



**JOURNAL OF TOURISM,
HOSPITALITY AND
ENVIRONMENT MANAGEMENT
(JTHER)**

www.gaexcellence.com/jthem



ENVIRONMENTAL AWARENESS AND GREEN BEHAVIOUR AMONG MALAYSIAN UNIVERSITY STUDENTS: IMPLICATIONS FOR SUSTAINABLE ENVIRONMENTAL MANAGEMENT

Nurul Zaharatullaili Rohizan¹, Suziana Hassan^{2*}, Devika Krishnan³, Raudha Md Ramli⁴

¹Faculty of Economics and Management, Universiti Kebangsaan Malaysia

 a203529@siswa.ukm.edu.my

 <https://orcid.org/0009-0009-3428-0112>

² Faculty of Economics and Management, Universiti Kebangsaan Malaysia

 suzi_h@ukm.edu.my

 <https://orcid.org/0000-0002-1051-158X>

³ Faculty of Administrative Science and Policy Studies, Universiti Teknologi Mara, Seremban, Malaysia

 devika@uitm.edu.my

 <https://orcid.org/0000-0001-9449-7190>

⁴ Faculty of Economics and Management, Universiti Kebangsaan Malaysia

 raudha@ukm.edu.my

 <https://orcid.org/0000-0003-4090-017X>

*Corresponding Author

Article Info:

Article history:

Received date: 10.03.2026

Revised date: 05.04.2026

Accepted date: 13.05.2026

Published date: 10.06.2026

To cite this document:

Rohizan, N. Z., Hassan, S., Krishnan, D., & Ramli, R. M. (2026). Environmental Awareness and Green Behaviour Among Malaysian University Students: Implications for Sustainable Environmental Management. *Journal of Tourism*

Abstract:

Environmental awareness and sustainability behaviour play an important role in addressing environmental challenges and promoting long-term environmental sustainability. Within higher education, university students play a critical role in shaping future sustainability practices and long-term environmental outcomes. Despite increasing attention to sustainability, limited empirical studies have examined the combined effects of environmental knowledge, awareness, and attitudes on green behaviour among Malaysian university students. This study examines the level of environmental knowledge, awareness, and attitudes and analyse their influence on green behaviour. This study employed a quantitative method involving 385 students from selected Malaysian Public Universities listed in the UI Green Metric World University Rankings. The questionnaire measured environmental knowledge, environmental awareness, green behaviour and sustainable consumption using a five-point Likert scale. Data were analysed using IBM SPSS Statistics, including descriptive analysis, reliability testing, Pearson correlation, and multiple regression. The results indicate high levels of environmental knowledge, attitude and awareness among students (mean range = 4.25–4.32), while Pearson correlation analysis reveals a strong positive relationship between environmental awareness and green behaviour ($r = 0.785$, $p < 0.001$). Multiple regression results

Hospitality and Environment Management, 11 (44), 145-155.

show that environmental knowledge ($\beta = 0.203, p < 0.001$), environmental attitude ($\beta = 0.237, p < 0.001$) and environmental awareness ($\beta = 0.446, p < 0.001$) significantly predict green behaviour, with environmental awareness emerging as the strongest determinant. This indicates that environmental awareness plays a more significant role than knowledge in influencing sustainable behaviour. These findings imply that strengthening environmental awareness initiatives, sustainability education and green campus policies can significantly enhance environmentally responsible practices among students. This study contributes by identifying environmental awareness as the strongest determinant of green behaviour in higher education contexts. Practically, the findings inform the design of more effective sustainability initiatives by emphasising awareness-driven strategies and institutional support to promote consistent pro-environmental behaviour.

DOI:10.35631/JTHEM.1144010 **Keyword:**

Environmental Sustainability; Higher Education Institutions; Pro-Environmental Behaviour; Sustainability Management; Multiple Regression



© The authors (2026). This is an Open Access article distributed under the terms of the Creative Commons Attribution (CC BY NC) (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited. For commercial re-use, please contact jthem@gaexcellence.com.

Introduction

Environmental sustainability has emerged as a central agenda within environmental management discourse, particularly in response to escalating challenges such as climate change, biodiversity loss, resource depletion and waste generation. Effective environmental management does not solely depend on technological advancement or regulatory enforcement, but also on behavioural transformation at the individual and institutional levels (Wu & Tham, 2023). In this regard, pro-environmental behaviour has been widely recognised as a critical component in achieving sustainable environmental outcomes (Wong-Parodi & Berlin Rubin, 2022).

