International Journal of Agriculture Extension and Social Development

Green consumption practices among students of agricultural universities for sustainable environment in India

Huidrom Bliss[1*] and Ritu Mittal Gupta[2]

[1] Ph.D. Research Scholar, Department of Extension Education and Communication Management, Punjab Agricultural University, Ludhiana, Punjab, India
[2] Principal Scientist and Head of Department, Department of Extension Education and Communication Management, Punjab Agricultural University, Ludhiana, Punjab, India

Corresponding Author: Huidrom Bliss

Abstract
Green consumption is the process of avoiding goods which significantly damage the environment in production and consumption practices that lead to serious environmental issues such as global warming and climate change, so, environmental issues are necessary to handle properly because of its important role in sustaining human life. The present study assessed green consumption practices among students of four Agricultural Universities in India and the sample comprised of 336 students. A self-structured interview schedule was developed for the study. Data were collected using a four-point continuum scale to measure the frequency of green consumption behaviours. Findings revealed that students exhibited low to moderate level of green practices, with higher engagement in energy and water conservation and lower involvement in plastic reduction and environmental safety measures. Gender differences were non-significant, while residence and family type showed significant associations. The study highlights the need for enhanced environmental education and sustainability initiatives in universities.

Introduction
Over the past few years, the world is facing serious environment degrading issues majorly driven by unethical and unsustainable human practices. Environmental degradation of the environment includes all the biotic and abiotic elements that forms our surrounding i.e. air, water, soil, plant, animals, and all other living and non-living elements of planet earth (Maurya *et al* 2020) [17]. Environmental issues are necessary to handle properly because of its important role in sustaining human life. Gruber and Schlegelmilch (2014) [10] said improper consumption practices lead to serious environmental issues such as global warming and climate change, which force the people to change their traditional consumption practices.
Green consumption, according to Kataria *et al* (2013) [12], is the process of avoiding goods which are likely to harm the health of the consumer, significantly damage the environment in production, use, or disposal, consume disproportionately large amounts of resources during production, cause unnecessary waste through over packaging, use materials derived from endangered species or environments, involve cruelty to or needle exploitation of animals, and adversely affect other countries, particularly developing countries. Perera *et al* (2016) [20] stated that green consumption practices are practices that reduce the negative impact on the environment. It is the idea which assigns to consumer's responsibility towards adopting environment friendly behavior such as use of renewable source of energy, purchasing organic products and industrial goods causing minimal impact on environment (Anonymous 2019) [1]. In simple words, green consumption or sustainable consumption refers to the purchase and use of environmentally friendly products that offer certain social or environmental advantages.

Sustainable consumption is a component of sustainability that promote the use of resources without depleting it for future generations. One of the most important features is that young people are promoting sustainable consumption in all the platforms (Fien *et al* 2008) [7]. A potential solution to these issues is to keep educating people and promoting sustainable behaviours, particularly among the younger generations (Bhuwandeep and Das 2021) [2]. Environmental education is regarded as a crucial means of enhancing students' environmental conduct, attitudes, and knowledge. A lot of colleges created environmental action plans to reinforce environmentally friendly practices, such as trash management, in response to the continuous environmental considerations (Espinosa 2008) [6]. As environmental sustainability has gained national and international recognition as a significant concern, universities are expected to have provided environmental education at a suitable level (Ma'ruf *et al* 2016) [16]. Therefore, the present study was conducted to study the green consumption practices of university students.

Materials and Methods

The study was conducted in Agricultural Universities of India, selecting one each from South, North, East and West region. From the southern region, Professor Jayashankar Telangana State Agricultural University (PJTSAU), Rajendranagar, Hyderabad was chosen. The northern region was represented by Punjab Agricultural University (PAU), Ludhiana, Punjab, while the eastern region was represented by Central Agricultural University (CAU), Imphal, Manipur. For the western region, Maharana Pratap University of Agriculture and Technology (MPUAT), Udaipur, Rajasthan was selected. From the four selected agricultural universities, eighty-four students were selected from each university which comprised of 28 UG students, 28 M.Sc. students, 28 Ph.D. students, irrespective of their specialisation. Thus, the sample comprised of 336 students. To control the extraneous variables, the sample from each university have equal representation of both male and female students.

