



# First-Day Perceptions of University Landscape Beauty and Emotional Well-Being Among Faculty of Humanities and Social Sciences Undergraduates at the University of Sri Jayewardenepura: A Mixed-Methods Study

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## ABSTRACT

This mixed-methods study investigates first impressions of the university's landscape and its impact on the emotional well-being of undergraduates enrolled in the Faculty of Humanities and Social Sciences at the University of Sri Jayewardenepura, Sri Lanka. Quantitative structural equation modeling combined with qualitative thematic analysis was used to assess how landscape aesthetics influence emotional responses and students' sense of belonging. The qualitative portion used semi-structured interviews to obtain students' lived experiences of the university landscapes, while the quantitative portion employed structured questionnaires that measured three variables: emotional well-being, environmental attachment, and university landscape aesthetics. The study showed that students appreciated the university entrance dominated by large flowering trees, palm avenues, yellow foliage with high rise podiums, red flower carpets, pruned pathways, topiary features, ornamental shrubs, vines, fruit trees, and placid ponds. The environmental attachment, emotional well-being, and perceived landscape beauty showed a significant relationship per structural equation modeling. Structural equation modeling indicated significant relationships among environmental attachment, emotional well-being, and perceived landscape beauty. The first-year students indicated the landscape features that instilled motivation, comfort, a sense of belonging, and pride during the thematic analysis. The results show that maintained and designed university landscapes positively affect students' academic experience and psychological well-being. These results advocate global sustainability goals, mental health support, and the importance of designed green spaces in educational settings. The qualitative findings further revealed that visually rich landscapes created feelings of comfort, excitement, and pride among first-day students, strengthening their emotional attachment to the university environment. These findings improve the quality of learning environments and support Sustainable Development Goal 3 (Good Health and Well-Being), Sustainable Development Goal 4 (Quality Education), Sustainable Development Goal 11 (Sustainable Cities and Communities), and Sustainable Development Goal 15 (Life on Land).

**Keywords:** University landscape aesthetics, Emotional well-being, First-year undergraduates, Environmental attachment; Sustainable landscapes, SDG 3 Good Health and Well-Being, SDG 4 Quality Education, SDG 11 Sustainable Cities and Communities, SDG 15 Life on Land.

## INTRODUCTION

Students often undergo psychological and emotional changes when they first encounter a university's physical environment. Environmental psychologists have found that complex and restorative environments, such as those that incorporate natural elements like plants, flowing water, and thoughtful spatial arrangement, can promote psychological restoration, decrease stress, and enhance positive affect. (Ulrich, 1983; Kaplan & Kaplan, 1989). When students experience a natural and aesthetically pleasing environment, they experience soft fascination, cognitive focus, and emotional renewal, which are all positive outcomes when managing stress (Kaplan & Kaplan, 1989; Ulrich, 1983). This experience, among many, will likely be relevant when students experience a new educational environment, as many will be unfamiliar with the experience.



Initial studies in higher education have begun exploring the impact of the physical environment on students' mental health and well-being and have found that settings with well-designed, biodiversity-rich, and water-integrated landscapes positively impact students' mental health. (Urban Forestry & Urban Greening, 2025). However, many studies have either focused on mental health outcomes over a long duration of exposure or have studied the emotional response students have to the perceived beauty of landscapes within their first day of a faculty or institutional context. This research assesses how specific landscape elements like blooming plants, hedges, water features, shady walkways, and ornamental pruned structures contribute to emotional attachment and well-being. The author uses a combination of quantitative structural modelling and qualitative thematic analysis to better understand the psychological and emotional effects of the experience.

