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Design Deficiencies in Campus Communal Spaces: Barriers to Student Interaction and Well-being

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ABSTRACT

Communal spaces in Malaysian public universities play a vital role in fostering social interaction, informal learning, relaxation, and a strong sense of belonging among students. This study aimed to assess students' perceptions of design deficiencies in communal spaces and their impact on the campus experience across selected UiTM campuses in Malaysia. A total of 110 respondents from Universiti Teknologi MARA Perak, Kedah, Pulau Pinang, and Puncak Alam participated in the research. Data was collected through a survey questionnaire distributed via Google Form, allowing students to express their views on the quality and usability of communal spaces within their campuses. The results indicate that the majority of students recognize the importance of well-designed communal spaces. This underscores the urgent need for improvements in campus communal space design to better support student engagement and enhance the overall campus environment. The study contributes to the discourse on campus planning by emphasizing the need for intentional, inclusive, and identity-driven communal environments. It offers practical insights for architects, planners, and university administrators to strengthen place identity, student belonging, and institutional character in higher education settings.

1 INTRODUCTION

Communal spaces in universities, such as courtyards, lounges, and cafés, serve as vital hubs for student interaction, informal learning, and emotional well-being (Smith et al., 2022). These environments support a broad spectrum of activities, from socializing and collaboration to relaxation and reflection. However, in many Malaysian public universities, these spaces often fall short in addressing the diverse spatial and behavioural needs of students. Design deficiencies such as insufficient weather protection in tropical climates, rigid furniture layouts, and limited accessibility continue to undermine their functionality and inclusivity (Hassan et al., 2021; Lim et al., 2023).

While universities in other countries are increasingly adopting inclusive and data-driven design strategies to enhance campus life (Jensen & Nielsen, 2023), Malaysian institutions still face persistent gaps in aligning communal space design with user expectations and evolving student lifestyles (Abdullah & Tan, 2022). Despite the expansion of the nation's higher education sector which now serves over 1.3 million students across 20 public universities (MOHE, 2023) communal space planning often receives less priority than academic infrastructure. This imbalance has led to underutilized or uninviting environments that inadequately support the needs of a digitally engaged, climate-sensitive, and demographically diverse student population.

Empirical studies have documented these issues in various contexts. For instance, at Universiti Malaya, outdoor communal areas are frequently deserted during peak heat hours due to a lack of shaded seating (Hassan et al., 2021). Similarly, Universiti Teknologi Malaysia's fixed-furniture lounge designs have been shown to hinder group work and adaptability (Abdullah & Tan, 2022). These spatial challenges not only affect physical comfort but also impede informal knowledge sharing and peer engagement elements proven to enhance academic success and student satisfaction (Lee & Martinez, 2022).

In light of these challenges, this study investigates students' perceptions of communal space design within selected Universiti Teknologi MARA (UiTM) campuses in Malaysia. Employing a quantitative approach, data were collected through structured questionnaires to address the issue. The aim of this study is to examine students' perceptions of design deficiencies in campus communal spaces at selected Malaysian public universities and to assess how these deficiencies impact student interaction, sense of belonging, and overall university experience.

2 LITERATURE REVIEW

2.1 Definition and Functions of Communal Spaces in Academic Settings

Communal spaces, often referred to as informal learning environments or "third places," are physical areas within university campuses that support a wide range of activities beyond structured classroom learning. Examples include courtyards, open-air lounges, shaded walkways, campus cafés, green gardens, and amphitheatre-style seating areas. Unlike formal academic settings, communal spaces are characterized by flexibility, accessibility, and openness, making them conducive to spontaneous interaction, collaboration, relaxation, and participation in extracurricular activities (Oldenburg, 1999; Temple, 2008). Such spaces enrich the educational experience by facilitating peer-to-peer learning, fostering interdepartmental connections, and providing relief from academic stress. According to Souter et al. (2011), these areas function not only as physical transit points but also as essential hubs for social interaction, identity formation, and emotional grounding. In multicultural academic settings like Malaysia, communal spaces further support intercultural dialogue and promote inclusivity through shared use. Well-designed communal areas also encourage healthy behaviours such as walking and outdoor engagement, which contribute significantly to students' mental and physical well-being (Hashim et al., 2019; Lim et al., 2023).

