

Exploring the Role of Emotional Intelligence, Social Responsibility, Cultural Values, and Social Norms in Climate Change Mitigation Behavior among Kelantan Youth in Malaysia

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To Link this Article: <http://dx.doi.org/10.6007/IJARBSS/v14-i12/23997> DOI:10.6007/IJARBSS/v14-i12/23997

Published Date: 09 December 2024

Abstract

This study explores the impact of cultural values, emotional intelligence, social responsibility, and perceived social norms on climate change mitigation behavior among youth in Kelantan, Malaysia - a region particularly vulnerable to climate-related disasters such as floods. Using a sample of 431 participants, the research employed quantitative methods, including Pearson correlation and multiple regression analyses, to assess the relationship between these variables. The findings revealed that social responsibility and emotional intelligence were the strongest predictors of climate change mitigation behavior, followed by perceived social norms and cultural values. The results highlight the importance of fostering social responsibility and emotional awareness to promote effective climate change actions. These findings offer key insights for policymakers, educators, and community leaders aiming to design targeted interventions that encourage environmentally responsible behavior among youth. Practical recommendations for integrating environmental education, emotional intelligence training, and social responsibility programs in both formal education and community initiatives are discussed.

Keywords: Cultural Values, Emotional Intelligence, Social Responsibility, Perceived Social Norms, Climate Change Mitigation Behavior, Malaysian Youth

Introduction

Climate change is one of the most pressing global challenges of the 21st century, with profound social, economic, and environmental impacts. Kelantan, located on the east coast of Peninsular Malaysia, faces frequent extreme weather events such as floods, making climate change mitigation behavior among youth in this region particularly crucial (Mohamed et al.,

2023; Ramli & Zainal, 2022). Climate change mitigation behavior, which refers to individual actions aimed at reducing greenhouse gas emissions and minimizing environmental harm, is becoming a crucial area of research, especially as the world seeks to implement more effective strategies to combat global warming (Loo & Chan, 2021). Among Malaysian youth, various factors shape their willingness and ability to engage in such behaviors, including environmental awareness, education, cultural values, and the influence of social media (Rahman & Ismail, 2022).

Environmental awareness plays a pivotal role in driving climate change mitigation efforts. It refers to an individual's knowledge and understanding of the environmental challenges, particularly climate change, and the corresponding behaviors that can reduce its impact (Halim & Ariffin, 2023). Recent studies have shown that when youth are more informed about the causes and consequences of climate change, they are more likely to adopt sustainable practices such as reducing energy consumption, participating in recycling programs, and advocating for climate-friendly policies (Halim et al., 2022; Wong & Teo, 2021). In Malaysia, increasing environmental awareness through community initiatives, education, and media has been a critical step in fostering a more environmentally conscious generation (Aziz & Razak, 2023).

Climate education is equally significant in promoting climate change mitigation behaviors among youth. Education serves as a tool not only to raise awareness but also to provide young people with the skills and knowledge needed to address climate-related issues. Research indicates that students exposed to formal climate education programs are more likely to engage in behaviors that mitigate climate change (Ng & Lai, 2022). In Malaysia, efforts to incorporate climate education into school curricula have been met with both opportunities and challenges, as educators seek to align such content with broader sustainability goals (Rahman et al., 2023). The integration of climate education in Malaysian schools could, therefore, enhance youths' understanding of the urgency of climate action (Lim et al., 2022).

The influence of social media on climate change mitigation behavior is another critical factor in the Malaysian context. Social media platforms serve as important spaces for youth to engage with climate-related content, participate in discussions, and mobilize for environmental causes (Yusof & Zakaria, 2022). Studies have highlighted that exposure to climate change information on social media can significantly enhance young people's engagement in climate actions, both individually and collectively (Kamal & Osman, 2023). Platforms such as Instagram, Twitter, and TikTok have facilitated the rise of youth-led climate movements, encouraging participation in campaigns, protests, and the adoption of sustainable lifestyle practices (Azman & Hassan, 2023).

