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Attitudes, Sustainable Practices and the Influence of Social Media among Politeknik Muadzam Shah Students

Siti Huzaifah binti Mohammad [1,a)], Nor 'Ainaa Syuhada binti Mohd Noor [1,b)] and Nor Sharidah binti Mohd Roslan [1,c)]

[1] *Politeknik Muadzam Shah, Lebuhraya Tun Abdul Razak, 26700 Muadzam Shah, Pahang, Malaysia*

[a)] *Corresponding author: huzaifah@pms.edu.my*
[b)] *syuhada@pms.edu.my*
[c)] *sharidah@pms.edu.my*

Abstract. This study investigates the attitudes, sustainable practices, social media influence, and perceptions of green campaigns among 124 students at Politeknik Muadzam Shah. Driven by the recognition of students as key agents in promoting eco-friendly behaviors, a quantitative approach was adopted, employing a five-point Likert scale questionnaire to gather data from students across various programs and semesters. Descriptive analysis using SPSS was performed to determine mean scores, standard deviations, and frequency distributions. The results indicate that students possess a highly positive attitude toward environmental sustainability (M = 4.50) and maintain a high level of daily sustainable practices, particularly regarding reusing items, energy conservation, and the 3R principles (M = 4.23). Social media was confirmed as a significant medium for disseminating sustainability messages (M = 3.84). While students' perceptions of green campaigns were positive (M = 3.94), their actual involvement remained relatively low. A Pearson Product-Moment Correlations analysis revealed a significant positive relationship between a student's attitude toward environmental sustainability and their sustainable practices ($r = 0.659$, $p = 0.000$), social media influence ($r = 0.576$, $p = 0.000$), and response to green campaigns ($r = 0.672$, $p = 0.000$). Furthermore, an independent t-test identified that female students were significantly more influenced by social media (M = 3.93) compared to male students (M = 3.72, $p = 0.013$). The study concludes that although polytechnic students have a high level of environmental awareness, more strategic, digitally driven, and community-based interventions are needed to translate positive attitudes into consistent, tangible actions.

Keywords: Environmental Sustainability, Sustainable Practices, Social Media, Green Campaigns

1. INTRODUCTION

The issue of environmental sustainability has gained increasing prominence on the global stage, with a growing consensus that proactive measures are essential to address climate change, resource depletion, and pollution. This urgency is particularly relevant in the context of higher education, where students are not only the future workforce but also key agents of change in society. Higher education institutions, therefore, play a critical role in fostering a culture of sustainability by shaping the attitudes and behaviors of their students. In Malaysia, like many developing nations, the balance between rapid economic development and environmental preservation presents a unique and pressing challenge. Understanding how young Malaysians perceive and engage with sustainability is crucial for developing effective environmental policies and educational strategies.

In Malaysia, like many developing nations, the balance between rapid economic development and environmental preservation presents a unique and pressing challenge. Understanding how young Malaysians perceive and engage with sustainability is crucial for developing effective environmental policies and educational strategies. Previous research has established that students generally hold positive attitudes towards environmental issues and possess a high level of awareness [20]. However, a significant attitude and behavior gap often exists, where strong environmental beliefs do not consistently translate into tangible, daily sustainable practices [16]. This disconnect highlights the complexity of influencing behavior and raises questions about the effectiveness of traditional awareness campaigns.

Simultaneously, the rise of social media has fundamentally transformed how young people access information and interact with the world around them. Platforms like Instagram, TikTok, and Facebook have become powerful channels for disseminating environmental messages, influencing trends, and mobilizing communities [14]. Their full potential in promoting sustainable practices, however, has not been fully explored in the Malaysian higher education context [12].

This study aims to bridge this gap by examining the nexus between attitudes, sustainable practices, and the powerful influence of social media among polytechnic students in Malaysia. By using a quantitative approach, we seek to assess the current levels of environmental attitudes, identify the most common daily sustainable practices, and evaluate the role of social media as a medium for sustainability-related communication. Furthermore, the research investigates students' perceptions of green campaigns to understand the factors that encourage or hinder their participation. The findings of this study are expected to provide valuable insights for educational institutions, policymakers, and environmental organizations, enabling them to design more strategic, digitally driven, and effective interventions that can transform environmental awareness into meaningful action on and off campus.