Higher education institutions play a strategic role in advancing sustainable environmental management. Universities serve not only as institutions for knowledge creation but also as practical environments in which sustainability principles can be integrated into institutional operations, governance practices and everyday student life. Through green campus initiatives, sustainability-oriented curricula and environmental awareness programmes, higher education institutions are uniquely positioned to encourage the development of environmentally responsible behaviours among students (Jusoh et al., 2018). Given that, student's environmental awareness and behavioural tendencies can carry long-term implications for sustainable environmental governance as they can be a future leader.

Despite the increasing emphasis on sustainability within Malaysian universities including participation in the UI GreenMetric World University Rankings and the implementation of various green campus policies, questions remain regarding to which extent the environmental awareness is translated into consistent green behaviour (Kumaran & Idris, 2025). Previous studies such as Radzi et al., (2025), and Syahrul Nizam Ibrahim et al., (2023) highlight the existence of an awareness-behaviour gap, whereby students report high levels of environmental knowledge and positive attitudes but do not consistently engage in environmentally responsible actions. From an environmental management perspective, identifying the determinants that facilitate behavioural consistency is essential for developing more effective institutional strategies and targeted interventions.

Although environmental awareness has been widely examined among general populations (e.g., Indrarosa et al., (2025); Khuadthong et al., (2025); and Sun & Ma (2026)), empirical research focusing specifically on Malaysian university students within a structured environmental management context remains limited. In particular, there is insufficient understanding of how environmental knowledge, environmental attitudes and environmental awareness jointly influence green behaviour in higher education settings. Clarifying these relationships is important for informing sustainability-oriented campus policies and strengthening institutional governance frameworks.

Accordingly, this study examines the level of environmental awareness and green behaviour among higher institution students in Malaysia and investigates the influence of environmental knowledge and environmental attitude on green behaviour. Using correlation and multiple regression analyses, the study provides empirical insights into the behavioural determinants that support sustainable environmental management within higher education institutions. The findings are expected to offer practical implications for university administrators, environmental policymakers and sustainability practitioners seeking to strengthen green campus initiatives and long-term environmental management strategies.

Literature Review

Environmental Knowledge, Awareness and Attitude

Environmental knowledge, awareness, and attitude are frequently investigated together in sustainability and environmental management. Environmental knowledge includes understanding environmental challenges, natural processes, and human impacts. Environmental awareness is the recognition of environmental challenges and their perceived severity (Eden, 2009), whereas environmental attitude is an individual's judgment of environmental conservation (Suziana, 2017). Sustainability education, campus events, and environmental campaigns in higher education may improve students' knowledge. Previous study demonstrates that environmental knowledge often leads to positive environmental perspectives (J. C. Bradley et al., 1999). However, empirical evidence shows that knowledge and awareness do not always lead to sustainable behaviours. Although students in high institution were knowledgeable, Jusoh et al., (2018) found that their environmental behaviour was modest. The contradicting findings show that knowledge and awareness are important cognitive characteristics but may not influence behaviour. Environmental management requires examining how these structures affect green behaviour to improve university sustainability programs.

Green Behaviour and Sustainable Consumption

Green behaviour refers to actions that reduce negative environmental impacts which include recycling, conserving energy and minimizing single-use plastics. Sustainable consumption extends this concept to responsible purchasing and lifestyle decisions that consider environmental consequences (De et al., 2025). Previous research indicates that favourable environmental attitudes do not automatically translate into consistent behavioural practices. For instance, Mohd Isa (2016) reported that although students demonstrated positive attitudes toward environmental protection, their actual engagement in sustainable activities was inconsistent. Likewise, empirical findings by Wardhana (2023) and Kukkonen et al. (2018) confirm that environmental awareness is positively associated with green behaviour. However, the magnitude of this relationship appears to depend on contextual influences such as prevailing social norms and the level of institutional support. These mixed findings suggest that the relationship between cognitive orientation and behavioural action is not straightforward. In particular, the combined roles of environmental knowledge, awareness and attitude remain insufficiently clarified within Malaysian public university settings. Therefore, further empirical investigation is necessary to determine how these psychological factors interact in shaping green behaviour among students in university level.

