Postgraduate students typically require spaces that balance privacy with community. Gardens, courtyards, outdoor study areas, and shaded seating can offer such dual-function spaces. Ali and Bawa (2023) emphasize that these features promote informal conversation, collaboration, and peer support, especially when embedded within or near living quarters.

John and Mamuzo (2024) further reinforce the link between landscape features and social capital development, arguing that well-designed physical environments in hostels can stimulate bonding, increase sense of belonging, and even improve academic outcomes. Yet, despite these benefits, existing postgraduate hostels in South-Western Nigeria are often devoid of these interactive, ecologically integrated design components. They are typically planned as functional dormitories rather than as holistic living-learning environments. This presents a missed opportunity to address the well-being of a growing academic population that requires more than shelter students need thoughtfully curated spaces that support relaxation, peer interaction, and academic focus.

Existing Research Gaps and Contextual Deficiencies

Although some studies in Nigeria and globally have explored landscape design in academic settings (Akinola, 2017; Adebayo, 2020), they often limit their scope to undergraduate residences or public open spaces. There is little empirical research on how specific landscape features influence postgraduate students' behaviours and perceptions within hostel environments.

For instance, while Bada (2016) identified a lack of social engagement in university hostels, the study did not examine the contribution of outdoor design to this problem. Likewise, Adebayo (2020) focused on architectural infrastructure, paying little attention to the outdoor setting as a medium for fostering

community. Even where landscape features are acknowledged, few studies measure their impact on postgraduate students, who have distinct spatial, psychological, and social needs.

Moreover, institutions like LAUTECH lack dedicated postgraduate hostel infrastructure entirely, which presents both a challenge and an opportunity for architectural innovation. As Akinola (2017) pointed out, landscape design has the potential to alleviate the stress and social isolation experienced by students yet this potential remains untapped in many Nigerian universities.

Theoretical Frameworks Supporting Landscape Design for Social Well-being

This study draws upon several theoretical underpinnings to frame the link between landscape design and social interaction:

- **Biophilic Design Theory:** Suggests that humans have an innate affinity for nature, and exposure to natural features can improve mental health, enhance learning outcomes, and foster social cohesion (Kellert, 2018).
- **Environmental Psychology:** Examines how physical environments influence behaviour, asserting that comfortable, engaging spaces increase satisfaction, reduce stress, and promote positive social behaviour (Gifford, 2014).
- **Green Space Theory:** Highlights the importance of accessible green areas for community health and well-being, especially in dense or institutional settings (Chiesura, 2004).

III. RESEARCH METHODOLOGY

This study adopted a quantitative research design to evaluate the effectiveness of landscape design features in selected postgraduate hostels across universities in South-western Nigeria. The research focused on collecting measurable data through structured questionnaires to assess students' perceptions of landscape features and their influence on social interaction within hostel environments.

Primary data were gathered using a well-structured, closed-ended questionnaire, administered to postgraduate students residing in hostels across five purposively selected universities located in Lagos, Ondo, Osun, Oyo, and Ogun States. These institutions were chosen based on the presence of significant landscape features and a considerable

population of postgraduate students. The questionnaire covered aspects such as the usability, functionality, aesthetics, and social value of outdoor spaces including walkways, green areas, seating, and shaded zones.

A multi-stage sampling technique was employed. First, universities and hostels were purposively selected based on the presence of notable and accessible landscape features. Then, respondents were randomly selected from among the postgraduate students residing in the hostels.

Sampling Frame and Sample Size

The sampling frame for this study comprised postgraduate students residing in hostels across five selected universities in South-western Nigeria. These institutions include the University of Lagos, Federal University of Technology Akure, Obafemi Awolowo University Ile-Ife, University of Ibadan, and Federal University of Agriculture Abeokuta. A total of 2,031 residents across twelve hostels formed the sampling population, featuring both single and double room arrangements.

To determine an appropriate sample size, the Slovin's formula was applied at a 95% confidence level and 0.05 margin of error, resulting in a sample size of 334 respondents, representing approximately 16% of the total population. The sample was proportionally distributed across the hostels based on their capacity for example, 84 respondents were drawn from the University of Lagos, 49 from FUTA, 65 from OAU, 70 from UI, and 66 from FUNAAB. This proportional representation ensured adequate coverage and reliable data across varying hostel types and institutional settings.