Practices are the actual behaviours and actions of the respondents engage in related to green consumption. Different statements related to various aspects of green consumption practices were framed. The responses to the statements were collected using four-point continuum scale. For each response, score 4 was given to always, 3 to sometimes, 2 to rarely and 1 to never. Thus, total score of each respondent was calculated.

Results and Discussion
Practices followed by respondents towards green consumption behaviour

The data present in Table 1 show the mean scores by respondents from four selected universities. The overall mean score for each practice indicates that while certain eco-friendly practices are well adopted by the respondents, others are still practiced at a relatively low level.

Energy saving practices: For switching off lights when not in use the overall mean score (overall average mean = 2.87) indicates that respondents were conscious about avoiding unnecessary energy wastage. This was particularly high among PJTSAU students (mean = 3.13) followed by CAU

(mean = 3.02), PAU (mean = 2.78) and MPUAT (mean = 2.57) in that order. Similarly, preferring more clothes over heating equipment (overall average mean = 2.49) was sometimes practiced and among universities PJTSAU respondents scored the highest average mean score with 2.73 followed by PAU (mean = 2.51), CAU (mean = 2.45) and MPUAT (mean = 2.28). On the other hand, preferring stairs instead of elevators recorded a comparatively lower mean (overall average mean = 2.41), reflecting that this practice was less commonly followed, although PJTSAU respondents (2.76) reported higher adherence compared to others with PAU (mean = 2.41), CAU (mean = 2.28) and MPUAT (mean = 2.17).

These results are consistent with findings from Chantima *et al* (2020) [4] who reported that university students exhibited moderate levels of energy conservation behaviour, particularly in personal lifestyle choices such as managing temperature like reducing heating or cooling or clothing, students are generally aware of energy-saving habits like turning off lights.

Practices related to plastic use

The results showed that plastic-related practices were moderately followed. As per the finding it was revealed that buying products packed in reusable material had a relatively high score (overall average mean = 2.56), among all, PJTSAU students (mean = 3.29) lead in following this practice followed by MPUAT and CAU (mean = 2.52 each) and PAU (mean = 1.91). Carrying a steel water bottle to college was relatively popular (overall average mean = 2.54), particularly among universities, PJTSAU (mean = 2.85) respondents had highest average mean followed by PAU (2.83), CAU (mean = 2.50) and MPUAT (mean = 2.00). Avoiding excessive packaging (overall average mean = 2.35) were the practices that was sometimes followed while avoiding plastic using restaurants (overall average mean = 1.76) was rarely followed.

These results are aligned with the work of Singh and Verma (2022) [23] who found that college students displayed a moderate tendency to purchase eco-friendly or reusable packaged products and consumers' purchase decisions were influenced especially among educated youth.

Table 1: Practices followed by respondents of selected universities towards green consumption behaviour n=336

Practices	University				Overall
	PAU	MPUAT	CAU	PJTSAU	
Related to energy saving					
Switch off devices when not in use	2.78	2.57	3.02	3.13	2.87
Prefer stairs instead of elevator	2.41	2.17	2.28	2.76	2.41
Prefer more clothes over heating equipment	2.51	2.28	2.45	2.73	2.49
Related to plastic use					
Avoid plastic using restaurants	1.8	1.51	1.77	1.94	1.76
Buy products packed in reusable material	1.91	2.52	2.52	3.29	2.56
Avoid using products with excessive packaging	2.13	2.13	2.25	2.90	2.35
Carry steel water bottle to college	2.83	2.00	2.50	2.85	2.54
Related to stationery material					
Buy bio degradable stationary	1.98	1.95	1.69	1.95	1.89
Donate old bags	3.00	3.07	2.89	3.10	3.10
Make full use of the entire notebook	2.30	2.48	2.42	2.85	2.52
Use blank pages from old copies	2.10	2.08	2.34	3.00	2.38
Buy eco-friendly stationary	1.38	1.80	1.28	1.63	1.52
Refill the used pen	2.39	2.70	2.23	2.38	2.42
Related to food and cleanliness					