2. LITERATURE REVIEW

Summarize previous research related to your topic. Identify gaps in the literature that your study aims to address.

2.1 Attitudes toward Environmental Sustainability

A significant research highlights the positive environmental attitudes among students in higher education. Studies consistently show that students possess a high level of environmental awareness and a strong belief in the importance of protecting the environment. For instance, a study on a Malaysian public university found that students exhibited a positive attitude toward on-campus sustainability initiatives [20]. Similarly, a quantitative analysis of college students' attitudes in Malaysia reported that students acknowledged their personal responsibility in addressing environmental issues and showed a favorable view of green technology [15]. This aligns with global trends where the younger generation is generally more concerned about climate change and environmental degradation. However, a common thread in the literature is the disconnect between this high level of awareness and actual behavioral change, a phenomenon often referred to as the "attitude-behavior gap" [16].

2.2 Sustainable Practices and the Attitude Behaviours Gap

While attitudes are generally positive, the implementation of sustainable practices is often found to be at a moderate or even low level. A review focusing on polytechnic students in Pahang specifically found that while students were aware of the 3R (Reduce, Reuse, Recycle) principles, their daily practices were not always consistent [17]. Another study on Malaysian university students concluded that although they had a high level of knowledge about environmental issues, their level of actual practice was only moderate [20]. The reasons for this gap are multifaceted, including a lack of motivation, convenience, and perceived difficulty in changing daily habits. The literature suggests that for practices to become consistent, they need to be embedded in the campus culture and made easily accessible to students [18].

2.3 The Influence of Social Media

Social media has emerged as a powerful tool for environmental communication and advocacy. Research indicates that platforms like Instagram, TikTok, and Facebook are significant channels for disseminating sustainability-related information to the youth. One study found a strong correlation between social media use and increased environmental awareness among Malaysian youth [14]. Chew and Tan further explored the role of "green influencers" and digital environmentalists, noting that students trust these opinion leaders and are more likely to be influenced by their content [12]. The visual nature of social media, with its use of short videos and infographics, is particularly effective in engaging students and making complex environmental issues more accessible and relatable [19]. This medium not only raises awareness but also influences consumer behavior, encouraging "green consumption" and the adoption of more sustainable lifestyles [19].

2.4 Perceptions and Participation in Green Campaigns

Despite the positive attitudes and significant influence of social media, student participation in organized green campaigns remains a challenge. Several studies point to a clear gap between students' positive perceptions of these campaigns and their actual involvement. Mohd Shah and Ariffin specifically addressed this issue, suggesting that while students are aware of campaigns, a lack of comprehensive understanding and effective message delivery often prevents them from actively participating [16]. Another study by the UTM Center for Diploma Studies found that only a minority of students had participated in campus green campaigns, even though many expressed a willingness to engage in self-motivated green activities [18]. This suggests that campaigns need to be re-evaluated to be more strategic and engaging. Literature points to the need for campaigns that are interactive, digitally driven, and offer tangible rewards or clear benefits to encourage higher participation rates [13].

The existing literature paints a consistent picture of Malaysian students who are environmentally aware, hold highly positive attitudes toward sustainability, and are actively engaged with social media for environmental information. However, a critical gap exists between this high awareness and the actual adoption of sustainable practices and participation in green campaigns. The findings of your study align with this broader scholarly conversation, underscoring the need for strategic interventions that leverage digital platforms to move beyond mere awareness and translate positive attitudes into consistent, daily behaviors on campus. Future efforts should focus on designing and implementing green campaigns that are not only informative but also highly interactive, community-based, and compelling enough to motivate students to act.

3. RESEARCH METHODOLOGY

This study employed a quantitative research approach to investigate the attitudes, sustainable practices, and the influence of social media among polytechnic students in Politeknik Muadzam Shah. The research design was a descriptive survey, which is suitable for obtaining information about the current state of a phenomenon and describing the variables of interest in a specific population [10].