Data were analyzed using descriptive statistical tools, including frequency distributions, percentages, and average mean values (AMV), total weight value (TWV), to evaluate the responses of respondent across all selected university. The analysis was carried out using statistical software such as SPSS and Microsoft Excel, with findings presented through tables.

IV. RESULTS OF FINDINGS AND DISCUSSION

Introduction

This section presents the results and analysis of data collected for the study. It discusses the identification and examination of the landscape design features that are most effective in the study area; assess the users' perceptions of these landscape design features and factors associated with the users' perceptions on landscape design setting of postgraduate hostels environments. The findings are structured accordingly and highlight their implications for users.

Identification and Examination of the Landscape Design Features That Are Most Effective In the Study Area

The data from Table 1 presented the Identification and Examination of the Landscape Design Features that are most effective in the study area Index, categorizing responses into four key sections: Social Interaction, Functionality, Aesthetic Appeal, and Accessibility. Each section is evaluated using Total Weighted Value (TWV), Weighted Mean Score (TWV/f), and Average Weighted Value (AWV), revealing the perceived effectiveness of various landscape design features within the hostel environment.

In Section 1: Social Interaction, respondents rated how well landscape features promote social engagement. The statement "Green spaces (gardens, lawns) contribute to creating spaces where students can meet and socialize" received the highest TWV of 1421 and a weighted mean TWV/f score of 4.25, showing strong agreement. This shows that green areas are particularly effective in encouraging social interactions. The overall AWV for this section is 3.97, showing that, on average; respondents agreed that the landscape design supports social connectivity among postgraduate students.

Section 2: Functionality assesses the practical utility of the landscape design. The statement with the highest effectiveness rating here is "The design of walkways and pathways ensures accessibility to all parts of the hostel," with a TWV of 1344 and weighted mean score TWV/f of 4.02. The total AWV for this section is 3.86, showing a generally positive perception of the landscape's functionality, though slightly lower than the social interaction

features. This implies room for improvement in enhancing functional aspects to match the social benefits. In Section 3: Aesthetic Appeal, the design features' visual quality was examined. The item "Landscape features (e.g., gardens, water features) contribute positively to visual appeal" stands out with a high TWV of 1413 and a weighted mean score TWV/f of 4.23. The overall AWV for this section is 4.02, showing a strong consensus that the landscape design significantly enhances the visual quality of the hostel environment. Lastly, Section 4: Accessibility achieved the highest average rating, with an AWV of 4.06. The statement "The design provides clear and safe access to key areas of the hostel" scored a weighted mean score TWV/f of 4.14, showing the importance and effectiveness of accessible design. The strong scores across this section show the effectiveness of inclusive design considerations in meeting the needs of all students, including those with disabilities.

In summary, the landscape design features in the study area are generally effective, with particularly strong ratings in Accessibility and Aesthetic Appeal. Green spaces and accessible pathways are especially valued, revealing the importance of both form and function in landscape planning within residential educational settings.

Implication

The findings from Table 1 have significant implications for future landscape planning and design within student residential environments. The consistently high weighted mean scores across all sections particularly in Accessibility (AWV 4.06) and Aesthetic Appeal (AWV 4.02) show the value placed on inclusive and visually pleasing spaces by postgraduate students. This shows that future designs should prioritize universal access, ensuring that all students, including those with disabilities, can easily navigate and utilize outdoor spaces.

Moreover, the high ratings for green spaces and outdoor seating as facilitators of social interaction reveal the importance of integrating nature and communal features into residential landscapes. As social interaction scored a substantial mean score AWV of 3.97, it shows students' appreciation for landscapes that foster connectivity and informal gatherings, which can enhance their academic and social experience.

While Functionality had slightly lower scores (AWV 3.86), it still show a generally favourable perception, but also points to potential areas for

improvement in circulation and practical usability of landscape features.