Avoid wastage of food	3.42	3.00	2.97	2.58	2.90
Buy organic fruits	1.77	2.02	1.71	1.66	1.79
Separate biodegradable and non-biodegradable trash	2.79	2.90	2.27	2.66	2.66
Tear wrapper carefully	2.58	2.63	2.76	2.65	2.65
Related to water saving					
Close the water tap when not in use	2.01	2.34	2.25	2.88	2.37
Bath with bucket	2.77	2.58	2.25	2.41	2.50
Take a short bath in shower	2.32	2.32	2.46	2.65	2.44
Use left over water for other purpose	2.55	2.82	2.57	2.64	2.64
Avoid wastage of water	2.60	2.50	2.39	2.90	2.60
Related to environment safety					
Buy recyclable products	3.00	3.03	3.08	2.94	3.01
Celebrate green Diwali	1.66	1.71	1.66	1.44	1.62
Use cloth napkins	2.09	2.23	2.29	2.20	2.20

Score range: 1 (Never) - 4 (Always)

Practices related to stationery material
Respondents were fairly consistent in eco-friendly stationery practices. Donating old bags (overall average mean = 3.10) was followed the most and among universities, majority of the respondents were from PJTSAU (mean = 3.10) followed by MPUAT (mean = 3.07), PAU (mean = 3.0), and CAU (mean = 2.89). Making full use of notebooks was also considerably practiced (overall average mean = 2.52), across the university, PJTSAU (mean = 2.85) had highest mean score followed by MPUAT (mean = 2.48), CAU (mean = 2.42) and PAU (mean = 2.30). Refilling the used pen was moderately practiced (overall average mean = 2.42), among the university MPUAT was leading (mean = 2.70) followed by PAU (mean = 2.39), PJTSAU (mean = 2.38) and CAU (mean = 2.23). Using blank pages from old copies (overall average mean = 2.38) was also moderately practiced. However, practices such as buying biodegradable stationery (overall average mean = 1.89) and buying eco-friendly stationery (overall average mean = 1.52) were rarely practiced.
These results are aligned with the work of Dwivedi and Kumar (2022) [5] found that among college students, donation or reuse of educational items is one of the most common sustainability-oriented habits, as it combines environmental awareness with altruistic motivation.

Practices related to food and cleanliness
The most prominent practice under this category was avoiding wastage of food, which recorded the highest overall mean (mean = 2.90), among the university, majority of the respondents from PAU (mean = 3.42) practiced it the most, followed by MPUAT (mean = 3.00), CAU (mean = 2.97) and PJTSAU (mean = 2.58). Practices like separating biodegradable and non-biodegradable trash (overall average mean = 2.66) and tearing wrappers carefully (overall average mean = 2.65) were moderately followed. However, buying organic fruits was least practiced (overall average mean = 1.79), showing minimal inclination towards organic food consumption. This could be due to high price tags on organic products and lack of confidence in authenticity of labels on the products.
These findings are aligned with the work of Filimonau et al (2020) [8] who reported that food waste prevention is one of the most adopted sustainable behaviours among university students, as it is directly associated with moral and financial consciousness. Similarly, Kumar and Singh (2021) [15] also observed that students are generally conscious about food

wastage due to familial upbringing and cultural emphasis on not wasting food.