2.2 Typology of Design Deficiencies in Outdoor Communal Spaces

Design deficiencies in outdoor communal spaces within university campuses manifest through interconnected spatial issues that hinder student interaction, well-being, and sense of belonging. These deficiencies can be grouped into five key typologies, each representing a critical barrier to meaningful engagement.

2.2.1 Poor Ergonomics

It remains a significant challenge in many outdoor environments, where seating and layout often fail to accommodate diverse body types, postures, or activities. Fixed concrete benches, narrow ledges, or non-shaded seating areas discourage prolonged use and restrict spontaneous group gatherings. The absence of backrests, ergonomic contours, or movable furniture results in discomfort that limits social interaction. As noted by Higgins and Hall (2022), rigid outdoor arrangements reduce opportunities for informal collaboration, while Garcia et al. (2023) emphasize that discomfort from poor seating design shortens the duration of space use. Hunley and Schaller (2009) found that student engagement decreased by 37% in spaces lacking ergonomic adaptability, underscoring the link between physical comfort and social participation.

2.2.2 Sensory Neglect

Particularly impactful in open-air settings, where environmental conditions are harder to regulate. Outdoor communal areas often suffer from either excessive stimulus such as traffic noise, harsh lighting, or glare from unshaded pavements or sensory monotony, characterized by flat, grey hardscapes and a lack of natural elements. Spaces without trees, water features, or varied textures may feel lifeless and uninviting. Studies in neuro-architecture show that such environments can elevate cortisol levels by 24%, increasing stress and reducing resilience (Browning et al., 2014). Woolner et al. (2022) and Pallasmaa (2012) further argue that environments failing to balance sensory input diminish cognitive clarity and emotional connection, particularly in high-traffic outdoor zones.

2.2.3 Inaccessibility

Outdoor communal spaces go beyond physical barriers such as staircases or uneven terrain. Narrow walkways, lack of tactile surfaces for visually impaired users, poor signage, and absence of shaded quiet zones for neurodivergent individuals reflect inadequate universal design. UNESCO's (2022) global audit of campus environments found that 68% of communal outdoor spaces contained "dignity violations," including inaccessible gathering spots or isolated seating for persons with disabilities. These issues perpetuate exclusion and send implicit signals of neglect toward underrepresented students. As Imrie (2020) and Spencer & Marschall (2020) note, such design oversights erode feelings of safety and inclusivity, especially for students with mobility, sensory, or cognitive differences.

2.2.4 Aesthetic Deficiency

Contributes to a loss of place identity in outdoor communal spaces when designs lack cultural relevance or meaningful symbolism. Spaces dominated by generic material such as concrete tiles and imported fixtures often feel disconnected from the university's character. The absence of locally sourced materials, indigenous plants, student art, or symbolic structures like typotecture installations weakens emotional attachment. Relph's (1976) theory of placelessness explains how such anonymity deters users from forming personal connections to a space. Kumar's (2024) study across Southeast Asian campuses found a 41% drop in student identification with spaces lacking cultural references, while Ahmed (2020) warned against token gestures like standalone murals or sculptures that are not spatially integrated further alienating users instead of fostering belonging.

2.2.5 Safety Concerns

Both physical and psychological, also limit the use of outdoor communal spaces. Poor lighting, overgrown vegetation, blind corners, and isolated seating areas near secluded walkways often lead to perceptions of vulnerability, especially after dark. Boomsma et al. (2017) highlight that inadequate visibility contributes to reduced feelings of security, while Thomas et al. (2020) found a 29% decrease in nighttime usage of poorly lit outdoor zones. Psychological safety is equally important. The absence of inclusive markers—such as gender-neutral signage, diverse representation in public art, or safe social

zones can cause certain student groups. Comunian, R., & Gilmore, A. (2015), describe this as "design-induced hypervigilance," where students actively avoid spaces that do not signal inclusivity or psychological comfort.