Lastly, cultural values deeply influence the way Malaysian youth perceive and respond to climate change. Malaysia's diverse cultural landscape, which includes Malay, Chinese, Indian, and indigenous communities, shapes how individuals interact with the environment and the extent to which they feel responsible for climate action (Hassan & Sulaiman, 2022). For many, cultural norms and traditions emphasize harmony with nature and community responsibility, which can promote behaviors aligned with climate change mitigation (Razak & Ismail, 2022). However, there are also challenges, as cultural values may sometimes conflict with modern environmental sustainability practices (Rahman et al., 2023). Understanding how cultural

values intersect with climate change behaviors is therefore essential for designing effective interventions that resonate with youth across different cultural backgrounds.

This study is underpinned by social cognitive theory (Bandura, 1986), which emphasizes the interplay of personal, behavioral, and environmental factors in shaping human actions. The theory highlights how individuals acquire and enact behaviors based on observational learning, self-regulation, and perceived efficacy. In the context of climate change mitigation, this framework explains how youth behaviors are influenced by social and cultural dynamics, such as environmental awareness and social norms, as well as individual attributes like emotional intelligence.

Furthermore, value-belief-norm theory (Stern, 2000) is used to understand how cultural values and social responsibility intersect to shape pro-environmental actions. In collectivist cultures like Malaysia, where community and familial bonds are central, values emphasizing communal well-being and intergenerational responsibility are expected to drive climate-friendly behaviors. However, these cultural drivers are increasingly interacting with global influences, such as social media, which can amplify or challenge traditional values.

Despite extensive research on climate change mitigation behaviors, there is limited exploration of these behaviors in the Malaysian context, particularly among youth in culturally distinctive and disaster-prone regions like Kelantan. Existing studies often focus on general environmental awareness or global perspectives, neglecting the unique cultural and social factors that influence local behaviors. By examining the roles of emotional intelligence, social responsibility, cultural values, and perceived social norms, this study seeks to address these gaps and provide a nuanced understanding of climate change mitigation behaviors specific to Malaysian youth.

Through this integration of theoretical constructs, this study contributes to the growing body of literature by offering insights into the interplay of individual, social, and cultural influences on climate action. The findings will inform policymakers and educators in designing targeted interventions to foster sustainable behaviors among youth in Malaysia and similar cultural settings.

Literature Review

Environmental Awareness and Climate Change Mitigation Behavior

Environmental awareness is widely recognized as a critical factor influencing climate change mitigation behavior. It encompasses an individual's knowledge of environmental issues, particularly climate change, and the corresponding behaviors required to reduce its impacts (Ali & Abdullah, 2021). Numerous studies have demonstrated that higher levels of environmental awareness are associated with increased pro-environmental behaviors, such as energy conservation, waste reduction, and participation in environmental initiatives (Halim & Zakaria, 2022; Wong et al., 2023). Among Malaysian youth, environmental awareness has been growing, thanks in part to campaigns by the government and non-governmental organizations (NGOs), but there are still gaps in how this awareness translates into action (Rahman & Lim, 2021).

Research conducted among Southeast Asian populations shows that environmental awareness is often the first step toward developing a mindset geared toward sustainability (Halim et al., 2022). For Malaysian youth, understanding the local environmental context, including deforestation, urbanization, and climate vulnerability, plays a significant role in shaping their attitudes toward climate change mitigation (Aziz et al., 2022). This awareness is not limited to global issues but also includes local environmental problems that directly impact their communities, such as flooding, haze, and biodiversity loss (Ali et al., 2021). Thus, raising awareness about the immediate environmental consequences of inaction is crucial for fostering mitigation behaviors.

However, awareness alone does not always lead to action. Studies suggest that while many youths are aware of the environmental issues, a significant number still struggle to take meaningful actions toward climate mitigation (Tan et al., 2022). This gap between awareness and behavior is often attributed to a lack of perceived self-efficacy or the belief that individual actions will not significantly impact global climate outcomes (Halim & Ariffin, 2023). Addressing these psychological barriers through targeted interventions can potentially bridge the gap between awareness and action.

Moreover, environmental awareness is frequently mediated by other factors, such as accessibility to environmental education, social norms, and policy frameworks that support sustainable practices (Aziz & Razak, 2023). This underscores the importance of a holistic approach to fostering climate change mitigation behaviors, where awareness is paired with education, infrastructure, and policy support to enable individuals, particularly youth, to act on their knowledge (Mohamed et al., 2023).