Water saving practices
Respondents demonstrated significant concern regarding water saving practices. Using left over water for other purposes (overall average mean = 2.64) was comparatively most practiced by the respondents and among universities, MPUAT (mean = 2.82) lead among all followed by PJTSAU (2.64), CAU (mean = 2.57) and PAU (mean = 2.55). Avoiding wastage of water (overall average mean= 2.60) was practiced to great extent and from selected universities, PJTSAU (mean = 2.90) lead here also followed by PAU (mean = 2.60), MPUAT (mean = 2.50) and CAU (mean = 2.39). Bathing with a bucket (overall average mean = 2.50) was moderately followed and among the university PAU (mean = 2.77) practiced the most followed by MPUAT (mean = 2.58), CAU (mean = 2.25) and PJTSAU (mean = 2.41). In contrast taking a short bath in shower (overall average mean = 2.44) and closing the water taps when not in use (overall average mean = 2.37) indicated that these were was less practiced.
These findings are consistent with Nguyen et al (2022) [18] who reported that water reuse and recycling behaviours were the most adopted conservation practices among young adults, especially in campus environments where awareness campaigns emphasize sustainability.

Practices related to environmental safety
Buying recyclable products scored relatively high (overall average mean = 3.01), with CAU (mean = 3.08) followed by MPUAT (mean = 3.03) leading other universities. However, using cloth napkins (overall average mean = 2.20) and practices like celebrating green Diwali (overall average mean = 1.62) were least adopted across all universities, reflecting limited acceptance of such environmentally responsible behaviours.
Biswas and Roy (2022) [3] found that young consumers, particularly university students were more likely to purchase recyclable or reusable goods when they were easily available and marketed as environmentally beneficial. Moreover, Kaur and Gupta (2023) [13] found that although awareness of Green Diwali campaigns has increased in urban areas, behavioural translation remains limited due to peer influence, family traditions, and lack of social reinforcement.

University wise comparison for practices towards green consumption behaviour: Table 2 presents university-wise comparison of respondents with respect to the practices followed towards green consumption behaviour.

Table 2: University wise comparison of respondents for practices followed towards green consumption n=336

Practices	University				Overall	Kruskal Wallis test (chi square value)	p value
	PAU	MPUAT	CAU	PJTSAU			
Energy saving	2.57	2.34	2.58	2.87	2.58	33.01**	0.000
Avoiding plastic	2.18	2.04	2.26	2.75	2.31	48.02**	0.000
Eco-friendly stationary	2.19	2.35	2.14	2.48	2.29	31.85**	0.000
Food and cleanliness	2.55	2.63	2.43	2.39	2.5	5.61NS	0.132
Water saving	2.45	2.51	2.38	2.7	2.53	13.53**	0.004
Environment safety	2.25	2.32	2.34	2.19	2.27	2.77NS	0.428
Overall mean	2.37	2.37	2.35	2.56	2.41	3.38NS	0.33

Mean range: 1 (Never) - 4 (Always), * Significant difference at 0.05 level.

A glance at table 2 suggests across all universities, practices such as energy saving (overall mean = 2.58), water saving (2.53), and food and cleanliness (2.50) recorded higher mean scores, indicating that these behaviours were practiced more consistently by the respondents. On the other hand, practices such as avoiding plastic (2.31), eco-friendly stationery usage (2.29), and environment safety measures (2.27) received comparatively lower mean scores, reflecting weaker adoption.

PJTSAU lead in practices related to energy saving and the Kruskal-Wallis test revealed statistically significant differences among universities for energy saving (χ^2 = 33.01, p = 0.000). In avoiding plastic also, PJTSAU scored much better than other universities which was statistically significant (χ^2 = 48.02, p = 0.000). Similar results were observed for eco-friendly stationery (χ^2 = 31.85, p = 0.000). and water saving (χ^2 = 13.53, p = 0.004). These results suggest that students' practices in these areas varied significantly across institutions. In particular, PJTSAU consistently reported higher mean scores for several practices (e.g., energy saving = 2.87, avoiding plastic = 2.75, water saving = 2.70), indicating their stronger engagement in sustainable behaviour compared to the other universities. This indicate that southern state youth is more inclined towards eco-friendly behaviour. This may be attributed to environmental education provided in universities or may be regional difference. These results are consistent with the findings of Kennedy et al. (2024) [14], who study demonstrated that factors such as green consumption and social norms significantly influence sustainable behaviour, thereby supporting the notion of stronger eco-friendly practices among youth in the region. The results are aligned with study by Wang et al (2024) [24] found that students from different schools (within the same university) differed significantly in water-saving behaviour, largely attributable to differences in environmental education provided.