2.3 Impacts of Design on Student Use and Engagement

Design significantly shapes how students engage with outdoor communal spaces, affecting their comfort, accessibility, and emotional connection to the campus. When communal spaces incorporate symbolic, visual, and sensory elements that reflect cultural identity or institutional heritage, they foster a stronger place identity, enhancing students' sense of belonging and pride. For instance, designs rooted in local narratives, such as traditional Malay motifs, can cultivate a meaningful sense of cultural continuity. However, when design lacks cultural relevance, inclusivity, or student involvement, it can lead to alienation and disconnection. Generic or tokenistic designs, as well as inaccessible or sterile environments, fail to resonate with diverse student populations and may exclude marginalized groups. This not only undermines social cohesion and emotional well-being but also limits the utility of these spaces, weakening their role in building a connected campus community.

In addition, a strong sense of belonging—crucial for academic and social engagement—depends on how inclusive and accessible a space feels. Features like gender-neutral restrooms, barrier-free access, and multilingual signage promote inclusivity in multicultural university settings like Malaysia. Sustainable design also plays a key role by ensuring long-term usability and environmental comfort through features such as shaded areas, natural ventilation, and eco-friendly materials. By integrating universal design principles and aligning with global sustainability goals, such as the UN's SDG 11, campuses can create resilient, equitable, and engaging environments that support student well-being, participation, and long-term satisfaction

2.4 Communal Space Design and Student Experiences

A growing body of research supports the conclusion that communal spaces significantly influence students' daily campus experiences, emotional well-being, and engagement with academic life. Kenney et al. (2005) emphasized the role of physical space as a "hidden curriculum," suggesting that the built environment can shape behaviours, relationships, and learning outcomes just as powerfully as formal instruction. Similarly, Turgut and Yigit (2019) found that outdoor spatial quality—including aesthetics, accessibility, and environmental comfort—directly affects students' willingness to socialize, study, or rest in those areas.

Preliminary findings reveal a clear disconnect between spatial design and the actual needs of users. For instance, 62% of surveyed students avoid indoor lounges due to poor ventilation, while 78% report that the absence of power outlets discourages outdoor study sessions (Lim et al., 2023). These results reflect broader international concerns in campus design, yet they also highlight unique regional constraints, such as accommodating monsoon conditions while preserving open-air spatial qualities.

In the Malaysian context, several recent studies have documented challenges in current communal space design. Hashim et al. (2019) noted that many university campuses have underutilized green spaces due to poor wayfinding, limited seating, and a lack of shading, which deters student usage during peak daytime hours. Ariffin et al. (2020) further highlighted that students often experience discomfort and disengagement in outdoor learning environments due to exposure to heat, inadequate shelter, and poor maintenance. Lim et al. (2023) added that the lack of electrical outlets, ergonomic seating, and connectivity infrastructure such as Wi-Fi continues to limit the functionality of communal spaces for studying and digital learning.

Moreover, student surveys at Malaysian universities have shown a high preference for shaded, naturally ventilated areas with movable seating and access to power outlets. Such findings indicate a

demand for user-centred design that caters to evolving student behaviours, including mobile learning, peer mentoring, and co-curricular activities (Lee & Martinez, 2022).