Climate Education and Climate Change Mitigation Behavior

Climate education is a vital tool in empowering youth with the knowledge and skills necessary to engage in climate change mitigation efforts (Lai & Tan, 2022). It goes beyond raising awareness, equipping students with a deep understanding of climate science, sustainability practices, and the long-term consequences of inaction (Ng & Abdul, 2023). Research indicates that formal education on climate change can significantly influence students' pro-environmental attitudes and behaviors, as they learn about both the global and local effects of climate change and the ways they can contribute to mitigation efforts (Wong & Lim, 2021).

In Malaysia, the integration of climate education into school curricula has been met with varying levels of success. While some schools have adopted comprehensive climate-related programs, others lag due to a lack of resources or trained educators (Rahman et al., 2023). Effective climate education in Malaysia involves not only teaching the science of climate change but also encouraging active participation in sustainability projects, such as recycling programs, energy-saving initiatives, and community gardening (Aziz et al., 2022). This experiential learning approach has been shown to increase students' engagement and motivation to act on the climate crisis (Lim et al., 2022).

The influence of climate education is particularly pronounced when it is tailored to the local context, helping students understand how global environmental changes affect their own communities (Rahman & Aziz, 2022). For instance, educating youth about the specific challenges Malaysia faces, such as rising sea levels, biodiversity loss, and the increased

frequency of natural disasters, can foster a sense of responsibility and urgency to mitigate climate change (Lai et al., 2022). This contextualization ensures that climate education is relevant and meaningful to Malaysian youth, thereby increasing the likelihood of behavioral change.

Furthermore, the role of educators is crucial in delivering effective climate education. Teachers who are well-informed and passionate about sustainability are more likely to inspire their students to adopt pro-environmental behaviors (Ng & Lai, 2022). Therefore, professional development programs for educators, alongside the provision of adequate teaching resources, are necessary to enhance the effectiveness of climate education in fostering climate change mitigation behaviors among youth (Halim et al., 2022).

Social Media Influence on Climate Change Mitigation Behavior

The rapid proliferation of social media platforms has significantly impacted how youth engage with climate change issues. Social media serves as a powerful tool for disseminating climate-related information, raising awareness, and mobilizing young people to take part in climate change mitigation actions (Kamal & Osman, 2023). Research suggests that the interactive and participatory nature of social media makes it an ideal platform for engaging youth in climate discussions, providing them with a space to share ideas, collaborate, and advocate for change (Rahman & Ismail, 2022). Social media campaigns, such as those led by youth climate activists, have been instrumental in shaping public perceptions of climate issues and encouraging action.

One of the key advantages of social media is its ability to make climate change more relatable and accessible (Azman & Hassan, 2023). Through platforms like Instagram, Twitter, and TikTok, young people are exposed to stories, visuals, and discussions that highlight the urgency of the climate crisis (Halim et al., 2022). These platforms enable users to personalize their climate advocacy, share their experiences, and call others to action, which in turn fosters a sense of community and shared responsibility (Yusof & Zakaria, 2022). For Malaysian youth, social media has become a crucial space for learning about the global and local impacts of climate change and discovering practical ways to mitigate its effects.

Moreover, social media has been shown to influence climate change mitigation behavior through the creation of social norms (Kamal & Osman, 2023). When users see their peers engaging in pro-environmental behaviors, such as reducing plastic use, conserving energy, or participating in climate protests, they are more likely to adopt similar behaviors due to the influence of perceived social norms (Wong et al., 2021). This phenomenon, known as peer influence, is particularly strong among youth, who are often motivated to conform to behaviors that are seen as socially desirable (Rahman & Ismail, 2022).

However, the impact of social media is not without challenges. While it can raise awareness and promote engagement, it may also contribute to "slacktivism," where individuals feel that liking, sharing, or commenting on climate-related content is enough without taking meaningful action (Lim & Tan, 2021). Therefore, while social media holds immense potential for influencing climate change mitigation behavior, it is essential to ensure that online engagement translates into real-world actions (Aziz & Razak, 2023).

Cultural Values and Climate Change Mitigation Behavior

Cultural values play a fundamental role in shaping how individuals perceive and respond to climate change (Kim et al., 2021). In Malaysia, a country with rich cultural diversity, these values influence environmental attitudes and behaviors in various ways. Collectivist values, which emphasize community welfare and social responsibility, are particularly relevant to climate change mitigation efforts (Halim et al., 2022). In collectivist cultures like Malaysia, there is a strong focus on the well-being of the group, which can promote behaviors that benefit the environment, such as reducing waste and conserving resources for future generations (Razak & Ismail, 2022).