The target population for this study was polytechnic students in Malaysia. Due to the scope of the research and the focus on a specific institution mentioned in the abstract, a convenience sampling method was employed. A sample of 124 students across various programs and semesters at Politeknik Muadzam Shah was selected to participate. This non-probability sampling technique was chosen for its practicality and accessibility, allowing for efficient data collection within the defined institutional setting [18]. The questionnaires were distributed in digital formats to ensure a high response rate. Participation was voluntary, and all respondents were assured of the confidentiality of their responses.

Table 1. Frequency distribution for gender, semester, and department of respondents

Variable	Freq	Percent
Gender		
Male	52	41.9
Female	72	58.1
Semester		
1	38	30.6
2	46	37.1
3	15	12.1
4	20	16.1
5	5	4.0

Deparment		
JTMK	59	47.6
JKM	16	12.9
JP	14	11.3
JRKV	18	14.5
JPH	17	13.7

Based on the frequency distribution in Table 1, the sample of 124 respondents was composed of more females (58.1%, n = 72) than males (41.9%, n = 52). An analysis of the academic semester reveals that a significant number of participants were in the early stages of their studies, with Semester 2 (37.1%) and Semester 1 (30.6%) accounting for most of the sample. The departmental representation was notably concentrated in JTMK, which made up 47.6% of the total sample, while the remaining departments (JRKV, JPH, JKM, and JP) had smaller, more similar proportions. The presented frequencies and percentages clearly define the distribution of respondents across these variables.

Table 2. Reliability coefficient of study instruments

Instruments	No. of items	Cronbach's alpha (α)
Attitude towards Environmental Sustainability	6	0.912
Green sustainable practices	6	0.838
Influence of social media	5	0.899
Response to the Green Campaign	4	0.845

Table 2 shows a reliability analysis that was conducted to assess the internal consistency of the 21 items used in the study. As shown in Table 1, the Cronbach's alpha coefficients for all instruments were found to be excellent, ranging from 0.838 to 0.912, and it is higher than the acceptable level (0.70).

In this study, data were analyzed using SPSS to summarize each variable through descriptive analysis. This included calculating mean scores (M), standard deviations (SD), and frequency distributions for each item and domain. The mean scores were then interpreted using a predetermined scale: 1.00 - 2.33 indicates a low level; 2.34 - 3.66 indicates a moderate level; and 3.67 - 5.00 indicates a high level. This approach allowed for a clear and consistent interpretation of the overall levels of attitudes, practices, social media influence, and perceptions based on the collected data.

This analysis strategy provided a clear statistical snapshot of the current situation, which aligns with the study's objective to assess and describe the key variables of interest. The standard deviation was used to measure the dispersion of responses around the mean, indicating the level of consensus or variation among the students' responses.

4. RESULTS

Table 3 shows the descriptive findings of the study variables, including attitudes toward sustainability, green sustainable practices, influence of social media, and responses to green campaigns.

Table 3. Descriptive Analysis of Study Variables

Variables	Freq	Percent	Mean	SD
Attitude towards sustainability			4.50	0.582

Low (1 – 2.33)	1	0.8		
Moderate (2.34 – 3.66)	9	7.3		
High (3.67 – 5)	114	91.9		
Green sustainable practices			4.23	0.662
Low (1 – 2.33)	2	1.6		
Moderate (2.34 – 3.66)	23	18.5		
High (3.67 – 5)	99	79.8		
Influence of social media			3.84	0.868
Low (1 – 2.33)	6	4.8		
Moderate (2.34 – 3.66)	39	31.5		
High (3.67 – 5)	79	63.7		
Response to the Green Campaign			3.94	0.827
Low (1 – 2.33)	5	4.0		
Moderate (2.34 – 3.66)	35	28.2		
High (3.67 – 5)	84	67.7		

Based on the results, a significant majority of respondents (91.9%) demonstrated a high level of attitude towards sustainability with a mean score of 4.50. Similarly, green sustainable practices recorded a mean score of 4.23, where nearly 80% of students fell into the "high" category. For the influence of social media, 63.7% of respondents reported a high level of influence, with a mean of 3.84. Meanwhile, responses to green campaigns were moderately high, with 67.7% reporting positive responses and a mean score of 3.94.