2.5 Case Studies on Communal Space Design

2.5.1 Global Context

Globally, universities are investing in communal space design as a strategic means to promote interdisciplinary engagement and student satisfaction. For example, the Stata Center at MIT uses modular, reconfigurable furniture and mixed-use zones to encourage both quiet study and group collaboration, resulting in a 30% increase in space utilization (Lee & Martinez, 2022). At the University of Melbourne, landscaped courtyards with Wi-Fi, solar-powered seating, and rain gardens serve as vibrant student hubs that support both ecological sustainability and social interaction (Souter et al., 2011). The University of Copenhagen has similarly reimagined its campus with shaded outdoor study areas and cooling green walls, resulting in a measurable reduction in student stress levels (Jensen & Nielsen, 2023).

2.5.2 Malaysian Context

Malaysian universities face more complex challenges due to tropical weather conditions, maintenance constraints, and varied user expectations. At Universiti Malaya, for instance, a retrofit of the Rimba Ilmu courtyard featuring added shade structures, Wi-Fi, and movable seating resulted in a 50% increase in student footfall during midday hours (Hassan et al., 2021). In UTM's MakerSpace, interdisciplinary collaboration rose by 35% following the introduction of flexible communal zones; however, long-term sustainability was compromised by inconsistent funding and the absence of climate-sensitive materials (Abdullah & Tan, 2022).

Studies by Lim et al. (2023) have also documented widespread dissatisfaction with campus lounges and waiting areas across multiple institutions, where students cited the lack of charging ports, ventilation, and privacy as major deterrents to prolonged use. These case studies underscore the pressing need for comprehensive communal space design frameworks that integrate cultural values, climate resilience, and technological functionality.

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3   METHODOLOGY

This study employed a quantitative, cross-sectional survey design to investigate students' perceptions of communal space design at selected Universiti Teknologi MARA (UiTM) campuses. A total of 110 students from four branches; Perak (Seri Iskandar and Tapah), Kedah (Sungai Petani), Pulau Pinang (Permatang Pauh), and Puncak Alam, were recruited through convenience sampling. The research instrument was a structured questionnaire developed and distributed using Google Forms,

consisting of 13 close-ended items (multiple choice, Likert scale, and rating scale) and 2 open-ended questions. The items were designed to capture student perspectives on design deficiencies (e.g., missing features, discomfort), emotional responses (e.g., sense of belonging), and behavioural outcomes (e.g., interaction levels, avoidance due to poor design). The final section of the survey invited students to suggest improvements, enabling the collection of student-centred insights for enhancing communal space usability and identity. Quantitative data were analysed using descriptive statistics, while open-ended responses were coded thematically to identify common issues and design priorities.

4   RESULTS

4.1 Demographic Profile of Respondents

Table 1 Demographic Profile of Respondents

Category	Subcategory	Frequency	Percentage (%)
Campus	UiTM Perak (Seri Iskandar & Tapah)	54	49.1
	UiTM Kedah (Sungai Petani)	43	39.1
	UiTM Pulau Pinang (Permatang Pauh)	12	10.9
	UiTM Puncak Alam	1	0.9
Faculty	Art and Design	57	49.1
	Information Management / Computer Science	22	19.0
	Architecture, Planning and Surveying (FSPU)	13	11.2
	Applied Sciences	9	7.8
	Business and Administration	7	6.0
	Civil Engineering	5	4.3
	Health Sciences	1	0.9
	Pre-Diploma	2	1.7
Year of Study	Year 1	22	20.0
	Year 2	62	56.4
	Year 3	13	11.8
	Year 4	11	10.0
	Year 5	1	0.9
	Year 6	1	0.9
Frequency of Using Outdoor Communal Spaces	Daily	37	33.6
	A few times a week	39	35.5
	A few times a month	19	17.3
	Rarely	13	11.8
	Never	2	1.8