For food and cleanliness (χ^2 = 5.61, p = 0.132) and environment safety (χ^2 = 2.77, p = 0.428), the differences were not statistically significant, implying that students' behaviours in these areas were largely uniform across institutions. The overall mean practice score (2.41) also did not differ significantly among universities (χ^2 = 3.38, p = 0.33), suggesting a broadly comparable pattern of green consumption practices when viewed collectively.

These results are aligned with the findings of Radhakrishnan et al (2021) [21] who noted that students from agricultural and environmental universities tend to exhibit higher pro-environmental practices due to greater curriculum integration of sustainability topics. Similarly, Nguyen and Nguyen (2022) [19] observed that environmental literacy, campus policies, and visible sustainability initiatives significantly predict student engagement in energy- and water-saving practices.

However, Sharma and Chauhan (2023) [22] found that although university students demonstrate strong environmental concern, participation in organized safety or conservation initiatives is often low due to lack of opportunities and institutional facilitation. Therefore, structured student-led programs, such as environmental safety workshops and green clubs, could help bridge this awareness-action gap.

Practice level of respondents towards green consumption behaviour

The distribution of respondents according to their level of green consumption practices is presented in Table 3.

Table 3: Distribution of respondents across universities according to level of practices followed towards green consumption n=336

Level of Practices	University				Overall f (%)
	PAU n1=84 f (%)	MPUAT n2=84 f (%)	CAU n3=84 f (%)	PJTSAU n4=84 f (%)	
Low (42-56)	37 (44.04)	38 (45.23)	40 (47.61)	30 (35.71)	145 (43.15)
Medium (57- 71)	41 (48.80)	35 (41.66)	36 (42.85)	30 (35.71)	142 (42.26)
High (72-86)	6 (7.14)	11 (13.09)	8 (9.52)	24 (28.57)	49 (14.58)

The results revealed that overall, the majority of respondents across the four universities were within the low (43.15%) and medium (42.26%) levels of practice, while only 14.58 per cent of the respondents reported a high level of practice. This highlights that although students were somewhat aware and engaged in sustainable practices, only a limited proportion consistently adopted them at a higher level.

Across universities, a similar pattern was observed as a large percentage of students were in low category in all universities i.e. CAU (47.61%), MPUAT (45.23%), PAU (44.04%) and PJTSAU (35.71%). In medium category also, a high percentage was observed in PAU (48.80%), CAU (42.85%), MPUAT (41.66%) and PJTSAU (35.71%) in that order. In high category, PJTSAU had the highest proportion (28.57%) compared to the other universities.

Overall, the findings reveal that while green consumption behaviour were present among respondents, their intensity was mostly confined to lower and medium levels, with only a small segment practicing high-level adoption. The variation among universities underscores the possible influence of institutional environment, sensitization efforts, or local awareness campaigns on students' sustainable consumption behaviours.

These results are consistent with the work of Gkargkavouzi et al 2019; Joshi & Rahman, 2021) [9], [11] which show that while environmental awareness among young adults is increasing, their translation of knowledge into consistent, everyday practice is often limited. Joshi and Rahman (2021) [11] identified a "knowledge–action gap" among youth, explaining that although students acknowledge environmental concerns, their actual consumption patterns remain largely conventional due to habit and limited access to sustainable practices.