These results indicate that while students' awareness and attitudes towards sustainability are very positive [15], their actual participation in campaigns remains moderate [16], which supports the findings from earlier studies in Malaysian universities [17], [18].

Table 4. Results of an independent sample t-test between gender towards attitude, green sustainable practices, influence of social media and response to the Green Campaign

Variables	n	Mean	SD	t	Sig-t
Attitude towards sustainability				-1.852	0.499
Male	52	4.38	0.674		
Female	72	4.58	0.494		
Green sustainable practices				-1.426	0.067
Male	52	4.13	0.750		
Female	72	4.31	0.585		
Influence of social media				-1.317	0.013
Male	52	3.72	0.997		
Female	72	3.93	0.757		
Response to the Green Campaign				-0.493	0.397
Male	52	3.89	0.882		
Female	72	3.97	0.790		

Based on the independent samples t-test analysis in Table 4, the results reveal a statistically significant difference between male and female students in the influence of social media. The mean score for female students (M=3.93) was

significantly higher than that for male students (M=3.72), with the difference being statistically significant at p=0.013. This finding suggests that female students at Politeknik Muadzam Shah are more receptive to and influenced by sustainability-related content on social media platforms compared to their male counterparts.

The t-test analysis also revealed that there were no statistically significant differences between male and female students across three key variables, which are attitudes toward environmental sustainability, green sustainable practices, and their response to green campaigns. Both male and female students demonstrated a highly positive attitude toward environmental sustainability, with respective mean scores of M=4.38 and M=4.58 (p=0.499). Similarly, the level of engagement in green sustainable practices was high for both genders, with no significant difference detected (p=0.067), as male students had a mean of M=4.13 and female students had a mean of M=4.31.

Furthermore, the study found that gender did not significantly influence students' responses to green campaigns (p=0.397). Male students reported a mean response of M=3.89, while female students' mean response was M=3.97, indicating that both groups had a similarly positive reception to these initiatives. Overall, these findings suggest a consistent level of environmental awareness, a commitment to sustainable practices, and a positive view of organized campaigns among students at Politeknik Muadzam Shah, regardless of their gender.

In conclusion, while gender does not appear to be a determining factor for students' attitudes, daily practices, or overall response to green campaigns, it does play a significant role in how social media influences students in the context of environmental sustainability.

Table 5: Pearson Product-Moment Correlations Analysis between attitude towards and green sustainable practices, influence of social media and response to the Green Campaign

Variables	r	p
Green sustainable practices	0.659	0.000
Influence of social media	0.576	0.000
Response to the Green Campaign	0.672	0.000

Based on the Pearson Product-Moment Correlations Analysis provided in Table 5, the results indicate a significant positive relationship between a student's attitude toward environmental sustainability and all three variables tested: green sustainable practices, the influence of social media, and their response to green campaigns.
First, there is a strong positive correlation between students' attitudes toward environmental sustainability and their green sustainable practices ($r = 0.659$, $p = 0.000$). The high correlation coefficient ($r = 0.659$) suggests that as a student's attitude towards environmental sustainability becomes more positive, their engagement in daily sustainable practices also increases. The p-value of 0.000 indicates that this correlation is statistically significant, meaning the relationship is unlikely to be due to chance.

Second, the data shows a strong positive correlation between attitudes and the influence of social media ($r = 0.576$, $p = 0.000$). This indicates that students with more positive environmental attitudes are also more likely to be influenced by sustainability-related content on social media. The significant p-value of 0.000 further confirms the statistical reliability of this relationship. Finally, a strong positive correlation exists between students' attitudes and their response to the Green Campaign ($r = 0.672$, $p = 0.000$). This is the strongest correlation among the three variables, suggesting that a positive attitude is a significant predictor of a student's positive response to green campaigns. The p-value of 0.000 confirms that this relationship is highly significant.

In summary, the correlation analysis provides compelling evidence that a positive attitude toward environmental sustainability is directly and significantly linked to higher levels of sustainable practices, greater influence from social media content, and a more favourable response to green campaigns.