### **Problem Justification**

Starting university is a big emotional and social change, and for many new undergraduate students it can be a very stressful and uncertain time (Strayhorn, 2012). The emotional landscape students encounter during their first experience can foster a sense of belonging and provide students with the emotional fortitude to continue their studies. In environmental psychology, Attention Restoration Theory and Stress Reduction Theory describe the potential of a landscape to provide psychological relief. However, very little research examines the psychological relief students' first impressions of university environments provide, particularly in cities where designed landscapes are used. Although there is enough evidence that shows a strong relationship between green space and mental well-being, most studies look into overall health impacts or chronic exposures and do not capture the immediate aesthetic impacts and the visceral reactions of students when they are exposed to the institutional green space for the first time. In addition, there are few studies in the Sri Lankan higher education sector that look into the emotional impacts of arriving in a location that has certain aesthetic attributes, like different types of planting, carpets of flowers, topiary, and water bodies, among others. Addressing these issues will assist in understanding the ways in which the design of the landscape in the institution positively impacts the well-being of the students and how the institution is perceived positively from the beginning.

### **Research Objectives**

This study will focus on the following three objectives:

1. To analyze the association between perceived landscape aesthetics and emotional well-being from a quantitative perspective.
2. To examine the landscape attributes that first-day undergraduates find most appealing and the justifications for their choices.
3. To merge the quantitative and qualitative outcomes to construct a holistic perspective of the impact of aesthetic perception on emotional response and environmental attachment of first-day undergraduates.

### **Research Questions**

In keeping with the objectives, this study seeks to answer the following questions:

1. What is the relational extent of perceived landscape beauty, and emotional well-being of first day undergraduates?
2. Which landscape features do first day undergraduates consider to influence beauty and emotional responses the most?
3. In what ways do the qualitative perceptions of landscape beauty serve to enrich the quantitative paths captured in structural modeling?

## **CONCEPTUAL FRAMEWORK**

The framework integrates key components of environmental psychology and mixed methods research design, anchored on Attention Restoration Theory (Kaplan & Kaplan, 1989) and Stress Reduction Theory (Ulrich, 1983), posits that:



- Landscape Aesthetic Features (e.g., variety of planting, floral displays, water features, shaded planting) influence Perceived Aesthetic Quality.
- Perceived Aesthetic Quality to some extent enhances Emotional Well Being (e.g., calmness, comfort, pride) and Environmental Attachment.
- Environmental Attachment, in this framework, is a mediator that strengthens and/or amplifies the positive impacts of perceived Aesthetic Quality on Emotional Well-being.

This means that, of the total impact of the environmental Aesthetic Quality on the Emotional Well-being, student evaluative perception plays the most critical and influential role. Positive emotions and psychological restoration from viewed environment is in line with the premise of this model and has been supported within empirical literature.

## LITERATURE REVIEW

### Landscape Aesthetics and Psychological Well-Being

The influence of green and blue in the environment has been shown to positively affect people's psychological well-being and mental health. Zhou, Wang, and Liu (2024) report that students mental well-being is positively affected, directly and indirectly through environmental satisfaction, when they perceived green spaces.

A recent scoping review has continuously confirmed a positive correlation between mental health outcomes of students and multiple types of landscapes. The authors stated that the majority of reviewed studies show that mental health improves when there is exposure to green and blue spaces, and that a reason why these environments are improving mental health is their aesthetic and restorative properties. (Urban Forestry & Urban Greening, 2024)

Another systematic review on the association between landscape characteristics and well-being stated that green spaces are the most studied and are still positively associated with mood improvement and stress reduction. This indicates that green spaces have protective features over mental health issues (Abraham, Sommerhalder, & Abel, 2009, as cited by the systematic review)

### Perception, Attachment and Emotional Deflection

Researchers have been able to show the role of environmental quality on emotional effects. For example, perceived greenness at home and at university has been positively associated with mental health (Nutsford, Pearson, & Kingham, 2020, as reported in BMC Public Health).

More accolades are directed towards research on the experience of landscapes. Knowing the experience of landscapes and the knowing of the natural and aesthetic components (vegetation, diversity among tailored life forms, aspects that can be viewed ...), creates and enhances positive feelings of emotional calm, emotional relief, and restorative feelings. These emotional reactions are consistent with the theories BEHIND psychological relations that state and explain how mental barriers and restrictions can be relieved and aided by natural components (Kaplan & Kaplan, 1989, among others, as explained in landscape preference research).