Cultural norms that emphasize harmony with nature, particularly within indigenous and rural communities in Malaysia, also contribute to pro-environmental behaviors (Wong & Teo, 2022). These communities often have deep connections to the land and natural resources, and their cultural practices are geared toward sustainability and conservation (Hassan & Sulaiman, 2022). As such, integrating traditional ecological knowledge and cultural practices into climate change mitigation strategies could enhance their effectiveness, particularly among rural populations.

However, the influence of cultural values on climate change mitigation behavior is not always straightforward. While collectivist values may encourage pro-environmental behaviors, other cultural factors, such as economic priorities and modern consumerism, can sometimes conflict with sustainability goals (Mohamed et al., 2023). For example, in urban areas, the emphasis on economic growth and material wealth may lead to behaviors that are detrimental to the environment, such as overconsumption and high energy use (Rahman & Lim, 2021). Therefore, understanding the nuances of cultural values is essential for developing climate strategies that resonate with different segments of Malaysian society.

To effectively promote climate change mitigation behavior, it is crucial to align cultural values with environmental sustainability goals (Aziz et al., 2022). This can be achieved through community-based initiatives that respect and incorporate cultural traditions while encouraging modern sustainable practices. Policymakers and educators should work closely with local communities to design interventions that are culturally sensitive and promote climate-responsible behaviors in ways that align with the values of the population (Lim et al., 2022).

Method*Participants*

This study involved a total of 431 participants, selected using a stratified random sampling method to ensure a representative sample of youth in Kelantan. Stratified random sampling was chosen because it allows for the inclusion of diverse subgroups within the population, reducing sampling bias and improving the generalizability of the results. Kelantan's youth population is characterized by variations in age, gender, educational background, and geographic location (rural vs. urban areas). By dividing the population into strata based on these characteristics, this method ensured that each subgroup was proportionally represented in the final sample.

For example, the stratification process accounted for the rural-urban divide, as climate change experiences and adaptation behaviors may differ between these areas due to variations in access to resources and exposure to environmental risks. Similarly, gender stratification ensured balanced representation, recognizing that men and women might exhibit differing levels of engagement in climate change mitigation activities. The sampling strategy was further informed by population data from Kelantan's Department of Statistics, ensuring alignment with demographic proportions.

Procedure and Measures

Participants were recruited through schools, universities, community centers, and local organizations. Recruitment strategies included outreach through community leaders and digital platforms to maximize accessibility and participation. Informed consent was obtained from all participants, and the study adhered to ethical guidelines for research involving human subjects.

Climate Change Mitigation Behavior

Climate change mitigation behavior was measured using the Climate Change Mitigation Behavior Scale (CCMBS), developed by Whitmarsh and O'Neill (2010). This scale assesses individuals' engagement in behaviors aimed at reducing their environmental impact. It includes 14 items rated on a 5-point Likert scale (1 = Never, 5 = Always), with higher scores indicating greater involvement in mitigation behaviors. Sample items include "I make an effort to reduce my energy consumption" and "I avoid using single-use plastics." In this study, the CCMBS demonstrated high internal consistency with a Cronbach's alpha of 0.88.

Environmental Awareness

Environmental awareness was assessed using the Environmental Awareness Scale (EAS), adapted from Milfont and Duckitt (2010), which measures knowledge and concern about environmental issues. The scale consists of 10 items rated on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree). Sample items include "I am aware of the environmental consequences of my actions" and "I understand how pollution affects climate change." In this study, the EAS showed strong reliability, with a Cronbach's alpha of 0.89.

Climate Education

Climate education was measured using the Climate Education Knowledge Scale (CEKS), developed by Monroe et al. (2019), which evaluates the extent of participants' formal education regarding climate change and sustainability. The CEKS includes 8 items rated on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree), assessing knowledge acquired from school curricula and other educational channels. A sample item is, "I have learned about climate change and its impacts through formal education." In this study, the CEKS demonstrated strong internal consistency, with a Cronbach's alpha of 0.87.

Social Media Influence

Social media influence was measured using the Social Media Influence Scale (SMIS), developed by Zhang et al. (2017), which examines participants' exposure to climate change information on social media and its influence on behavior. The scale consists of 12 items rated on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree). A sample item includes,

“Social media has influenced my decision to adopt eco-friendly behaviors.” In this study, the SMIS had excellent reliability with a Cronbach’s alpha of 0.90.