Gender comparison for practice about green consumption behaviour

The gender distribution of respondents across universities with respect to their practices towards green consumption behaviour is presented in Table 4. The results reveal that both male and female respondents were mostly concentrated in the low and medium levels of practice, with relatively fewer in the high level across the universities.

At PAU, a higher percentage of females (45.23%) as compared to males (42.85%) were in the low practice group, while more males (54.76%) than females (42.85%) were in the medium group. Respondents in high level had more female (11.90%) and less male (2.38%) were observed. The mean value for male (58.83±6.81) and female (58.88±8.34) respondents was almost equal. The Mann–Whitney U test result (Z = 0.318, NS) indicated no significant gender difference.

Similarly, at MPUAT, 50.00 per cent of females were in the low level as compared to 40.47 per cent of males, while in medium level male (54.76%) was higher than female (28.57%). Further, female (21.42%) had a relatively higher representation in the high level compared to males (4.76%). Overall females (59.64 ± 10.30) scored slightly higher mean than males (59.21 ± 8.07). However statistical test (Z = 0.193, NS) confirmed that these differences were not significant.

At CAU, a larger number of both males and females were in the low group with female (50.00%) and comparatively low in male (45.23%), in medium groups, male (52.38%) was more than female (33.33%) while female (16.66%) high-level practices than male (2.38%) respectively. Here also overall, females (59.21 ± 9.74) reported marginally higher scores as compare to male respondents (57.57±6.64). Despite these differences, the Mann–Whitney U test results (Z = 0.264 NS) indicated no statistical significance.

Table 4: Gender comparison across universities among respondents for practices towards green consumption behaviour n=336

| Levels of practices | University | | | | | | | | Overall | |
| | PAU | | MPUAT | | CAU | | PJTSAU | | | |
	M n_a=42 f (%)	F n_b=42 f (%)	M n_c=42 f (%)	F n_d=42 f (%)	M n_e=42 f (%)	F n_f=42 f (%)	M n_g=42 f (%)	F n_h=42 f (%)	M n_i=168 f (%)	F n_j=168 f (%)
Low (42-56)	18 (42.85)	19 (45.23)	17 (40.47)	21 (50.00)	19 (45.23)	21 (50.00)	19 (45.23)	11 (26.19)	73 (43.45)	72 (42.85)
Medium (57-71)	23 (54.76)	18 (42.85)	23 (54.76)	12 (28.57)	22 (52.38)	14 (33.33)	10 (23.80)	20 (47.61)	78 (46.42)	64 (38.09)
High (72-86)	1 (2.38)	5 (11.90)	2 (4.76)	9 (21.42)	1 (2.38)	7 (16.66)	13 (30.95)	11 (26.19)	17 (10.11)	32 (19.04)
Mean ±SD	58.83±6.81	58.88±8.34	59.21±8.07	59.64±10.30	57.57±6.64	59.21±9.74	63.52±9.94	64.23±11.23	59.78±8.22	60.66±10.17
Mann Whitney U test (Z value)	0.318 NS		0.193 NS		0.264 NS		0.761 NS		0.244 NS	

Mean range 1(Low) – 3 (High), * Significant difference at 0.05 level, NS = non-significant.

It was found that at PJTSAU, in low level male respondents 45.23% were higher than female respondents (26.19%). In medium category, female respondents (47.61%) were greater than male respondents (23.80%). Further in high category, male respondents (30.95%) were higher than female respondents (26.19%). At PJTSAU, female respondents (64.23±11.23) reported slightly higher practices than male respondents (63.52± 9.94). However, the Mann–Whitney U test (Z = 0.761 NS) indicated that these differences were not significant.

The overall distribution, shows that 43.45% of males and 42.85% of females were found in the low practice category,

while 47.61% of males and 38.09% of females were in the medium category. A slightly higher proportion of females (19.04%) than males (10.11%) reported high levels of practice. Overall, females (60.66 ± 10.17) again showed a slightly higher mean than males (59.78 ± 8.22). The Mann–Whitney U test results (Z = 0.244 NS) indicate that differences were not statistically significant.