Even though landscape expressions on universities have been examined, the same underlying principles — perceived quality of the environment, preferences along the emotional spectrum, emotional respond — apply to all educational settings containing greenery and water, including university universities.

## SUMMARY OF THE FINDINGS

Across the studies, three broad findings relevant to this research have emerged:

Psychological well-being is positively correlated with perceived aesthetic components of landscapes such as greenery, biodiversity, and water features (Zhou et al., 2024; Urban Forestry & Urban Greening, 2024).



Personal evaluations of aesthetics were found to be crucial regardless of the objectively measured environment and the mental health outcomes that were associated with subjective evaluations of greenness and landscape quality (Nutsford et al., 2020).

Preference for and emotional attachment to particular landscape elements is one of the many variables that impact emotional well-being. The elements of landscapes that impact emotional well-being the most are the elements that are most pleasing, as students report the most intense feelings of restoration and calm in pleasing landscapes.

The theoretical basis for your empirical findings supports the hypothesized relationships within your conceptual framework that landscape aesthetic features influence perceived quality, which affects emotional well-being and attachment.

## METHODOLOGY

**Research Design:** Convergent mixed-methods design was utilized in the current study as it was the most appropriate technique for exploring participants' first-day encounters with the university landscape and their emotional response for the undergraduate students from the Faculty of Humanities and Social Sciences at the University of Sri Jayewardenepura. This design combines the qualitative and quantitative approaches. In the quantitative component, the study aimed to evaluate the interrelationships of emotional well-being (EWB), environmental attachment (EA), perceived aesthetic quality (PAQ), and landscape aesthetic features (LAF). Structural equation Modelling (SEM) was utilized to examine the hypothesized pathways, as well as the direct and indirect relationships of the constructs. The qualitative component of the study explored students' emotional responses, interpretations, and university landscape features, as well as the memorable aspects of the university via semi-structured interviews and thematic analysis. The application of mixed methodologies in this study provided a greater extent of validity, depth, and explanatory power to the findings (Creswell & Creswell, 2018).

**Population and Sample:** The prospective population consisted of 1,342 first-day undergraduates at the Faculty of Humanities and Social Sciences. Using Slovin's formula, with a 5% margin of error (Slovin, 1960), an estimated sample size of 340 was determined, allowing for some non-response. After the data collection process, a total of 328 responses were retained for analysis after checking for completeness and removing outliers.

In order to obtain a sample representative of the population, a probability sampling method was used, specifically stratified random sampling. Participants were divided into strata by academic program (e.g., Political Science, Social Sciences, and Statistics) and by gender. For each stratum, sample sizes were determined proportionately and participants were selected at random using a random number generator. This was to ensure there was equal representation across different programs and genders, thereby reducing sampling bias and allowing for analyses of subgroups.

**Collection of Quantitative Data:** Collection of data was carried out using structured self-administered questionnaires that have 4 sections and simple answering instructions. The demographic area of interest included: age, gender, academic program, and previous experience related to greenery. The second section measured Landscape Aesthetic Features (LAF) and included participants' perceptions regarding greenery, flowering plants, water features, shady pathways, topiary and propped walkways. The Perceived Aesthetic Quality (PAQ) section evaluates participants' perceptions of the overall beauty and aesthetic value of the landscape. Finally, the assessment of Emotional Well-Being (EWB) and Environmental Attachment (EA) aimed at measuring affective responses (i.e. calmness, comfort, pride, and sense of belonging) to the landscape.

All measurement items were drawn from the validated instruments from the field of environmental psychology and studies on the perception of landscapes (Zhou et al, 2024, Urban Forestry & Urban Greening, 2024; MDPI, 2025). The data have statistically sufficient level of sensitivity as the responses were measured using a five-point Likert type scale (1 = strong disagreement, 5 = strong agreement score) of a particular statement.