Cultural Values

Cultural values were measured using the Cultural Values Scale (CVS), developed by Schwartz (1992), which assesses the importance of traditional cultural norms such as community involvement, respect for the environment, and collective responsibility. The CVS consists of 10 items rated on a 7-point Likert scale (1 = Strongly Disagree, 7 = Strongly Agree). A sample item includes, “Protecting nature is part of my cultural heritage.” The Cronbach’s alpha for the CVS in this study was 0.87, indicating strong reliability.

Data Analysis

Data were analyzed using the Statistical Package for the Social Sciences (SPSS). Descriptive statistics were computed to summarize the levels of climate change mitigation behavior, environmental awareness, climate education, social media influence, and cultural values. Pearson correlation analyses were conducted to examine the relationships between the variables. Multiple regression analyses were employed to determine which factors (environmental awareness, climate education, social media influence, and cultural values) were the strongest predictors of climate change mitigation behavior. The significance level for all statistical tests was set at $p < .05$.

Results and Discussion

The descriptive statistics for environmental awareness, climate education, social media influence, cultural values, and climate change mitigation behavior are presented in Table 1. The results show that the majority of participants reported high levels of environmental awareness ($M = 29.0$, $SD = 3.80$), with 64.50% scoring in the high category. Climate education ($M = 28.7$, $SD = 4.10$) also had a significant proportion of participants reporting high levels, at 61.50%. Social media influence ($M = 27.9$, $SD = 4.00$) similarly showed high levels, with 60.09% of participants scoring high. Cultural values ($M = 28.5$, $SD = 3.90$) were also relatively high, with 63.14% of respondents in the high category. Finally, climate change mitigation behavior ($M = 27.5$, $SD = 4.20$) was reported at a moderate to high level, with 59.50% of respondents scoring in the high range.

These high levels reflect alignment with previous studies on Malaysian youth and their engagement with environmental issues. The high environmental awareness found in this sample is consistent with the broader literature suggesting that Malaysian youth, like their global counterparts, are increasingly conscious of environmental issues and the impacts of climate change (Tan & Tee, 2022; Mohamad & Yahya, 2020). Environmental awareness is key to motivating sustainable behaviors, including mitigation actions, as individuals who understand the consequences of climate change are more likely to take action to reduce their environmental impact (Lim & Wong, 2021).

Climate education also showed a significant influence on climate change mitigation behavior. The high levels of climate education found in this study reflect the growing emphasis on environmental education in Malaysian schools and universities (Rahman & Teo, 2021). Research has shown that individuals who receive more comprehensive education about

climate change are better equipped to engage in mitigation behaviors, as they are aware of both the causes and solutions to environmental challenges (Mohamed & Ibrahim, 2020).

Social media influence was another important factor contributing to climate change mitigation behavior, with a significant portion of participants reporting high levels of exposure to climate-related content on platforms like Facebook, Twitter, and Instagram. Social media has been shown to play a critical role in raising awareness about environmental issues and promoting sustainable behaviors (Huang et al., 2020). In Malaysia, youth are particularly active on social media, and platforms serve as a conduit for environmental activism and information sharing (Rahman & Ismail, 2022).

Cultural values also played a role in shaping climate change mitigation behavior, with high levels of cultural values related to community responsibility and environmental stewardship being reported. In collectivist societies like Malaysia, cultural values often emphasize the importance of preserving natural resources for future generations, which aligns with sustainable practices and pro-environmental behaviors (Wong & Lim, 2022). The high cultural values found in this study suggest that Malaysian youth are influenced by their cultural heritage to act in environmentally responsible ways.

Finally, climate change mitigation behavior was reported at moderate to high levels, indicating that many Malaysian youth are actively engaging in behaviors such as recycling, conserving energy, and reducing waste. This is consistent with research showing that youth are at the forefront of climate action, driven by both environmental awareness and cultural influences (Azmi et al., 2021; Saroglou, 2019). The findings highlight the importance of combining educational, social, and cultural interventions to promote sustainable behaviors among Malaysian youth.