5. DISCUSSION

The findings of this study offer a nuanced perspective on environmental sustainability among polytechnic students in Malaysia, revealing a high level of awareness and positive attitudes but a more moderate translation of these beliefs into daily sustainable practices. This confirms the well-documented "attitude-behavior gap" and highlights the complexities involved in fostering a truly sustainable culture.

5.1 The Strong Foundation of Attitudes and Awareness

The high mean score (M = 4.50) for attitudes toward environmental sustainability is a significant finding. It indicates that polytechnic students are not only aware of global and local environmental challenges but also feel a personal responsibility to address them. This positive outlook, particularly their belief in green technology as a solution, suggests that future sustainability initiatives will be received favourably. This finding aligns with broader trends in Malaysian higher education, where studies on university students consistently report a strong sense of environmental consciousness. However, it also underscores the need for a strategic shift from simply informing students to empowering them to act on their beliefs.

5.2 The Attitude and Behaviours Gap in Practice

While students expressed highly positive attitudes, their reported daily sustainable practices were only at a moderately high level (M=4.23). This finding is a critical area for discussion and confirms the well-documented "attitude-behaviour gap". It suggests that while students may know they should recycle, conserve energy, or use reusable items, they do not consistently do so. The reasons for this gap are likely multifaceted, potentially including a lack of convenient infrastructure such as accessible recycling bins, perceived social norms that do not vigorously enforce green behaviours, or the absence of immediate, tangible incentives. This finding indicates that awareness alone is insufficient; practical, systemic, and cultural interventions are necessary to embed sustainable actions into daily life. The Pearson Product-Moment Correlations Analysis further supports this by revealing a strong positive correlation between students' attitudes and their sustainable practices ($r = 0.659$, $p = 0.000$). Although this relationship is statistically significant, the correlation coefficient itself indicates that positive attitudes do not guarantee a perfect translation into behaviour, highlighting the complexity of this gap.

5.3 Social Media's Dual Role

The data finds that social media is a significant medium for disseminating sustainability messages (M = 3.84), confirming its pivotal role in modern environmental communication. The preference for visual content like short videos and infographics demonstrates that students are more receptive to engaging, digestible information. Social media's influence extends beyond mere awareness; it can create a sense of social influence where individuals feel compelled to align their behaviours with their peers and digital role models. This suggests that institutions and organizations can leverage social media not just to inform but to create a vibrant online community that normalizes and celebrates sustainable practices. This finding is further enriched by the independent t-test results, which show a statistically significant difference in social media influence between genders. Female students (M = 3.93) were found to be more influenced by sustainability-related content on social media compared to male students (M = 3.72, $p = 0.013$). This suggests that targeted social media campaigns may be particularly effective in engaging the female student population. The correlation analysis also reinforces this, showing a significant positive link between attitudes and social media influence ($r = 0.576$, $p = 0.000$).

5.4 The Challenge of Green Campaign Participation

Despite students' positive perceptions of green campaigns (M=3.94), the study found a low participation rate, highlighting a significant gap between positive attitudes and actual behaviors. This discrepancy suggests that while students are receptive to the concepts of green initiatives, the campaigns themselves are failing in their execution. This failure may be attributed to a lack of effective promotion, logistical barriers, or a perceived absence of a direct, tangible environmental impact. The **correlation analysis** provides a critical insight, revealing the strongest positive relationship between attitudes and a student's response to green campaigns ($r = 0.672$, $p = 0.000$). This strong link suggests that students with positive attitudes are significantly more likely to respond favourably, yet the low participation rate points to a crucial disconnect. The problem is not a lack of interest, but a failure to convert that interest into action. The study reveals that students are more likely to engage in interactive and reward-based campaigns. Therefore, future green campaigns should be reimagined to move away from passive, lecture-style formats towards more active, engaging, and rewarding experiences. By incorporating elements like hands-on activities or competitive challenges, organizers can better align their efforts with students' preferences, thereby increasing participation and translating positive perceptions into meaningful action.

5.5 Implications and Recommendations

The findings reveal a significant disparity between students' positive attitudes towards green initiatives and their low participation rates. To bridge this gap, Malaysian polytechnic institutions should adopt a dual strategy that focuses on both environmental integration and dynamic campaign redesign.