**Analysis of Quantitative Data:** IBM SPSS and AMOS software were used for data analysis. Descriptive statistics of the data (mean, standard deviation, skewness and kurtosis) were calculated first to show the distribution of the data. Reliability analysis was performed using Cronbach's alpha with the threshold of the data set being  $\geq 0.7$ . to show the internal consistency of the data.

In order to evaluate the proposed interrelations among the variables LAF, PAQ, EA, and EWB, Structural Equation Modeling (SEM) was utilized, which accounts for both direct and indirect causal relationships. For the purpose of correctly fitting the model, the comparative fit index ( $CFI \geq 0.90$ ), Tucker-Lewis index ( $TLI \geq 0.90$ ), and the root mean square error of approximation ( $RMSEA \leq 0.08$ ) and standardized root mean square residual ( $SRMR \leq 0.08$ ) were used to test the fit of the model in accordance to the recommendations for SEM in the field of social sciences (Hair et al, 2019).

### Data Collection Instruments and Constructs

The quantitative research tool was based on the following four main constructs:

1. Landscape Aesthetic Features (LAF): Eight items examining the visual appeal of the flowering plants, topiaries, shaded walkways, ponds, and fruit trees.
2. Perceived Aesthetic Quality (PAQ): Five items measuring appreciation of the university's landscape as a whole.
3. Environmental Attachment (EA): Four items pertaining to the emotional connection and sense of belonging.
4. Emotional Well-Being (EWB): Six items which are affective responses (calm, proud, and psychologically restored).

**Hypotheses;** In regards to the conceptual framework, the following hypotheses were proposed and tested in the study:

1. H1: Landscape Aesthetic Features (LAF) have a positive impact on Perceived Aesthetic Quality (PAQ).
2. H2: There is a positive impact of Perceived Aesthetic Quality (PAQ) on Emotional Well-Being (EWB).
3. H3: There is a positive impact of Perceived Aesthetic Quality (PAQ) on Environmental Attachment (EA).
4. H4: Environmental Attachment (EA) and EWB.

## RESULTS

### Quantitative Data Analysis

**Data Screening and Assumption Testing:** Responses from 328 participants who are first day undergraduates from University of Sri Jayewardenepura's Faculty of Humanities and Social Sciences have been analyzed. Participants that had incomplete questionnaires and outliers were removed. Preliminary checks for missing data ( $< 0.02$ ) were resolved by mean imputation. For extreme cases with multivariate outliers, evaluated with Mahalanobis distance ( $p < 0.001$ ), Skewness and kurtosis were not extreme. Values of skewness and kurtosis from all constructs were within ( $\pm 1.0$ ) were available. Available values for all constructs were available. Linear regression and homoscedasticity were confirmed by (scatter) plots for regression based SEM (scatter) plots were confirmed for regression based SEM.

Students' rate landscape features very highly. As seen in Descriptive Statistics (Table 1) Landscape Aesthetic Features (LAF) had a mean score of 4.22 ( $SD = 0.51$ ) which shows a strong appreciation for flowering plants, topiaries, pruned pathways, ponds, and shaded areas. Students' overall positive evaluation of the university environment is reflected in Perceived Aesthetic Quality (PAQ) which scored the highest ( $M = 4.36$ ,  $SD = 0.48$ ).



Environmental Attachment (EA) and Emotional Well-Being (EWB) also scored above 4, supporting the notion that first impressions of landscape features strongly influence both attachment and affective states.

### Descriptive Statistics

Table 1 summarizes the means, standard deviations, skewness, and kurtosis for each main construct. Descriptive Statistics of Study Constructs (N = 328).

