

SOCIAL MEDIA IMPACT ON UITM SEREMBAN 3 STUDENTS' ENVIRONMENTAL AWARENESS

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Abstract: *The aim of this study was to investigate the influence of social media on the knowledge, attitude, and practices of environmental awareness among Bachelor of Environmental Administration students at UiTM Seremban 3, as well as to identify the relationship between students' awareness towards the usage of social media in spreading environmental awareness. Quantitative research methods and convenience sampling were employed, with 168 participants completing a questionnaire over the course of two semesters. Data were analyzed using SPSS software. The findings indicated that most respondents had a high level of knowledge regarding environmental awareness, but there was a discrepancy between knowledge and practice. While knowledge and attitude were found to have a positive correlation with environmental awareness, practice did not. Therefore, it is crucial for all parties, including the university, to collaborate in promoting environmental awareness, which should be seen as more than just knowledge, but also as a set of attitudes and practices that can be applied in daily life.*

Keywords: *Attitude, Awareness, Environmental, Knowledge, Practice.*

Introduction

The environment is essential to all life on Earth as it provides numerous benefits and necessities to all living things. Without environmental protection, life on Earth would be impossible, so it is crucial for humans to have environmental awareness to preserve and conserve our environment. The recent unpredictable environmental issues have alarmed many stakeholders and organizations, making environmental education and conservation necessary. The Tbilisi Declaration 1977 (GDRC), organized by the United Nations Education, Scientific, and Cultural Organization (UNESCO), briefly discussed the goals of environmental education, promoting a clear understanding of economic, social, political, and ecological interdependence in both urban and rural areas. It provides everyone with the knowledge, values, attitudes, commitment, and skills needed to protect and improve the environment and change how individuals, groups, and communities think about the environment.

Therefore, it is important for all members of society to receive environmental education. The media is an effective tool for drawing attention to environmental issues and informing the public about pollution problems, creating public pressure to take action. Providing appropriate information to the public is critical in encouraging ecologically responsible behavior. In the modern technology era, social media provides various channels to distribute countless information. With the increasing use of social media platforms, our society is becoming more environmentally aware as numerous resources are available. Ho et al. (2019) believed that social media platforms are practical tools for disseminating environmental information and encouraging people to adopt environmentally friendly lives. Moreover, the involvement of social media in increasing public awareness about environmental issues is crucial as it educates and informs. Social media has proliferated as a form of online communication tool whereby users can create comments, share, and upload related information, contributing to raising environmental awareness that creates a greater and better influence on society (Saneh, Role of Media in Conserving Environment, 2018).

Approximately 1.5 billion people have access to 2,700 global media channels, including television, radio, the internet, mobile phones, newspapers, and other forms of mass media. Although television and radio have been valuable means of disseminating information to the general public, the internet is often regarded as the most effective and relevant mass media tool for facilitating access to enormous amounts of data. For instance, in January 2022, Malaysia had 30.25 million social media users accounting for 91.7% of the total population (Kemp, 2022). This shows that the population in Malaysia uses social media in their daily lives either for entertainment or to obtain relevant information. Therefore, social media can be a platform that spreads and increases environmental awareness, especially among students.

Moreover, the study on the impact of social media on environmental awareness among students in the Bachelor of Environmental Administration program at UiTM Seremban 3 can be related to the notion of Climate Change Adaptation, which is a crucial issue in the global environmental agenda. Climate change adaptation is a vital component of the United Nations' Sustainable Development Goals (SDGs), particularly SDG 13, which aims to take urgent action to combat climate change and its impacts. Additionally, the Sendai Framework for Disaster Risk Reduction (2015-2030) recognizes the importance of climate change adaptation in reducing the impact of natural disasters on communities.

The study's findings on the need to focus on developing attitudes and practices that promote environmental awareness can be related to the 11th and 12th Malaysia Plans, which prioritize

sustainable development and environmental protection. Malaysia is also one of the signatories to the Paris Agreement and is expected to play an active role in the upcoming COP28 climate conference.

In addition, even with the power of social media in influencing and encouraging people to be more aware of environmental issues, the level of environmental awareness in terms of practice and knowledge to protect and conserve the environment is still shallow (Jusoh et al., Environmental Awareness Level Among University Students in, 2018). Hence this study aims to identify the relationship between students' awareness of social media usage in spreading environmental awareness and providing several recommendations.