Theoretical Framework

This study is grounded on Ajzen (1991) Theory of Planned Behaviour (TPB) which explain that behaviour is primarily influence by behavioural intention shaped by attitudes, social influences, and the sense of being in charge. Within environmental contexts, individuals who hold favourable attitudes toward environmental protection and perceive social or institutional support are more likely to engage in pro-environmental actions. Drawing on TPB, this study conceptualises environmental knowledge, environmental attitude and environmental awareness as key determinants of green behaviour among university students. This theoretical grounding strengthens the interpretation of findings and positions the study within environmental management and behavioural research.

Methodology

Research Design

This study adopts a quantitative cross-sectional survey design to examine environmental awareness and green behaviour among university students. The survey approach enables efficient data collection from a large sample and supports statistical analysis of relationships among variables. As an explanatory study, it investigates the influence of environmental knowledge, environmental attitude and environmental awareness on green behaviour.

Population and Sample

The target population comprised students from Malaysian public universities listed in the UI GreenMetric World University Rankings, namely Universiti Kebangsaan Malaysia (UKM), Universiti Putra Malaysia (UPM), Universiti Sains Malaysia (USM), Universiti Teknologi Malaysia (UTM) and Universiti Malaya (UM). These institutions were selected due to their established commitment to sustainability and environmental management initiatives. The required sample size was determined using Cochran's formula, based on a 95% confidence

level ($Z = 1.96$), a 5% margin of error and an assumed population proportion of 0.5. The formula as follow:

$$no = z^2 \cdot p \cdot (1 - p) / e^2$$
$$no = 1.96^2 \cdot 0.5 \cdot (1 - 0.5) / 0.05^2 = 384.16 \approx 385$$

To fit the data analyses requirement, a total of 385 responses were gathered.

Instrumentation and Data Collection

Data were collected using a structured questionnaire distributed online via Google Forms. The survey link was shared through university platforms and student social media groups. Participation was voluntary, and respondents were informed of the study's purpose prior to providing consent.

The questionnaire consisted of three sections. Section A captured demographic information. Section B measured the main constructs i.e. Environmental Knowledge (EK), Environmental Attitude (EA), Environmental Awareness (EAW), Green Behaviour (GB) and Sustainable Consumption (SC) using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Section C included open-ended questions to obtain additional insights into students' views on improving environmental awareness and sustainable practices within universities. The measurement items were adapted from established studies to ensure content validity.

Data Analysis

The data were analysed using the IBM SPSS 30. Reliability analysis test from the Cronbach's Alpha conducted to examine internal consistency. Pearson correlation analysis was used to examine the relationship between environmental awareness and green behaviour. Multiple regression analysis was conducted to determine the individual and combined effects of environmental knowledge, environmental attitude and environmental awareness on green behaviour. In addition, responses from open-ended questions were analysed using thematic analysis to identify recurring themes related to environmental initiatives and campus sustainability practices.

Results and Discussion

Socio-demographic information

A total of 385 students from five Malaysian public universities listed under the UI GreenMetric World University Rankings participated in this study. Most respondents were aged between 22 and 25 years and were undergraduate students, with Year 3 students representing the largest group. Female students constituted a larger proportion of the sample. The demographic distribution indicates that the respondents largely represent traditional university-age students who have been exposed to sustainability initiatives within higher education institutions and aligned with study by (Raja Zulkifli et al., 2024).

In terms of living arrangements, respondents were relatively balanced between those residing in university colleges and rented accommodation, while a smaller proportion lived with their families. Since the participating universities are recognised for their sustainability performance, students are likely to have been exposed to environmental campaigns and green campus policies. This context as stated in (Chantiran et al., 2025) may partly explain the generally high levels of environmental knowledge, awareness and green behaviour observed in the subsequent analyses.

Table 1: Respondents' Sociodemographic Information

Variable	Category	n	%
Gender	Male	136	35.3
	Female	249	64.7
Age (years)	18–21	104	27
	22–25	262	68.1
	26–29	11	2.9
	≥ 30	8	2.1
Race	Malay	320	83.1
	Chinese	39	10.1
	Indian	21	5.5
	Others	5	1.3
University	UKM	125	32.5
	UPM	74	19.2
	USM	61	15.8
	UTM	62	16.1
	UM	51	13.2
	Others	12	3.2
Level of Study	Diploma	35	9.1
	Bachelor's	315	81.8
	Master's	24	6.2
	PhD	10	2.6
	Others	1	0.3
Year of Study	Year 1	60	15.6
	Year 2	96	24.9
	Year 3	171	44.4
	Year 4	58	15.1
Housing Status	College residence	149	38.7
	Rented accommodation	155	40.3
	Living with family	81	21