A total of 110 students from four UiTM campuses participated in the study. Nearly half of the respondents were from UiTM Perak (49.1%), followed by UiTM Kedah (39.1%), UiTM Pulau Pinang (10.9%), and UiTM Puncak Alam (0.9%). In terms of faculty, most students were from the Faculty of Art and Design (49.1%), with others from Information Management and Computer Science (19.0%), Architecture, Planning and Surveying (11.2%), and other disciplines. More than half of the respondents were Year 2 students (56.4%), followed by Year 1 (20.0%), Year 3 (11.8%), Year 4 (10.0%), and a small number from Year 5 and Year 6 (0.9% each). This distribution reflects a participant group primarily from creative and built environment backgrounds, who are likely to have relevant exposure to spatial and design aspects of campus life. The majority of students reported frequent use of communal spaces, with 35.5% using them a few times a week and 33.6% daily. Only 11.8% reported rare use, and

1.8% never used them. This suggests that communal spaces are actively used, indicating their importance in daily student life. However, the fact that some still avoid them may reflect underlying design or comfort issues.

4.2 Perception of Campus Communal Spaces

Table 2 Perceived Importance of Well-Designed Communal Spaces

Response	Frequency	Percentage (%)
Very Important	35	31.8
Important	48	43.6
Neutral	19	17.3
Very Unimportant	8	7.3

Students were asked about their views on the design and function of campus communal spaces. In terms of importance, majority of respondents rated well-designed communal spaces as either important (43.6%) or very important (31.8%). Meanwhile, 17.3% were neutral, and a small minority (7.3%) viewed them as very unimportant. These results reflect a generally positive perception of the role of design in shaping student well-being and engagement.

Table 3 Sense of Belonging in Current Communal Spaces

Response	Frequency	Percentage (%)
Yes	91	82.7
No	19	17.3

The majority of students (82.7%) reported feeling a sense of belonging when using existing communal spaces, while 17.3% did not. This suggests that for most students, communal spaces support inclusivity and emotional connection; however, a minority may feel excluded due to issues such as design misalignment or lack of accessibility.

Table 4 Rating of Current Communal Space Design

Rating	Frequency	Percentage (%)
1 (Very Poor)	1	0.91
2 (Poor)	11	10.00
3 (Neutral)	59	53.6
4 (Good)	30	27.2
5 (Excellent)	9	8.12

Most students (53.6%) rated the design of communal spaces neutrally, while 27.3% found it good and only 8.2% rated it excellent. Around 11% gave low ratings (1 or 2), suggesting that student satisfaction with design remains modest overall.

Table 5 Activities in Outdoor Communal Spaces

Activity	Frequency	Percentage (%)
Socialising	31	28.2
Eating	24	21.8
Relaxing	20	18.2
Studying	19	17.3
Group Discussion	16	14.6

Students reported engaging in a range of activities in outdoor communal spaces. Socialising was the most commonly reported activity (28.2%), followed by eating (21.8%), relaxing (18.2%), studying

(17.3%), and group discussions (14.6%). These findings suggest that outdoor spaces serve multiple purposes, supporting both social interaction and academic engagement.

Table 6 Do Communal Spaces Encourage Peer Interaction?

Response	Frequency	Percentage (%)
Yes	84	76.36
No	26	23.64

A majority (76.4%) believed that communal spaces encouraged interaction among students, while 23.6% disagreed. Open-ended responses further contextualised these perceptions. Themes that emerged included the importance of social interaction, design and aesthetics, facilities and comfort, group collaboration, accessibility and location, personal preference, and maintenance and safety.

Several students highlighted that open, well-designed spaces enhanced social interaction and group bonding. One respondent noted, *"It's open space, there's a lot of people and this can lead them to talking to each other."* Others stressed the role of aesthetics, suggesting that *"well-designed spaces can definitely make the campus environment more engaging."* Concerns related to facilities included lack of seating, shade, and cleanliness, while others valued the spaces for collaborative work, especially for assignments and group discussions. Some responses reflected personal preferences for solitude, where communal spaces were used for relaxation rather than interaction: *"I like to be alone and didn't talk with anyone even though there are people in front of me."* A few students raised more serious concerns, including negative experiences tied to poor maintenance and social discomfort, such as bullying or exclusion. These findings suggest that while communal spaces are widely used and appreciated, improvements in design quality, accessibility, and emotional safety could further enhance their role on campus.