Problem Statement

Environmental issues in Malaysia are critical phenomena. Environmental pollution and ecological deterioration have remained essential issues that have wreaked havoc on the economy and people's quality of life. Landslides at Gua Tempurung on the North-South Highway (2004), landslides at Ulu Kelang in Selangor (2003-2007), floods in Segamat in Johor (2007), haze in Kuala Lumpur (2005) due to forest fires in Sumatra, Indonesia, and most recently flash floods in Shah Alam and Kuala Lumpur (2006-2007) have opened many eyes in Malaysia, particularly among authorities and the general public (Khalil, Husin, Mahat, & Nasir, 2011).

Moreover, environmental issues such as water pollution, air pollution, and climate change have negatively impacted living beings and the Earth. Therefore, in recent years, environmental protection has become a national and international issue. Various ways, strategies, and plans have been implemented, and cooperation between organizations has taken place, for instance, through social media platforms to spread and increase environmental knowledge, attitude, and practice among Malaysians. Nevertheless, this issue has yet to be prevented since the Malaysian environmental awareness society needs to be more profound.

According to Muller (2021), about 86 percent of the Malaysian population were active social media users as of January 2021. This was an increase of 24 percent compared to 2016, in which social media users amounted to approximately 62 percent of the total population in Malaysia. As we know, social media platforms are essential in influencing, informing, and educating. However, with the increasing development of modern technology, large-scale environmental degradation has occurred. Nowadays, social media is used nonstop by various groups, from children to the elderly.

Social media can be described as a platform to share everything that happens in people's lives and has been taken advantage of by many kinds of activists, interest groups, pressure groups, and the Malaysian government to promote environmental awareness. Since people scroll through their social media every day to get the news and stay informed, posts about environmental awareness are also displayed, whether or not they follow the news. The effectiveness of posts about environmental awareness, tips for going green, eco-friendly campaigns, and others on social media platforms such as Facebook, Twitter, Instagram, and other applications cannot be measured in small circumstances and conditions. Environment and nature are a large scope of matter where the decrease of environmental issues and problems has become one of the focus and attention. If posts on social media about the environment are effective and can influence people to follow and apply them, then environmental issues such as pollution may decrease over time.

Literature Review

Theory of Planned Behaviour

The Theory of Planned Behavior (TPB) is a well-established theory in social psychology that has been used to explain and predict behavior in a variety of contexts. It suggests that people's attitudes, subjective norms, and perceived behavioral control (PBC) all influence their intentions to engage in a particular behavior, which, in turn, affects their actual behavior (Ajzen, 1991).

In the context of environmental awareness, the TPB is particularly suitable for analyzing the factors that influence students' behaviors because it takes into account not only their attitudes toward the environment but also their perceived ability to perform pro-environmental behaviors. The TPB argues that perceived behavioral control, which refers to the degree to which individuals believe they have the resources, skills, and opportunities necessary to perform a behavior, is a critical factor in predicting behavior (Ajzen, 1991).

Moreover, studies have found that the TPB has been successfully used to explain environmental behavior and intentions, including recycling (Bamberg & Moser, 2007) and energy conservation (Krause & Blanc, 1985). This further supports the suitability of the TPB in analyzing the factors influencing students with environmental awareness.

Factors Influencing Environmental Awareness

Knowledge

Knowledge is an undeniable reality that holds value in all situations and times. As Davenport (1997) notes, knowledge is essential for problem-solving and making informed decisions, as it serves a deeper purpose beyond simple information. Knowledge can be defined as comprehension or consciousness of concepts, facts, explanations, or abilities gained through education, experience, perception, discovery, or study. Moreover, it is an individual's understanding or thoughts used to achieve their objectives effectively. Webster's Dictionary defines knowledge as the familiarity earned through experience or association with real-life situations.

The accumulation of knowledge is crucial to an individual's life and can influence their decisions and reactions. Societal progress is only possible through knowledge, leading to the creation of products that make life easier. Environmental awareness is an example of an issue that requires knowledge to solve. Social media platforms are effective tools for spreading knowledge, as they are borderless and can reach a vast audience at a low cost. These platforms have seen increased membership, making them more accessible and straightforward to use for organizations and individuals.

Social media has become a valuable platform for promoting knowledge sharing and communication, not only for personal use but also for organizations. Facebook, for instance, fosters a knowledge-sharing environment that encourages users to exhibit social support and participate in knowledge management procedures. Knowledge sharing is a transfer of information and knowledge from one person, group, or organization to another, and it is crucial in today's world.