Reliability and Descriptive Analysis

Table 2 presents the reliability and descriptive statistics of the study variables. Overall, the constructs demonstrate acceptable internal consistency. Environmental Awareness ($\alpha = 0.826$), Green Behaviour ($\alpha = 0.789$) and Sustainable Consumption ($\alpha = 0.760$) exhibit good reliability, while Environmental Knowledge ($\alpha = 0.615$) and Environmental Attitude ($\alpha = 0.596$) show

moderate reliability, which remains acceptable for exploratory research in social sciences (Hair et al., 2010). The relatively lower reliability for Environmental Attitude suggests that future studies may consider refining measurement items to enhance construct precision. The comparatively lower reliability coefficient for Environmental Attitude indicates that further refinement of measurement items may improve construct consistency in future research. Descriptive statistics show consistently high mean scores across all constructs (mean = 4.25–4.32), suggesting that students generally demonstrate strong environmental knowledge, positive attitudes and elevated awareness levels. This pattern reflects a favourable sustainability orientation among respondents from universities recognised under the UI GreenMetric ranking. Nevertheless, the reliance on self-reported measures warrants cautious interpretation. In environmental research, socially desirable responding may influence participants to report higher levels of pro-environmental orientation than their actual practices reflect. (Bradley et al., 2020).

Table 2: Reliability And Descriptive Statistics for the Constructs

Construct	No. of Items	Mean	SD	Cronbach's Alpha
Environmental Knowledge (EK)	4	4.25	0.80	0.615
Environmental Attitude (EA)	4	4.32	0.85	0.596
Environmental Awareness (EAW)	8	4.26	0.81	0.826
Green Behaviour (GB)	5	4.26	0.81	0.789
Sustainable Consumption (SC)	5	4.26	0.87	0.760

Environmental Awareness and Green Behaviour

The Pearson correlation results presented in Table 3 indicate a strong and statistically significant positive association between Environmental Awareness (EAW) and Green Behaviour (GB) ($r = 0.785$, $p < 0.001$). This suggests that higher levels of environmental awareness are associated with greater engagement in environmentally responsible practices among students. The finding is consistent with earlier studies demonstrating that awareness functions as a key antecedent of sustainable behaviour (Wardhana et al., 2023; Kukkonen et al., 2018). From the perspective of the Theory of Planned Behaviour (Ajzen, 1991), heightened awareness strengthens individuals' cognitive evaluation of environmental consequences, which in turn increases the likelihood of behavioural participation.

Table 3: Relationship Between the Constructs

Variables	EK	EA	EAW	GB
EK	1			
EA	—	1		
EAW	—	—	1	
GB	—	—	0.785**	1

Determinants of Green Behaviour

The multiple regression results presented in Table 4 indicate that Environmental Knowledge (EK), Environmental Attitude (EA) and Environmental Awareness (EAW) significantly predict

Green Behaviour (GB). The overall model is statistically significant and accounts for 67% of the variance in green behaviour. Environmental Awareness exerts the strongest influence, followed by Environmental Attitude and Environmental Knowledge. This pattern suggests that although knowledge and favourable attitudes contribute to sustainable practices, behavioural engagement is more strongly associated with students' awareness of environmental issues and their perceived relevance within institutional and social contexts.

These findings are consistent with the Theory of Planned Behaviour, which emphasises the role of cognitive and attitudinal factors in shaping behavioural outcomes. They also align with the Value-Belief-Norm framework (Lind et al., 2015) which proposes that awareness of environmental consequences activates personal norms that encourage pro-environmental action. From an environmental management perspective, the results imply that university sustainability strategies should extend beyond information-based interventions. While environmental education remains important, initiatives that enhance awareness such as visible green campus policies, peer engagement and institutional incentives could be more effective in promoting consistent behavioural change. Multicollinearity diagnostics further confirm that the predictors independently contribute to the model, reinforcing the robustness of the regression findings.

Table 4: Multiple Regression Analysis Predicting Green Behaviour

Model Summary					
R		R²	Adjusted R²	SD	
0.819		0.67	0.668	0.345	
ANOVA					
F		Sig.			
258.039		0.001			
Regression Coefficients					
Predictor		Coefficient	Beta	t	Sig.
Environmental Knowledge (EK)		0.222	0.203	4.058	0.001
Environmental Attitude (EA)		0.247	0.237	4.798	0.001
Environmental Awareness (EAW)		0.471	0.446	8.536	0.001
Dependent Variable: Green Behaviour (GB)					

Conclusion

This study investigated the effects of environmental knowledge, environmental attitude and environmental awareness on green behaviour among Malaysian university students. The results indicate that all three variables significantly influence green behaviour, with environmental awareness exerting the strongest effect. The model explains a considerable proportion of behavioural variance, highlighting the importance of cognitive and attitudinal determinants in shaping sustainability practices within higher education settings.