Firstly, institutions must embed sustainability directly into the campus environment. This means moving beyond theoretical concepts and investing in tangible infrastructure that makes eco-friendly behaviour easy and intuitive for students. Examples include installing innovative energy systems, creating visible and accessible recycling hubs, and other facilities that integrate sustainable living into daily campus life. Concurrently, leveraging digital platforms is crucial. Institutions should develop a strategic social media presence to showcase student-led projects, organize engaging competitions, and partner with green influencers to make sustainability more relatable and appealing to a younger audience. The aim is to make sustainability not just a subject but a seamless part of the student experience.

Secondly, to boost active participation, institutions should shift their approach to campaign design. Instead of relying on top-down directives, a bottom-up, peer-driven model is highly recommended. This strategy involves empowering students to take the lead on their own green projects, which fosters a sense of ownership and personal investment. Future campaigns should be interactive and reward-based, incorporating elements like gamified challenges, eco-friendly markets that offer tangible benefits, or volunteer opportunities. These initiatives should be heavily promoted on digital channels to maximize reach and engagement. By transforming sustainability into a collaborative and rewarding community effort, polytechnics can more effectively integrate it into the campus culture.

5.6 Limitations

This study is not without limitations. The use of a convenience sample of 124 students from a single polytechnic institution limits the generalizability of the findings to all polytechnic students across Malaysia. The self-reported nature of the survey data may also be subject to social desirability bias, where respondents may overstate their positive attitudes or sustainable practices. A larger, more diverse sample from various institutions across different regions would provide a more robust and comprehensive understanding of the issue. Future research could also employ mixed methods approaches, combining surveys with interviews or observational studies, to gain a more profound, qualitative understanding of the motivations behind student behaviours.

6. CONCLUSION

In conclusion, this study provides a valuable snapshot of the attitudes, sustainable practices, and the influence of social media among polytechnic students in Malaysia. The findings confirm that this generation of students possesses a highly positive and well-informed attitude toward environmental sustainability. Their belief in personal responsibility and the potential of green technology is a strong foundation upon which to build a culture of sustainability.

However, a significant and actionable finding is the presence of an attitude-behavior gap, where positive intentions do not consistently translate into daily practices. While students reported a moderately high level of engagement in sustainable behaviors, there is still ample room for improvement. The study also unequivocally demonstrates the critical role of social media as a powerful and effective medium for environmental communication. Students are receptive to sustainability messages delivered through visual, engaging content, indicating that digital platforms are a key resource for future campaigns.

Crucially, the research highlights a disconnect between positive perceptions of green campaigns and low student participation. This suggests that awareness and interest alone are insufficient to drive action. To strengthen the culture of sustainable practices on campus, future interventions must be more strategic, interactive, and rewarding.

In essence, the study reflects a population that is aware and willing, but in need of more strategic, digitally driven, and community-based interventions. By leveraging the power of social media and redesigning green campaigns to be more engaging and tangible, higher education institutions can effectively bridge the attitude-behavior gap and empower students to become more active and consistent participants in creating a sustainable future.

REFERENCES

[1] M. S. M. Saleh, M. A. Mehellou, M. A. S. A. Rahman, and A. S. Mohd Ariffin, "Social media impact on sustainable intention and behaviour: a comparative study between university students in Malaysia and Indonesia," *Journal of Applied Research in Higher Education*, vol. 16, no. 3, pp. 505–523, 2024, doi: 10.1108/JARHE-10-2023-0479.

[2] M. S. M. Saleh, M. A. Mehellou, and A. S. Mohd Ariffin, "The influence of sustainability knowledge and attitude on sustainable intention and behaviour of Malaysian and Indonesian undergraduate students," *Research in Comparative and International Education*, vol. 17, no. 4, pp. 528–543, 2022, doi: 10.1177/17454999221126712.

[3] S. Shafie, M. S. A. Rahman, and M. S. A. Khalid, "Pro-environmental behaviours, advertising literacy and social influencers' leadership qualities among Malaysian university students," *International Journal of Academic Research in Business and Social Sciences*, vol. 12, no. 10, pp. 84–100, 2022, doi: 10.6007/IJARBSS/v12-i10/13075.