In summary, knowledge is an essential aspect of life that holds value in all situations and times. It is vital for problem-solving and decision-making and is gained through education, experience, perception, discovery, or study. Social media platforms have made knowledge sharing accessible and straightforward, and organizations and individuals can use them to promote knowledge sharing and communication. Knowledge sharing is necessary for societal progress and the solution of issues such as environmental awareness.

Attitude

Attitudes are a reflection of an individual's thoughts and feelings towards a particular object or situation. One's beliefs play a crucial role in shaping their attitudes. Montano and Kasprzyk (2008) argue that people with positive beliefs tend to have positive attitudes, while those with negative beliefs tend to have negative attitudes. Other factors that influence the formation of attitudes include personal experience, culture, and media. Attitudes can greatly impact how individuals react and behave in different situations, including the environment.

To promote environmental conservation, it is crucial to encourage positive environmental attitudes and behaviors. Social media platforms can be used to foster such attitudes and behaviors. Bohlerengen and Wiium (2022) suggest that promoting eco-friendly products and encouraging proper waste disposal through social media can influence the community to adopt positive environmental attitudes. While the impact of individual actions may be small, they can indirectly influence others and increase environmental awareness. Moreover, an individual's knowledge, attitudes, values, and behaviors can significantly impact the overall environmental quality and awareness of society.

In summary, attitudes are an essential aspect of an individual's behavior and can be shaped by various factors. Social media can be utilized as a platform to promote positive environmental attitudes and behaviors that can ultimately impact the environment and society.

Practice

According to the Oxford Learner's Dictionaries, practice is a routine of regular activities or training by an individual. It is an essential part of everyday life that enables people to stay focused and achieve their goals. Practice is a voluntary action that requires perseverance over a long period. It is influenced by various external and internal factors that aim to improve one's quality of life.

In recent times, social media has emerged as a leading cause that enhances the attitude and practice of individuals in society. Social media platforms are internet-based tools that facilitate the exchange of information, such as text, photographs, and videos. For example, uploading daily practice on social media indirectly encourages others to follow suit. Social media has also been utilized as a platform to spread awareness about environmental issues and promote better environmental practices.

By using social media, communities can access various information and activities that can improve the quality of the environment, such as 3R activities. Many individuals have shared 3R activities on social media, encouraging communities to adopt them as part of their daily routine. Environmental practices must be improved, and individuals must be responsible for their actions toward the environment.

Overall, practice is a critical aspect of everyday life that requires perseverance and can be influenced by various internal and external factors. Social media has emerged as a powerful tool for promoting better environmental practices and enhancing the attitude and practice of individuals in society.

Methodology

The present study aimed to explore the impact of social media on environmental awareness among students in the Bachelor of Environmental Administration program at UiTM Seremban 3. The use of a cross-sectional design with a quantitative approach allowed for the collection of data at a single point in time, enabling the researchers to compare the level of environmental awareness among the participants. The research unit analyzed was the students enrolled in the program, who were considered the primary entity under study.

To determine the appropriate sample size, the researchers employed the Krejcie & Morgan Table, which is a widely used guideline for determining the sample size in research studies. Based on the table, a sample size of 132 students was chosen out of a total of approximately 200 Bachelor of Environmental Administration students in part 6. A convenience sampling technique was used to collect data through a Google Form questionnaire, which allowed for the collection of data from a wide range of participants. The use of this technique was also cost-effective and efficient, as it enabled the researchers to reach a large number of participants quickly and easily.

The study's findings aimed to replace preconceptions with factual information on the factors examined at that time, providing more accurate research results. The study's results indicated that most of the respondents had a high level of knowledge regarding environmental awareness, but there was a discrepancy between knowledge and practice. While knowledge and attitude were found to have a positive correlation with environmental awareness, practice did not. These findings highlight the need for universities and other organizations to focus on promoting not only knowledge but also the development of attitudes and practices that promote environmental awareness.

Findings and Discussion

Research Analysis

Table 1: Correlation Result

Variables		Result	Hypotheses
Knowledge	Pearson Correlation, r	0.794**	HA1 accepted
	Sig. (2-tailed), p	0.000	
	N	168	
Attitude	Pearson Correlation, r	0.180*	HA2 accepted
	Sig. (2-tailed), p	0.019	
	N	168	
Practice	Pearson Correlation, r	0.141	HA3 rejected
	Sig. (2-tailed), p	0.068	
	N	168	

Source: Self-develop by the researchers

Table 1 displays the correlation between the independent variables of knowledge, attitude, and practice towards the dependent variable, which is environmental awareness. The results indicate a significant positive relationship between knowledge and environmental awareness ($r = 0.794^{**}$, $p = 0.000$, $p < 0.05$). Therefore, the null hypothesis (H01) is rejected, and the alternative hypothesis (HA1) is accepted, suggesting that there is a positive relationship between knowledge from social media as a factor influencing environmental awareness.