The findings imply that university sustainability strategies should not rely solely on knowledge-based interventions. Although environmental education remains essential, initiatives that actively enhance awareness, supported by visible policies, campus infrastructure and student participation are more likely to encourage consistent behavioural engagement. From an environmental management perspective, integrated approaches that combine curricular exposure, experiential learning and institutional support appear necessary to strengthen pro-environmental conduct.

This study contributes empirical evidence within the Malaysian university context; however, its cross-sectional design and reliance on self-reported measures limit causal interpretation. Future research could adopt longitudinal designs or incorporate behavioural observation to provide deeper insight into the awareness and behaviour dynamic. Overall, the findings emphasise the strategic role of awareness-oriented interventions in advancing sustainable environmental management within universities.

Acknowledgements: The authors would like to express their sincere gratitude to Faculty of Economics and Management, UKM for providing the necessary resources and support throughout the course of this research. Special appreciation is extended to colleagues and peers who contributed valuable insights and constructive feedback, which greatly enhanced the quality of this paper.

Funding Statement: This research received financial support from Faculty of Economics and Management under Grant Number GIPP-EP-2024-010. The funding body had no role in the design of the study, data collection, analysis, interpretation of results, or the decision to publish this manuscript.

Conflict of Interest Statement: The authors declare that there is no conflict of interest regarding the publication of this paper. All authors have contributed to this work and approved the final version of the manuscript for submission to the International Journal of Tourism, Hospitality And Environment Management (JTHEM)

Ethics Statement: This study was conducted in accordance with ethical research standards. Informed consent was obtained from all participants prior to data collection. Participation was voluntary, and respondents were assured of confidentiality and anonymity. The data collected were used solely for academic purposes.

Author Contribution Statement: All authors contributed significantly to the development of this manuscript. Suziana Hassan was responsible for the conceptualization, methodology, and overall supervision of the study. Nurul Zaharatullaili Rohizan handled data collection, analysis, and interpretation of results. Devika Krishnan and Raudha Md Ramli contributed to the literature review, drafting, and critical revision of the manuscript. All authors read and approved the final version of the manuscript prior to submission.