Table 1 Identification and Examination of the Landscape Design Features that is most effective in the study area Index

Section 1		Social Interaction								
S/N	Statements	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)	Total Frequency(f)	TWV	TWV/f	AWV
1	The landscape design of my hostel encourages social interactions among postgraduate students.	35	19	65	85	130	334	1258	3.77	251.60
2	The presence of outdoor seating areas in the landscape design encourages informal gatherings.	12	5	55	92	170	334	1405	4.21	281.00
3	Green spaces (gardens, lawns) contribute to creating spaces where students can meet and socialize.	10	3	62	76	183	334	1421	4.25	284.20
4	The landscape design features in my hostel support group activities	19	46	86	65	118	334	1219	3.65	243.80

	(e.g., study groups, recreation).									
Total								5303	15.88/4	1060.60
									3.97	
Section 2		Functionality								
5	The landscape design allows for easy movement and access to key areas (e.g., seating, study spaces).	23	12	85	115	99	334	1257	3.76	251.40
6	The design of walkways and pathways ensures accessibility to all parts of the hostel.	15	5	93	65	156	334	1344	4.02	268.80
7	The landscaping is practical for daily activities (e.g., walking, relaxation).	19	32	76	82	125	334	1264	3.78	252.80
Total								3865	11.57/3	773.00
									3.86	
Section 3		Aesthetic Appeal								

8	The aesthetic quality of the landscape enhances the overall beauty of the hostel environment.	12	29	75	89	129	334	1296	3.88	259.20
9	Landscape features (e.g., gardens, water features) contribute positively to visual appeal.	10	5	62	78	179	334	1413	4.23	282.60
10	Integration of natural features, such as trees and flowers, adds to the attractiveness of the landscape.	19	12	64	115	124	334	1315	3.94	263.00
Total								4024	12.05/3	804.80
									4.02	
Section 4		Accessibility								
11	The landscape design is accessible for all students, including those with disabilities.	15	8	65	102	144	334	1354	4.05	270.80
12	Landscape features (e.g., seating, walkways) cater to students with varying mobility needs.	22	12	75	62	163	334	1334	3.99	266.80
13	The design provides clear and safe access to key areas of the hostel (study and recreational spaces).	12	6	55	110	151	334	1384	4.14	276.80
Total								4072	12.19/3	814.40
									4.06	

Source: Author's Field Survey, 2024

Assessment of the Users' Perceptions of These Landscape Design Features

The data from Table 2 presented the Assessment of the Users' Perceptions of Landscape Design Features Index, using the Total Weighted Value (TWV), Weighted mean score (TWV divided by frequency), and Average Weighted Value (AWV) to evaluate how users rate various aspects of the landscape design in the study area.

From the analysis, Statement 5, "Green spaces provide opportunities for informal gatherings and discussions," received the highest TWV of 1584, a weighted mean TWV/f score of 4.74, and the highest AWV of 316.80, showing it is the most positively perceived feature by users. This reveals that users highly value green spaces for social interaction and see them as a vital part of their landscape experience. Similarly, Statement 2, which focuses on the design's ability to create a conducive environment for relaxation and unwinding, has a high TWV of 1377, a weighted mean TWV/f of 4.12, and an AWV of 275.40. This

shows the importance of peaceful and restful spaces in the landscape design.

Statement 8, "The overall landscape improves my satisfaction with hostel life," also scored significantly; with a TWV of 1428, weighted mean score TWV/f of 4.28, and AWV of 285.60, showing a strong positive impact of landscape design on users' satisfaction with their living environment. In contrast, Statement 6, concerning how landscape features contribute to a sense of community, recorded the lowest TWV of 1130, a weighted mean score TWV/f of 3.38, and AWV of 226.00. This shows that users do not perceive the current landscape features as effectively fostering community interaction. On average, the overall assessment of all the landscape design features yields a total TWV of 11065, weighted mean score TWV/f (mean) of 4.14, and a total AWV of 2213.00, showing that users generally have a favourable perception of landscape features in their environment, especially in promoting well-being, satisfaction, and relaxation.

Table 2 Assessment of the Users' Perceptions of these Landscape Design Features Index

S/N	Statements	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)	Total Frequency(f)	TWV	TWV/f	AWV
1	Landscape design enhances interaction with fellow students.	25	14	78	66	151	334	1306	3.91	261.20
2	The design creates a conducive environment for relaxation and unwinding.	19	12	43	95	165	334	1377	4.12	275.40
3	Aesthetic features motivate me to spend more time outdoors.	7	2	18	111	196	334	1489	4.46	297.80

4	The landscape positively impacts my academic performance and mental well-being.	17	8	88	76	145	334	1326	3.97	265.20
5	Green spaces provide opportunities for informal gatherings and discussions.	0	0	12	62	260	334	1584	4.74	316.80
6	Landscape features contribute to a sense of community among students.	29	17	55	89	144	334	1304	3.90	260.80
7	Recreational areas within the landscape are functional and inviting.	33	19	69	92	121	334	1251	3.75	250.20
8	The overall landscape improves my satisfaction with hostel life.	18	6	34	84	192	334	1428	4.28	285.60
	Total							11065	33.13/8	2213.00
									4.14	