These results are aligned with the work of Zhao (2021) [25] who highlighted that gender differences in environmental awareness and sustainable practices tend to diminish in higher education, where both male and female students have equal access to environmental knowledge and sustainability-

focused curricula.

Correlation of socio-personal profile of respondents with practices about green consumption behaviour

Table 5 presents the correlation between the socio-personal profile of respondents and their practices towards green consumption behaviour.

Table 5: Correlation of socio personal profile with practices of respondents towards green consumption behavior n=336

Socio personal profile	Practices
Education	0.27**
Family size	0.080[NS]
Family income	0.142**
Family Education	0.046[NS]

** Correlation is significant at the 0.01 level, * Correlation is significant at the 0.05 level, NS = non-significant.

The findings reveal that education (r = 0.27, $p<0.01$) and family income (r = 0.142, $p<0.01$) was significantly correlated with practices. However, family size (r = 0.080) and family education (r = 0.046) showed no significant correlation with practices, suggesting that the number of family members did not affect respondents' practices towards green consumption behaviour

Association of socio personal profile with KAP about green consumption behaviour

Table 6 presents the association of socio-personal variables with practices of respondents towards green consumption behaviour. The findings show that age had a significant association with practices (r = 0.270, $p<0.01$).

Table 6: Association of socio personal profile with practices about green consumption behaviour n=336

Socio personal profile	Practices
Age	0.270**
Gender	0.029[NS]
Residence	0.138*
Caste	0.037[NS]
Family background	0.017[NS]
Family type	0.161**
Father's occupation	0.050[NS]
Mother's occupation	0.018[NS]

** Significant difference at the 0.01 level, * Significant difference at 0.05 level, NS = non-significant.

The findings reveal that education (r = 0.27, $p<0.01$) and family income (r = 0.142, $p<0.01$) was significantly correlated with practices. However, family size (r = 0.080) and family education (r = 0.046) showed no significant correlation with practices, suggesting that the number of family members did not affect respondents' practices towards green consumption behaviour.
Father's (r = 0.050[NS]) and mother's occupation (r = 0.018[NS]) exhibited no significant association with practices.

Comparison of respondents across universities according to their practices about green consumption behaviour

The data presented in Table 7 illustrated the comparison of respondents across the four selected universities with respect to their practices towards green consumption behaviour.

Table 7: Comparison of respondents across universities according to practices about green consumption behaviour n=336

Levels	University				f value	p value
	PAU n_1=84	MPUAT n_2=84	CAU n_3=84	PJTSAU n_4=84		
Practice	58.85±7.57	59.42±9.20	58.39±8.33	64.21±10.56	7.54*	0.000

* Significant difference at 0.05 level, NS= non-significant.

With regard to practices towards green consumption behaviour, PJTSAU respondents reported the highest mean score (64.21±10.56), which was notably higher than the other three universities, where in other three universities the mean score were more or less similar (MPUAT - 59.42 ± 9.20, PAU and CAU - 58.39±8.33 each). The results revealed a significant difference among universities (f = 7.54, $p<0.01$), implying that respondents from PJTSAU were comparatively more active in adopting and practicing green consumption behaviours than their counterparts from PAU, MPUAT, and CAU.