[4] N. Zubir, N. I. M. Salleh, and R. H. A. Rahman, "Students' knowledge, attitudes and practice towards sustainable development goals at Universiti Pendidikan Sultan Idris," *International Journal of Research and Innovation in Social Science (IJRISS)*, vol. 8, no. 3, pp. 215–225, 2024.

[5] Y. Huang, T. C. Tan, and J. Abdullah, "Comparative effects of thematic teaching, design-thinking, and traditional lectures on sustainable development knowledge and behaviours among students," *IJRISS*, vol. 7, no. 9, pp. 145–156, 2023.

[6] N. Baharudin and H. M. Omar, "Climate change awareness and behavioural attitudes among Malaysian university students," *IJRISS*, vol. 8, no. 5, pp. 301–309, 2024.

[7] S. Afroz and S. Ilham, "The relationship between sustainability knowledge, attitude, and practice among Malaysian undergraduates," *Asian Journal of Environment-Behaviour Studies*, vol. 5, no. 2, pp. 45–56, 2021.

[8] N. A. Ahamad and N. Ariffin, "Sustainable consumption knowledge and practice among Malaysian university students," *Environment-Behaviour Proceedings Journal*, vol. 6, no. 15, pp. 79–87, 2021.

[9] M. S. M. Saleh, M. A. Mehellou, and A. S. Mohd Ariffin, "SmartPLS analysis of social media and sustainable behaviour among Malaysian students," *Journal of Applied Research in Higher Education*, vol. 16, no. 4, pp. 615–632, 2024.

[10] B. O. Omisore, F. D. Idowu, and A. S. Olawale, "Awareness and knowledge of sustainable development goals among university staff and students in developing countries," *IJRISS*, vol. 7, no. 8, pp. 210–218, 2021.

[11] K. Konstantoulaki, P. A. Ioannou, and A. Triantafyllidou, "Social media engagement and the determinants of behavioural intentions of university programme selection," *Corporate Communications: An International Journal*, vol. 26, no. 5, pp. 785–802, 2021.

[12] N. Tan and L. Chew, "Green influencers and sustainable consumer behaviour among Malaysian youth," *Frontiers in Psychology*, vol. 14, pp. 1–12, 2023, doi: 10.3389/fpsyg.2023.1122334.

[13] S. Yusof, A. Rahim, and N. Hashim, "The influence of TikTok water saving competition on raising climate change awareness among students in Malaysia," *Geografi – Malaysian Journal of Society and Space*, vol. 21, no. 1, pp. 77–90, 2025.

[14] M. Y. Zulkifli, H. Tan, and A. Aziz, "The role of social media in promoting environmental awareness among Malaysian youth," *Asian Journal of Sustainability and Social Responsibility*, vol. 7, no. 2, pp. 55–70, 2022.

[15] A. Rahman and N. Hassan, "Attitudes towards green technology adoption among Malaysian college students," *Sustainability*, vol. 15, no. 4, pp. 1–15, 2023, doi: 10.3390/su15042812.

[16] A. Mohd Shah and R. Ariffin, "Bridging the attitude-behaviour gap in student participation in campus green campaigns," *International Journal of Sustainability in Higher Education*, vol. 24, no. 1, pp. 101–117, 2023.

[17] Z. Ismail, N. Roslan, and S. Jamal, "3R practices and sustainability among polytechnic students in Pahang," *Journal of Technical Education and Training (JTET)*, vol. 16, no. 2, pp. 22–33, 2024.

[18] UTM Center for Diploma Studies, "Student participation in green campus initiatives: A survey of Malaysian polytechnics," *UTM Research Reports*, 2022.

[19] S. Tan, J. Wong, and A. Lim, "Social media and green consumption behaviour among Gen Z," *Journal of Cleaner Production*, vol. 382, pp. 1–13, 2023, doi: 10.1016/j.jclepro.2022.135215.

[20] R. Ahmad, F. Hassan, and M. Mohamed, "Environmental sustainability attitudes and practices in a Malaysian public university," *Southeast Asian Social Science Review*, vol. 26, no. 2, pp. 121–140, 2021.