4.3 Perceptions of Design Quality and Missing Elements

Table 7 Students' Perceptions of University Identity Reflected in Communal Space Design

Response	Frequency	Percentage (%)
Yes	84	76.4
No	26	23.6

Table 7 shows that 76.4% of students agreed that the design of communal spaces reflects the identity of their university. However, 23.6% did not share this view, indicating that while many students recognise symbolic or aesthetic representations of UiTM's character, a significant minority feel there is a disconnect between design intent and lived campus experience.

Qualitative responses revealed six key themes regarding university identity expression through design. Many students acknowledged the presence of cultural and symbolic features, such as traditional-modern design blends and institutional colour schemes, which they felt helped reinforce UiTM's heritage and branding. This theme was particularly evident among students from creative programmes who also highlighted the importance of artistic and aesthetic alignment, suggesting that murals, sculptures, and architecture help reflect the identity of an art-focused campus. Conversely, others pointed to a lack of identity or generic design, noting an absence of distinguishing features or alignment with their faculty's profile. Some responses focused on facilities as symbols of intent, where investment in comfort, technology, and student amenities were interpreted as reflecting institutional values. In addition, atmosphere and emotional response were mentioned as part of identity construction, students described calming or inspiring environments as supportive of university image. A recurring concern, however, was the presence of neglected or outdated areas, which weakened the university's identity due to poor maintenance and lack of visual appeal.

Table 8 Missing Design Elements in Communal Spaces

Element	Frequency	Percentage (%)
Comfortable Seating	42	38.2
Shade/Shelter	34	30.9
Greenery	23	20.9
Others	11	10.0

In terms of physical elements, students were also asked to identify what was missing in their communal spaces. As shown in Table 8, the most commonly reported deficiencies included comfortable seating (38.2%), shade or shelter (30.9%), and greenery (20.9%). These results highlight a need for more climate-sensitive and ergonomic design considerations that support prolonged use in Malaysia's tropical context.

Table 9 Desire for More Artistic-Based Elements in Communal Spaces

Response	Frequency	Percentage (%)
Yes	92	83.6
No	18	16.4

When asked about the inclusion of artistic elements, a large majority (83.6%) supported the idea of incorporating more creative, aesthetic, or symbolic features into communal spaces (Table 9). This suggests a strong desire for campus environments that reflect identity and offer visual engagement, particularly among students from art-based faculties.

Open-ended feedback regarding improvements to communal space design revealed seven main areas of concern. The most common recommendation was for comfortable seating, with students requesting furniture that supports both relaxation and productivity. The second key theme was greenery and shaded areas, with students highlighting the calming effects of trees, covered spaces, and even water features like ponds. Several students also cited the need for basic infrastructure, such as lighting, Wi-Fi, and electrical sockets. These elements were seen as essential for supporting modern student life. There was also strong support for integrating artistic elements and faculty-specific identity, with students suggesting murals, installations, or designs that reflect UiTM's creative profile.

Other frequently mentioned needs included functional facilities (e.g., fans, toilets, water dispensers), flexible layouts for both academic and social activities, and student involvement in the design process. This final theme reflects a desire for more participatory and personalised design practices that acknowledge students not just as users, but as contributors to the campus environment.

4.4 Perceived Impact of Design on Student Experience

Table 10 Student Beliefs on the Impact of Communal Spaces on University Experience

Response	Frequency	Percentage (%)
Yes	108	98.2
No	2	1.8

A vast majority of respondents (98.2%) agreed that well-designed communal spaces enhance their university experience. This indicates a clear consensus among students on the significance of spatial quality in supporting their well-being, productivity, and overall satisfaction on campus.