References

- Ajzen, I. (1991). The Theory of Planned Behavior. In *Organizational Behavior and Human Decision Processes* (Vol. 50).
- Bradley, G. L., Babutsidze, Z., Chai, A., & Reser, J. P. (2020). The role of climate change risk perception, response efficacy, and psychological adaptation in pro-environmental behavior: A two nation study. *Journal of Environmental Psychology*, *68*, 101410. <https://doi.org/10.1016/j.jenvp.2020.101410>
- Bradley, J. C., Waliczek, T. M., & Zajicek, J. M. (1999). Relationship Between Environmental Knowledge and Environmental Attitude of High School Students. *The Journal of Environmental Education*, *30*(3), 17–21. <https://doi.org/10.1080/00958969909601873>
- Chantiran, K., Samsudin, N., Mohd Yasin, N. H., & Nazir, M. H. (2025). Factors Influencing Behaviour Toward Participation In Sustainable Green Exercise: A Conceptual Framework. *Journal of Tourism Hospitality and Environment Management*, *10*(42), 321. <https://doi.org/10.35631/JTHERM.1042021>
- De, T., Singh, N., Ibrahim, B. S. K. S. M. K., Dikkatwar, R., & Chaudhary, M. K. (2025). Mindful, responsible, and sustainable consumption: a hybrid review of evolving research trends. In *Discover Sustainability* (Vol. 6, Number 1). Springer Nature. <https://doi.org/10.1007/s43621-025-01343-1>
- Eden, S. (2009). Environment. *International Encyclopedia of Human Geography: Volume 1-12, 1–12*, V3-505-V3-516. <https://doi.org/10.1016/B978-008044910-4.00268-6>
- Indrarosa, D., Mariyono, J., Santoso, S. I., & Sutaryo, S. (2025). The effectiveness of community-based eco-farm waste management training on enhancing farmers' environmental awareness: The role of government support and sustainability attitudes. *Cleaner Waste Systems*, *12*. <https://doi.org/10.1016/j.clwas.2025.100394>
- Jusoh, S., Khairul, M., Kamarudin, A., Wahab, N. A., Hafiz, M., Saad, M., Rohizat, N. H., Hazwani, N., & Mat, N. (2018). Environmental Awareness Level Among University Students in Malaysia: A Review. In *International Journal of Engineering & Technology*. www.sciencepubco.com/index.php/IJET
- Khuadthong, B., Imjai, N., Yordudom, T., Armandsiri, M., & Aujirapongpan, S. (2025). Shaping sustainable tourism behavior among elderly tourists: Roles of low carbon literacy and social-environmental awareness. *Sustainable Futures*, *10*. <https://doi.org/10.1016/j.sftr.2025.101026>
- Kukkonen, J., Kärkkäinen, S., & Keinonen, T. (2018). Examining the relationships between factors influencing environmental behaviour among university students. *Sustainability (Switzerland)*, *10*(11). <https://doi.org/10.3390/su10114294>
- Kumaran, S., & Idris, I. (2025). Sustainability in Malaysian Higher Education: A Comprehensive Analysis with Suggestions for Malaysian Universities' Future. In *Educational Process: International Journal* (Vol. 18). Universitipark. <https://doi.org/10.22521/edupij.2025.18.469>
- Lind, H. B., Nordfjærn, T., Jørgensen, S. H., & Rundmo, T. (2015). The value-belief-norm theory, personal norms and sustainable travel mode choice in urban areas. *Journal of Environmental Psychology*, *44*, 119–125. <https://doi.org/10.1016/j.jenvp.2015.06.001>
- Mohd Isa, N. K. (2016). Pengetahuan, Sikap dan Tingkah Laku Pelajar UPSI Terhadap Prinsip-Prinsip Kampus Lestari. *Jurnal Perspektif*, *8*(1), 29–41. <https://ejournal.upsi.edu.my/index.php/PERS/article/view/1729/1255>
- Radzi, N. A. M., Olaleye, B. R., Saidi, N. A., Hassan, S., & Khumalo, N. (2025). Environmental Sustainability Awareness and Knowledge Among Millennial and Gen Z Students: A

- Study from a Public Higher Education Institution. *Journal of Lifestyle and SDGs Review*, 5(4), e3931. <https://doi.org/10.47172/2965-730x.sdgsreview.v5.n04.pe03931>
- Raja Zulkifli, R. N. I. K., Hassan, H. 'Izzati, & Ab Rahman, F. A. (2024). Exploring Obstacles To Recycling Practices Among University Students: A Case Study Of Students At Uitm Seremban. *Journal of Tourism, Hospitality and Environment Management*, 9(36), 48–59. <https://doi.org/10.35631/jthem.936004>
- Sun, M., & Ma, S. (2026). The paradox of environmental awareness improvement and carbon footprint: a Maslow's Need-hierarchy perspective analysis in rural China. *Journal of Cleaner Production*, 538. <https://doi.org/10.1016/j.jclepro.2025.147304>
- Suziana, H. (2017). Environmental attitudes and preference for wetland conservation in Malaysia. *Journal for Nature Conservation*, 37, 133–145. <https://doi.org/10.1016/J.JNC.2017.04.004>
- Syahrul Nizam Ibrahim, M., Ibrani Shahrudin Adam Assim, M., Johari, S., Kamariah Wan Mohammad, S., & Hassan, S. (2023). *Tourists' Knowledge On The Status Of Unesco World Heritage Site For Gunung Mulu National Park* (Vol. 2023, Number 2).
- Wardhana, D. Y. (2023). Environmental Awareness, Sustainable Consumption and Green Behavior Amongst University Students. *Review of Integrative Business and Economics Research*, 11(1), 242–251.
- Wong-Parodi, G., & Berlin Rubin, N. (2022). Exploring how climate change subjective attribution, personal experience with extremes, concern, and subjective knowledge relate to pro-environmental attitudes and behavioral intentions in the United States. *Journal of Environmental Psychology*, 79, 101728. <https://doi.org/10.1016/J.JENVP.2021.101728>
- Wu, Y., & Tham, J. (2023). The impact of environmental regulation, Environment, Social and Government Performance, and technological innovation on enterprise resilience under a green recovery. *Heliyon*, 9(10), e20278. <https://doi.org/10.1016/j.heliyon.2023.e20278>