Source: Author's Field Survey, 2024

Determination of the Factors Associated With the Users' Perceptions on Landscape Design Setting of Postgraduate Hostels Environments

The data from Table 3 presented the Determination of the Factors Associated with the Users'

Perceptions on the Landscape Design Setting of Postgraduate Hostels Environments Index, derived from the analysis of respondents' opinions on various factors influencing their perception of the hostel landscape environment. The table utilizes

Total Weighted Value (TWV), Weighted Mean (TWV/f), and Average Weighted Value (AWV) to assess the level of importance and impact attributed to each factor.

From the data, poor drainage and waterlogging emerged as the most significant factor affecting users' perceptions, with the highest TWV (1503) and weighted mean TWV/f of 4.50, accompanied by an average mean AWV of 300.60. This shows a very strong consensus among respondents that issues of drainage and waterlogging severely diminish the quality of the hostel landscape setting. Climatic conditions such as excessive heat and lack of shade also recorded a high weighted mean TWV/f of 4.27, showing respondents' sensitivity to weather-related factors that influence their comfort in outdoor settings. Similarly, the presence or absence of recreational facilities was highly rated with a weighted mean TWV/f of 4.18, showing that recreational facilities are critical in shaping users' perceptions of the hostel environment. In the same vein, the arrangement and availability of seating areas and accessibility features also scored high weighted means of 3.97 and 3.91, respectively. These results imply that accessibility and the presence of seating areas are key components in the overall user experience of the landscape environment.

The maintenance level of landscape features scored 3.93, showing that respondents also consider the upkeep of landscape features as an important factor in their satisfaction with the hostel environment. The availability of green spaces was similarly valued, with a weighted mean TWV/f of 3.94, showing a positive but slightly lower preference compared to other factors. Safety and maintenance of walkways

and pathways recorded the lowest weighted mean TWV/f of 3.66, though still above the average, revealing that while important, it is not perceived as critically as other features.

Implication

The findings from Table 4.5 have important implications for the planning and management of landscape environments within postgraduate hostels. The data clearly show that users place the highest importance on addressing issues related to drainage, water management, climatic conditions, and the provision of recreational facilities, as these directly affect their comfort, satisfaction, and overall perception of the outdoor environment. This shows that immediate attention should be given to ensuring effective drainage systems, providing adequate shading, and incorporating diverse recreational spaces to enhance the functionality and appeal of the hostel landscapes. Moreover, accessibility and the availability of seating areas were also recognized as critical factors influencing interaction and comfort within the outdoor environment. These findings imply that the design of the landscape must consider inclusive pathways, ramps, and well-placed seating areas to accommodate the diverse needs of all users. Although safety and maintenance of pathways received relatively lower priority, it remains essential for ensuring a safe and user-friendly environment, and should not be neglected in the broader design and maintenance strategy.

Table 3 Determination of the Factors Associated with the Users' Perceptions on Landscape Design Setting Of Postgraduate Hostels Environments Index.

S/N	Statements	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)	Total Frequency(f)	TWV	TWV/f	AWV
1	The availability of green spaces influences my	15	4	85	112	118	334	1316	3.94	263.20

	perception of the hostel environment									
2	Poor drainage and waterlogging negatively affect my view of the landscape design	0	0	34	99	201	334	1503	4.50	300.60
3	The maintenance level of landscape features affects my overall satisfaction with the environment	22	10	67	105	130	334	1313	3.93	262.60
4	Accessibility features (e.g., ramps, pathways) impact my perception of the landscape setting	12	9	78	130	105	334	1309	3.92	261.80
5	The arrangement and availability of seating areas affect my interaction with outdoor spaces	7	22	55	140	110	334	1326	3.97	265.20
6	Climatic conditions (e.g., excessive heat, lack	45	19	67	115	88	334	1184	3.54	236.80

	of shade) influence my perception of comfort in the landscape setting.									
.8	The safety and maintenance of walkways and pathways shape my view of the landscape design	34	22	85	75	118	334	1223	3.66	244.60
8	The presence or absence of recreational facilities affects my perception of the hostel's outdoor environment	10	7	55	104	158	334	1395	4.18	279.00
	Total							10569	31.64/8	2113.80
									3.96	