Table 11 Frequency of Avoiding Communal Spaces Due to Poor Design or Maintenance

Rating (1 = Never, 5 = Always)	Frequency	Percentage (%)
1 (Never)	11	10.0
2 (Rarely)	18	16.4
3 (Moderate)	55	50.0
4 (Often)	23	20.9
5 (Always)	3	2.7

When asked how often they avoided communal spaces due to poor design or maintenance, half of the students (50.0%) selected the midpoint (3 – Sometimes), indicating moderate levels of disengagement. Additionally, 23.6% of students reported frequent avoidance, selecting either 4 (Often) or 5 (Always). These findings suggest that while communal spaces are generally used, a notable portion of students are discouraged by ongoing issues related to maintenance, comfort, and spatial design.

Open-ended feedback revealed eight key themes related to improving campus communal spaces. Students highlighted the need for better WiFi and connectivity, more comfortable and climate-appropriate seating, and increased greenery and shaded areas to support relaxation and usability. Concerns were also raised about maintenance and basic facilities, such as broken infrastructure and limited access to water dispensers.

Other common suggestions included greater student involvement in design processes, improved zoning and multifunctional layouts to accommodate different activities, and enhanced safety and accessibility, particularly in high-traffic areas. Lastly, students expressed interest in more events and programming to encourage active use of these spaces. These insights point to a strong student preference for communal environments that are functional, inclusive, and reflective of their academic and social needs.

5   DISCUSSION

The study highlights varied student perceptions regarding the design of communal spaces across selected UiTM campuses. While 75.4% of respondents agreed that these areas encourage peer interaction and 98.2% believed that well-designed spaces enhance their university experience, only 8.2% rated the current design as excellent, with a majority (53.6%) offering a neutral assessment. This suggests that, despite acknowledging their importance (75.4%), many students remain unsatisfied with existing spatial conditions—an issue commonly linked to unresponsive or generic campus design (Thomas et al., 2020). Furthermore, although 82.7% of students reported a sense of belonging, 17.3% did not—pointing to inclusivity gaps possibly stemming from spatial alienation or lack of identity markers (Relph, 1976; Spencer & Marschall, 2020).

Key deficiencies cited include the lack of comfortable seating (38.2%), shade or shelter (30.9%), and greenery (20.9%), aligning with prior research emphasizing the importance of ergonomic and climate-sensitive features (Garcia et al., 2023; Ariffin et al., 2020). Notably, 23.6% reported frequently avoiding these spaces due to poor design or maintenance. Despite these shortcomings, 76.4% saw existing spaces as reflective of university identity, and 83.6% desired more artistic features—reinforcing the call for culturally grounded, inclusive, and visually engaging environments (Kumar, 2024; Pallasmaa, 2005).

CONCLUSION

This study concludes that while students generally recognize the value of outdoor communal spaces in enriching their university experience, the current design of these areas often fails to meet their expectations. Many communal spaces lack the essential elements that support comfort, inclusivity, and

meaningful engagement, such as appropriate seating, shade, and natural features. These design shortcomings can lead to disengagement and underutilization of spaces that are meant to foster interaction and well-being.

Despite these challenges, students still view communal spaces as important reflections of institutional identity and express a strong desire for environments that are more creative, culturally grounded, and student-focused. The findings underscore the need for more thoughtful and inclusive design strategies that not only consider environmental and ergonomic factors but also celebrate diversity and student agency. Moving forward, incorporating student feedback into the design and improvement of communal spaces will be critical to creating vibrant, functional, and welcoming environments that support both academic and social life on campus.

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AUTHOR CONTRIBUTIONS

Norita Abdul Kadir: Conceptualized and designed the study, wrote the paper, led methodology development, and authored the original draft. Berlian Nur Morat: Provided expertise in research methods and data analysis. Syahrul Nizam Shaari: Visualization and wrote parts of the paper. Shahrunizam Sulaiman: Supervision, reviewed existing research, and editing.

CONFLICT OF INTEREST

There are no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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