Similarly, the results show a positive relationship between attitude and environmental awareness ($r = 0.180^*$, $p = 0.019$, $p < 0.05$). Thus, the null hypothesis (H02) is rejected, and the alternative hypothesis (HA2) is accepted, indicating that attitude from social media is a factor that positively influences environmental awareness.

On the other hand, the correlation results reveal that there is no relationship between practice and environmental awareness ($r = 0.141$, $p = 0.068$, $p > 0.05$). Therefore, the null hypothesis (H03) is accepted, and the alternative hypothesis (HA3) is rejected, indicating that practice from social media is not a factor that significantly influences environmental awareness. Overall, the findings suggest that social media can be a useful tool in promoting environmental knowledge and attitude among students.

Research Objective: To Identify the Relationship between Students' Awareness of the Usage of Social Media in Spreading Environmental Awareness

Based on the analysis, there is a strong positive correlation between students' awareness and their knowledge of social media usage for promoting environmental issues. The respondents' acknowledgement of the importance of using social media wisely supports the hypothesis that social media is an excellent platform for promoting environmental awareness. As one of the modern information sources, social media can play a vital role in spreading information related to the environment and encouraging users to understand the significance of Sustainable Development Goals.

Although the youth nowadays are more interested in short videos and documentaries, the respondents' age does not affect their knowledge and interest in using social media to promote environmental issues. Formal education in the environmental field also keeps the respondents up to date about the environmental issues happening globally.

However, the study found that attitude has a weak correlation with students' awareness of social media usage for promoting environmental issues. While the respondents agreed that they need to have an attitude towards spreading environmental awareness through their social media accounts, they have a low settled way of thinking and uncertain attitude towards environmental conservation and preservation actions.

Additionally, the study found no positive relationship between practices and students' awareness of social media usage for promoting environmental issues. This may be due to the respondents' focus on social media's various functions rather than disseminating environmental awareness.

To improve students' awareness of social media usage for promoting environmental issues, there needs to be a change in attitude and a focus on environmental conservation and preservation actions. This change can be achieved through increased education and discussion

about environmental issues at home, participation in environmental protection activities, and a conscious effort to educate others about the environment.

Recommendation for the Studies

Volunteerism Activities (CSR)

Volunteerism refers to a voluntary commitment to dedicate time and effort to support a person, group, or cause, often through non-profit organizations (Stukas, Syder, & Clary, 2014). Improving volunteerism, particularly among university students, is essential. Volunteering within the institution encourages civic participation and helps support the less fortunate or conserve the environment (Mustafa, Wahab, Radzi, & Hamzah, 2020). Several studies have shown that volunteering has numerous benefits, including lower mortality rates, better functional ability, and reduced depression rates later in life (Haski-Leventhal, Cnaan, Handy, Brudney, Holmes, & Hustinx, 2008). Encouraging individual involvement in volunteering activities, particularly among university students, is crucial, as it stimulates their minds and hearts, leading to changes in mindset and attitudes.

In addition, volunteering activities can enhance students' well-being, educational opportunities, and employability. Students can engage in various volunteer work, such as environmental volunteering, which involves activities that help the environment. Environmental education aims to impart knowledge, motivate, change attitudes, and promote environmentally friendly behavior (Rentzou, 2021). To promote engagement in environmental actions, individuals need to have environmental awareness and identify reasons to engage in such activities. Social volunteerism is the most suitable and approachable form of volunteering for university students, as it emphasizes educating others about the significance of combating climate change and discovering the numerous intricate details of environmental problems.

University students are at a level of maturity that enables them to devote time and energy to environmental conservation activities. The establishment of environmental NGOs or clubs and successful advertising has expanded student involvement in environmental volunteerism, which can benefit the students and the government by lowering the cost of environmental management (Woosnam, Strzelecka, Nisbett, & Keith, 2019). The advantages of environmental volunteerism for students include personal growth, knowledge and expertise in environmental management, networking and partnerships, preparation for the workplace, and improved well-being (Seligman, 2011). Combining environmental education with volunteerism can help students apply their knowledge more effectively to environmental conservation activities.