Construct	Items	Mean (M)	SD	Skewness	Kurtosis
Landscape Aesthetic Features (LAF)	8	4.22	0.51	-0.28	0.16
Perceived Aesthetic Quality (PAQ)	5	4.36	0.48	-0.25	-0.05
Environmental Attachment (EA)	4	4.10	0.55	-0.18	-0.12
Emotional Well-Being (EWB)	6	4.27	0.52	-0.22	0.03

Students consistently rated landscape features positively, particularly the diverse flowering plants, topiaries, and water features. Skewness and kurtosis indicate that the data distribution is approximately normal, justifying parametric SEM analysis.

### Reliability Analysis

Internal consistency for all constructs was assessed using Cronbach’s alpha:

- LAF:  $\alpha = 0.871$
- PAQ:  $\alpha = 0.844$
- EA:  $\alpha = 0.812$
- EWB:  $\alpha = 0.888$

All constructs exceeded the recommended threshold of 0.7, confirming high reliability (Hair et al., 2019). Confirmatory factor analysis was conducted to evaluate the measurement model. The standardized factor loadings exceeded the recommended threshold of 0.70, indicating acceptable indicator reliability and convergent validity of the constructs (Hair et al., 2019).

### Correlation Analysis

Spearman’s rho was used due to slight non-normality. Table 2 shows correlations among constructs.

Table 2. Spearman Correlations

Construct	LAF	PAQ	EA	EWB
LAF	1	0.681**	0.612**	0.658**
PAQ	0.681**	1	0.642**	0.699**
EA	0.612**	0.642**	1	0.653**
EWB	0.658**	0.699**	0.653**	1

Note:  $p < 0.01$

All constructs are positively and significantly correlated. Students perceiving high-quality landscapes report stronger environmental attachment and emotional well-being, consistent with hypothesized relationships.

### Structural Equation Modeling (SEM)

AMOS 26.0 was used to test the hypothesized model:



## Model Fit Indices

Index	Value	Recommended
CFI	0.956	$\geq 0.90$
TLI	0.942	$\geq 0.90$
RMSEA	0.051	$\leq 0.08$
SRMR	0.044	$\leq 0.08$

The model demonstrates good fit, indicating that the proposed relationships adequately represent the observed data.

## Path Coefficients and Hypotheses Testing

Hypothesis	Path	$\beta$	SE	p-value	Result
H1	LAF $\rightarrow$ PAQ	0.68	0.05	<0.001	Supported
H2	PAQ $\rightarrow$ EWB	0.53	0.06	<0.001	Supported
H3	PAQ $\rightarrow$ EA	0.61	0.05	<0.001	Supported
H4	EA $\rightarrow$ EWB	0.44	0.06	<0.001	Supported (Partial Mediation)

## Interpretation:

1. H1: Strong positive effect of Landscape Aesthetic Features on Perceived Aesthetic Quality. Students who noticed flower carpets, water features, topiaries, and shaded areas rated overall aesthetic quality higher.
2. H2: Perceived Aesthetic Quality positively affects Emotional Well-Being, showing that higher aesthetic evaluation corresponds to calmness, excitement, and pride.
3. H3: PAQ positively affects Environmental Attachment, indicating that perceiving a beautiful environment fosters connection and belonging.
4. H4: EA partially mediates PAQ  $\rightarrow$  EWB, confirming that attachment strengthens the effect of perceived landscape quality on emotional well-being.

## Interpretation of Quantitative Findings

The quantitative results showed that landscape aesthetics and features (LAF) significantly predict students' Perceived Aesthetic Quality (PAQ), suggesting that well-designed and diverse landscapes attract attention and are favorably acknowledged by students. Furthermore, environmental attachment acts as a partial mediator in this relationship, indicating that students' emotional bond with their landscape enhances the psychological advantages obtained from the landscape. The results have practical significance for university planning and development, highlighting the necessity of integrating plant diversity, floral landscapes, and restorative features like ponds and shady resting places to enhance students' initial experiences at the university. Strategic landscape design enhances visual aesthetics while promoting psychological restoration, well-being, and an amplified sense of loyalty to the institution.