Source: Author's Field Survey, 2024

CONCLUSION AND RECOMMENDATION

The study concludes that landscape design features plays a vital role in enhancing social interaction, comfort, and well-being among postgraduate students in South-western Nigerian universities. Features such as green spaces, shaded seating, walkways, and aesthetic features significantly improve the hostel environment, with accessibility and visual appeal being highly valued. However, issues like poor drainage, inadequate shading, and limited recreational facilities were identified as key challenges. The findings highlight the importance of user-centered, sustainable, and socially engaging landscape planning in postgraduate residential settings.

In light of these findings, the study recommends that universities prioritize the inclusion of socially interactive and climate-responsive landscape design features in hostel environments. Enhancing accessibility, expanding recreational zones, and implementing effective maintenance practices are essential. Additionally, involving students in the design process and using landscape features as tools for community building can foster inclusion and enrich the overall student experience. Together, these strategies can help create vibrant, functional, and supportive outdoor spaces in postgraduate hostels.

REFERENCES

- [1] Adams, M., and Nelson, R. (2021). Personalization and engagement in campus landscape design: Enhancing student connection and satisfaction. *Journal of Environmental Design*, 35(1), 55-68.
- [2] Adebayo, A. (2020). The expansion of higher education and the evolution of hostel architecture in Nigeria . *Journal of Nigerian Architecture*, 18(2), 33-45.
- [3] Akinola, A. A. (2017). Landscape architecture for hostel developments in Nigerian universities: Case study of Obafemi Awolowo University. *Journal of Nigerian Architecture*, 12(1), 45-55.
- [4] Ali, S., and Bawa, K. (2023). Integrating sustainable design principles in hostel landscapes. *International Journal of Sustainable Design*, 29(2), 112-128.
- [5] Ayeni, D. A. (2012). Emphasizing Landscape Features as Important Components of a Sustainable Built Environment in Nigeria Developing Country Studies ISSN 2224-607X (Paper) ISSN 2225-0565 (Online) Volume 2, No.8, 2012
- [6] Baur, J. (2022). Campus community gardens and student health: A case study of a campus garden and student well-being. *Journal of American College Health*, 70(2), 377-384
- [7] Bell, A., Cheng, T., and Li, Q. (2019). Restorative effects of campus green spaces: A study on student well-being. *Environmental Psychology Journal*, 64, 120-134.
- [8] Brown, S., and Dissanayake, E. (2018). The arts are more than aesthetics: Neuroaesthetics as narrow aesthetics. In *Neuroaesthetics* (pp. 43-57). Routledge
- [9] Chiesa, A. (2004). The role of urban parks for the sustainable city. *Landscape and Urban Planning*, 68(1), 129-138.
- [10] Hartig, T., Mitchell, R., de Vries, S., and Frumkin, H. (2014). Nature and health. *Annual Review of Public Health*, 35, 207-228.
- [11] John, F. and Mamuzo, G. (2024). The Role of Key Landscaping Features on Enhancing Social Interaction in Tertiary Institutions Students Center. *International Journal of Multidisciplinary Research and Growth Evaluation*. 05. 526-530.
- [12] Kellert, S. R. (2018). *Biophilic design: The theory, science, and practice of bringing buildings to life*. John Wiley and Sons.
- [13] Kaplan, R., Kaplan, S., and Ryan, R. L. (2018). Restorative environments: A theoretical and empirical overview. *Journal of Environmental Psychology*, 59, 1-13.
- [14] Lorinc, M., Sinha, K., and McQuaid, N. A. (2020). The role of green roofs in mitigating urban heat: A review. *Urban Forestry and Urban Greening*, 48, 126592.
- [15] Mendoza, A., and Venables, A. (2023). Attributes of blended learning environments designed to foster a sense of belonging for higher education students. *Journal of Information Technology Education. Research*, 22, 129.
- [16] Su, J. (2022). The influence of learning environment and learning pressure on the student development of university--based on the mediating role of learning orientation and engagement
- [17] Tongyun, W and .Wei, Z. and Fei, X. (2024). The Role of Landscape Design in Enhancing Environmental Sustainability and Human Well-being. 10.21203/rs.3.rs-4180380/v1.