References

1. Anonymous. Green consumption [Internet]. Wikipedia; 2019 [cited 2019 Jun 26]. Available from: https://en.wikipedia.org/wiki/Green_consumption
2. Bhuwandeep, Das PP. Study on knowledge, attitude, and practice (KAP) of sustainable consumption behaviour among college students. J Asia Entrep Sustain. 2021;17:125-141.
3. Biswas A, Roy M. Green buying behavior of young consumers: An empirical analysis in the context of India. J Clean Prod. 2022;366:132902.
4. Chantima K, Nakanishi H, Poungsombat P. Energy conservation behavior of Thai university students: A case study of Chiang Mai University. Environ Nat Resour J. 2020;18(3):1-11.
5. Dwivedi P, Kumar S. Youth perception and participation in sustainable consumption practices in India. Int J Sustain High Educ. 2022;23(4):945-962.
6. Espinosa RM, Turpin S, Polanco G, Torre A, Delfín I, Raygoza I. Integral urban solid waste management program in a Mexican university. Waste Manag. 2008;28:27-32.
7. Fien J, Neil C, Bentley M. Youth can lead the way to sustainable consumption. J Educ Sustain Dev. 2008;2:51-60.
8. Filimonau V, Krivcova M, Pettit F. An exploratory study of food waste management practices in the UK higher education sector. J Clean Prod. 2020;244:118738.
9. Gkargkavouzi A, Halkos G, Matsiori S. A multidimensional measure of environmental behavior: Exploring the predictive power of connectedness to nature, ecological worldview, and environmental concern. Environ Behav. 2019;51(8):995-1027.

10. Gruber V, Schlegelmilch BB. How techniques of neutralization legitimize norm- and attitude-inconsistent consumer behavior. J Bus Ethics. 2014;121:29-45.

11. Joshi Y, Rahman Z. Investigating young consumers' green purchasing behavior: The role of environmental concern, eco-label knowledge and green skepticism. Sustain Prod Consum. 2021;25:28-38.

12. Kataria A, Kataria A, Garg R. Factors affecting green purchase behavior: An in-depth study of Indian consumers. J Manag Res. 2013;1(2):15-41.

13. Kaur J, Gupta R. Youth awareness and participation in eco-friendly festival celebrations: A study on Green Diwali initiatives in India. Environ Commun. 2023;17(5):712-725.

14. Kennedy RF, Susainathan S, George HJ, Parayitam S. Green consumption and sustainable lifestyle: Evidence from India. Adm Sci. 2024;14(10):262.

15. Kumar A, Singh A. Food waste behaviour among Indian youth: An attitudinal and cultural perspective. Int J Consum Stud. 2021;45(5):964-977.

16. Ma'ruf, Surya S, Apriliany PD. Knowledge, attitudes and behavior of university students towards environmental issues in Indonesia. Sainshumanika. 2016;8:81-88.

17. Maurya PK, Ali SKA, Ahmad A, Zhou Q, Castro J, Khane E, *et al*. An introduction to environmental degradation: causes, consequences and mitigation. Haridwar (India): Agriculture and Environmental Science Academy; 2020. p. 1-20.

18. Nguyen TT, Dang TH, Luu QH. Assessing water conservation behavior among university students in Vietnam: An application of the theory of planned behavior. Environ Chall. 2022;8:100568.

19. Nguyen TT, Nguyen H. Determinants of students' pro-environmental behaviors in higher education: The role of campus sustainability initiatives. Sustainability. 2022;14(7):3821.

20. Perera C, Auger P, Klein J. Green consumption practices among young environmentalists: A practice theory perspective. J Bus Ethics. 2016;152(3):843-864.

21. Radhakrishnan S, Kumar V, Mishra P. Environmental literacy and sustainable behaviour among higher education students in India. Environ Educ Res. 2021;27(4):531-547.

22. Sharma A, Chauhan P. Bridging the awareness-practice gap in environmental safety behaviour among Indian university students. J Clean Prod. 2023;389:136037.

23. Singh R, Verma HV. Understanding youth preferences towards eco-friendly products in India. J Clean Prod. 2022;363:132545.

24. Wang X, Liu Z, Zhang Y. Differences in water-saving behaviors among college students: Research based on the theory of planned behavior. Sustainability. 2024;16(23):10182.

25. Zhao Y. Gender and environmental behaviour among university students: A comparative analysis of awareness and action. J Environ Psychol. 2021;75:101594.