Awareness

To be aware means to have knowledge of or be conscious of events, objects, or sensory patterns. Regarding the environment, awareness refers to understanding the condition and situation of the environment, which is crucial for improving the quality of life for underprivileged populations. While most university students possess general environmental knowledge, they do not practice it in their daily lives. Thus, it is essential to make efforts to improve environmental practices among university students. Collaboration between the government, non-governmental organizations, community, and individuals is crucial. The university management should also take an active role in increasing students' environmental practices and attitudes. For instance, they could place more recycling bins around the faculty to encourage recycling habits. Students can also contribute by bringing their reusable bags instead of using plastic bags, which helps

reduce plastic waste. These actions can help improve student attitudes and practices towards the environment and inspire others to do the same.

Environmental Programs (NGOs, Private Bodies)

NGOs, or non-governmental organizations, are groups that operate independently of the government, but the government may provide support. These organizations are vital in environmental conservation and social welfare, making them one of the most effective ways of reaching people today. NGOs use a variety of methods, including newsletters, pamphlets, blogs, audiovisuals, gatherings, talks, and community conversations, to promote environmental awareness. They have developed numerous programs, especially for students, who are an easy group to work with. One of these programs is Jom Bersih Bukit Bintang, which aims to create a friendly community and a sustainable environment in a popular tourist destination. The program also seeks to instill a sense of responsibility among younger generations for protecting the environment. It includes benefits for students and collaborations for recycling, as well as 'gotong-royong' activities, which focus on cleaning the streets. NGOs are essential in educating the younger generation about the importance of environmental practices and attitudes in daily life, such as reducing plastic usage, which is a significant contributor to environmental problems.

Responsibilities of the Policymakers

A policy refers to a set of rules, strategies, or courses of action implemented by governments, businesses, or other organizations to influence decision-making and procedures. Policies are more closely related to plans of action than laws, and individuals who create policies are known as policy-makers. This term is inclusive and applies to anyone who is responsible for creating or modifying policies. Policy-makers are approached by various groups, including lobbyists, interest groups, constituents, and academics, who try to influence their decisions. It is crucial for policy-makers to ensure that policies meet the needs and desires of the population.

In the context of environmental awareness, policy-makers play a critical role in increasing community awareness of the environment. One way to achieve this is by introducing policies related to environmental awareness at the primary school level. This will help improve knowledge, attitudes, and practicality among individuals of all ages towards the environment. At the university level, policies should be put in place to ensure that environmental awareness is enhanced among university students. The university can establish courses or clubs where students can learn and practice environmental attitudes, such as recycling in the university area. By doing so, the university can take responsibility for increasing environmental awareness among students.

Limitation of Study

Some possible limitations of the study could be:

- a) **Limited Generalizability:** The study only focused on the students enrolled in the Bachelor of Environmental Administration program at UiTM Seremban 3, which limits the generalizability of the findings to other populations. The study did not include students from other majors or universities, which may have different levels of environmental awareness.
- b) **Single Data Collection Point:** The study employed a cross-sectional design, which only collected data at a single point in time. This approach may not reflect changes or trends in environmental awareness among the participants over time. A longitudinal design

could have provided more insights into changes in environmental awareness over a longer period.

- c) **Self-Reporting Bias:** The use of a Google Form questionnaire for data collection could have resulted in self-reporting bias. Respondents may have provided socially desirable responses, leading to overestimation or underestimation of their level of environmental awareness. In addition, the use of convenience sampling may have introduced selection bias, as only those who were interested or available to participate responded.
- d) **Limited Scope:** The study focused only on the impact of social media on environmental awareness, which may not be comprehensive enough to capture all factors that influence environmental awareness among students. Other factors, such as education, socio-economic status, or personal values, were not examined in this study.
- e) **Lack of Control:** The study did not control for external factors that may have influenced the participants' level of environmental awareness. For example, participants may have received information or education on environmental issues from sources other than social media, which may have influenced their level of awareness.

Thus, it is important to acknowledge these limitations to provide a more nuanced interpretation of the study's findings and to guide future research in this area.

Conclusion

This research investigates whether social media usage can heighten environmental consciousness among students at UiTM Seremban 3. The study has found that only two factors, knowledge and attitude, are positively linked with environmental awareness, while the third factor, practice, does not show any correlation. Social media has failed to impact students' practices towards the environment. The research has helped researchers gain a deeper understanding of the interplay between knowledge, attitude, and social media practices, which can influence environmental awareness among students at UiTM Seremban 3. It has also raised awareness of the importance of promoting environmental consciousness among individuals, universities, communities, and organizations, including government and non-governmental groups. To achieve this, it is crucial to encourage cooperation and collaboration among all these stakeholders, with a particular focus on students

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