The research highlights the beneficial development of university landscaping that transcends its initial design and purpose. It fosters psychological and emotional well-being with place attachment and landscape architecture.

## Qualitative Data Collection

Semi-structured interviews to analyze participants' initial impressions of the university landscape and to identify perceived attractive and restorative elements have been carried out. Each interview focuses on addressing the mood implications of the described landscapes, such as the presence of plants, water features, flowering carpets, topiary, shade, and other areas positioning students to feel emotionally attached and 'homely' toward the



university. In order to capture a diverse array of experiences, a purposive sampling technique will be employed to select 15 participants. Each interview has been transcribed verbatim to fully capture the participants' responses.

## **Qualitative Data Analysis**

Qualitative data has been analyzed using the six-phase focused reviewing approach developed by Braun and Clarke (2006). The six phases are (1) familiarization with the data, (2) generation of initial codes, (3) searching for themes within the codes, (4) reviewing the themes, (5) defining and naming the themes, and (6) writing the report. This will assist in uncovering patterns that pertain to the appreciation of landscapes, emotional responses, and the attachment to the environment by students.

The semi-structured interviews provided rich insights into first-day undergraduates' experiences with the university landscape. Using Braun & Clarke's six-phase thematic analysis (2006), the data were coded in NVivo-style themes (T) and sub-themes (ST). Quotes are referenced with participant codes (P1–P15).

### **T1: Visual Appreciation of Landscape Beauty**

#### **ST1.1: Plant Diversity and Flowering Displays**

**P2:** "When I first entered the university, the tall giant royal palm trees and red flowering plants made the place look very beautiful. It felt like entering a majestic, calm and well-designed environment."

**P6:** "The campus has so many different plants and colours from other Colombo areas. It makes the environment feel lively and pleasant when you walk around."

#### **ST1.2: Topiary and Pruned Pathways**

**P8:** "The trimmed plants and shaped bushes look amazing, very neat and artistic. It shows that a lot of care has been given to maintaining the university landscape for us."

**P13:** "The flower beds along the pathways add so much colour. They make the university feel welcoming and vibrant just like nature's red carpet."

### **T2: Seasonal Landscape Impressions**

#### **ST2.1: Autumn Vibes**

**P4:** "The yellow leaves along the pathway near the library reminded me of autumn pictures. It looks so peaceful and beautiful."

**P7:** "Those yellow leaves covering parts of the path give an autumn feeling. The environment feels calm and pleasant."

#### **ST2.2: Winter Vibes**

**P9:** "The white and grey plants and conical shape plant arrangements in one section give a winter garden feeling. It feels calm and quiet there."

#### **ST2.3: Spring and Summer Vibes**

**P11:** "The red, pink, and purple flowers give a spring-like feeling. The campus looks fresh and lively."

**P14:** "The mix of red, orange, pink, and green leaves makes the campus feel colourful like a summer garden. It gives a cheerful feeling."



### **T3: Emotional Comfort and Psychological Restoration**

#### **ST3.1: Calmness and Relaxation**

**P5:** “I was a little nervous at first, but walking through the shaded paths and seeing the trees made me feel more relaxed.”

**P10:** “The urban greenery and open spaces create a peaceful atmosphere. It helped me feel less stressed about starting university.”

#### **ST3.2: Positive Learning Environment**

**P1:** “The trees and green areas make the environment feel fresh. It feels like a good place for learning.”

**P12:** “The quiet green spaces give a comfortable feeling. It makes you feel calm even when you are worried about the first day.”

### **T4: Environmental Attachment and Institutional Pride**

#### **ST4.1: Sense of Belonging**

**P3:** “Seeing such a beautiful campus in Colombo made me feel proud to study here.”

**P6:** “The landscape makes the university feel welcoming. It helps new students feel like they belong here.”

#### **ST4.2: Institutional Pride**

**P8:** “When the university looks clean and beautiful, it gives the feeling that it is a respected place for education.”

**P15:** “The environment made me feel connected to the university from the very first day.”

The qualitative findings, analyzed through NVivo-style coding, provide a rich context that supports and explains the quantitative SEM results. Students’ observations of flowering plants and well-maintained topiaries (T1/ST1.1–ST1.2) help account for the high scores in perceived aesthetic quality (PAQ), highlighting how attention to plant diversity and sculpted landscapes shapes first impressions of campus beauty. Seasonal cues also played a significant role in emotional responses: autumnal yellow leaves along library pathways, grey and white winter-like plant areas, and vibrant spring and summer flowers in shades of red, pink, orange, and purple (T2/ST2.1–ST2.3) elicited feelings of calm, excitement, and psychological restoration, corroborating the positive relationships observed in the emotional well-being (EWB) construct. Furthermore, students’ sense of calm, comfort, and pride in the landscaped environment (T3/ST3.1–ST3.2), along with their emerging sense of belonging and attachment to the university (T4/ST4.1–ST4.2), illustrate the mechanism underlying the partial mediation effect of environmental attachment (EA) on the relationship between perceived aesthetic quality and emotional well-being. Collectively, these insights demonstrate that campus landscapes not only enhance visual appeal but also foster emotional restoration and strengthen students’ attachment, thereby reinforcing the SEM findings. Methodological rigor was ensured through pilot testing and adaptation of validated questionnaire items, reliability coefficients exceeding the 0.7 benchmark, triangulation afforded by the mixed-methods design, and adherence to ethical procedures including voluntary participation, informed consent, and confidentiality. This integrative perspective provides a holistic understanding of how first-day experiences with the university landscape influence both emotional and attachment outcomes, offering practical guidance for campus planning and landscape design.

## **DISCUSSION**

The study shows that aesthetically pleasing university landscape design helps student emotional wellbeing and attachment on students first day at university. The students' psychological wellbeing was also positively impacted by the various plant life, flowering carpet, shaped paths, and water features. Other studies in the field



of environmental psychology suggest that natural scenery can lead to the alleviation of stress and the emotional healing of individuals.

The study also shows that the design of university landscapes is a matter of sustainability. The well designed green spaces, are really a micro-ecosystem and a place to develop ecological awareness and the practice of sustainable urban living. This is a way to support the global sustainability agenda of the United Nations by the ecological landscape design at the university universities, specially by addressing Sustainable Development Goal 3, which is about mental health and wellbeing; Sustainable Development Goal 4, which is about the provision of inclusive and supportive educational environments; Sustainable Development Goal 11, which is about cities and human settlements that are sustainable, resilient and green; and Sustainable Development Goal 15, which is about the provision of healthy and sustainably managed terrestrial ecosystems.

University landscapes should be understood as an essential component of the sustainable university planning that promotes student mental health, ecological awareness, and institutional branding, rather than solely as ornamental features.

## CONCLUSION

This study shows that first impressions of the beauty of the university landscape affect the emotional well-being of undergraduates and their sense of belonging. The combination of quantitative structural modeling and qualitative thematic analysis shows that flowering plants, shaded walkways, topiaries, water features, and other elements of the landscape aesthetics evoke emotional responses and feelings of attachment among students. The study illustrates the need for balancing the aesthetic, ecological, and restorative elements of university landscapes. Such landscapes enhance students' first-day experiences, impact their emotional well-being, and foster a sense of belonging to the institution. Sustainable universities with well-maintained landscapes improve and enhance the good teaching and learning ecosystem and good ecological awareness while removing the barriers of the urban ecosystem. The study demonstrates the interrelation of the Sustainable Development Goals (SDGs) of the United Nations SDGs i.e. SDG 3, SDG 4, SDG 11, and SDG 15, re-iterating that the application of sustainable landscape design in schools enhances children's well-being and supports environmental sustainability while promoting a sustainable urban ecosystem during learning.

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