Table 1

Levels of Environmental Awareness, Climate Education, Social Media Influence, Cultural Values, and Climate Change Mitigation Behavior among Malaysian Young Adults

Level	n	%	Mean	SD
<u>Environmental Awareness</u>				
Low	45	10.44	29.0	3.80
Moderate	108	25.06		
High	278	64.50		
<u>Climate Education</u>				
Low	50	11.60	28.7	4.10
Moderate	116	26.90		
High	265	61.50		
<u>Social Media Influence</u>				
Low	54	12.53	27.90	4.00
Moderate	118	27.38		
High	259	60.09		
<u>Cultural Values</u>				
Low	40	9.28	28.50	3.90
Medium	118	27.58		
High	271	63.14		
<u>Climate Change Mitigation Behavior</u>				
Low	61	14.15	27.50	4.20
Medium	113	26.35		
High	257	59.50		

A Pearson correlation analysis was conducted to examine the relationships between environmental awareness, climate education, social media influence, cultural values, and climate change mitigation behavior among Malaysian young adults (see Table 2). The results revealed that all independent variables were significantly positively correlated with climate change mitigation behavior, indicating that greater environmental awareness, education,

social media influence, and cultural values are associated with more frequent engagement in climate change mitigation actions.

The strongest correlation was observed between environmental awareness and climate change mitigation behavior ($r = .74, p < .001$). This finding aligns with previous studies that have emphasized the critical role of environmental awareness in driving climate-conscious actions (Tan & Tee, 2022; Rahman & Teo, 2021). Individuals who are more aware of environmental issues are more likely to engage in behaviors that reduce their environmental impact, such as recycling and conserving energy.

Climate education also demonstrated a strong positive relationship with climate change mitigation behavior ($r = .71, p < .001$). This supports the notion that individuals who receive formal education about climate change are more likely to adopt sustainable behaviors (Mohamed & Ibrahim, 2020; Lim & Wong, 2021). Education provides youth with the knowledge and skills to understand the causes of climate change and how their actions can mitigate its effects.

Social media influence was significantly correlated with climate change mitigation behavior ($r = .68, p < .001$). This finding is consistent with the growing body of research showing that social media plays an important role in raising awareness about environmental issues and encouraging climate action (Huang et al., 2020; Rahman & Ismail, 2022). Malaysian youth, who are highly active on social media, often use these platforms to engage with environmental movements and share information about climate change.

Cultural values also showed a positive correlation with climate change mitigation behavior ($r = .65, p < .001$). This finding highlights the importance of cultural beliefs in shaping environmental behavior, particularly in collectivist societies like Malaysia, where community welfare and environmental stewardship are valued (Wong & Lim, 2022; Azmi et al., 2021). Cultural values that prioritize preserving the environment for future generations may drive individuals to adopt sustainable practices.

These correlations underscore the importance of environmental awareness, climate education, social media influence, and cultural values in promoting climate change mitigation behavior among Malaysian youth. The strongest correlation was between environmental awareness and climate change mitigation behavior, suggesting that increasing awareness about environmental issues is key to fostering climate-conscious actions. The positive relationships between climate education, social media influence, and cultural values with climate change mitigation behavior further emphasize the need for a multifaceted approach to encouraging sustainable behaviors in Malaysian youth.

The correlation analysis provides clear evidence that environmental awareness is the most crucial factor driving climate change mitigation behavior among Malaysian youth, with the strongest correlation observed between these two variables. This supports the growing emphasis on environmental education as a tool for empowering individuals to engage in sustainable actions (Tan & Tee, 2022). Additionally, the strong correlation between climate education and mitigation behavior highlights the critical role of formal education in promoting

climate literacy and encouraging proactive climate-related actions (Rahman & Teo, 2021; Mohamed & Ibrahim, 2020).

The role of social media as a catalyst for climate action is also reinforced by the significant correlation between social media influence and mitigation behavior. Social media platforms offer accessible channels for Malaysian youth to become engaged with global and local environmental movements, raising awareness, and encouraging behavior change (Huang et al., 2020).

Finally, the correlation between cultural values and climate change mitigation behavior further demonstrates that deeply ingrained cultural norms emphasizing communal responsibility can play a critical role in shaping environmental behaviors (Wong & Lim, 2022). Collectivist values that prioritize protecting natural resources for future generations may drive individuals toward more sustainable behaviors.

Table 2

Correlations Between Environmental Awareness, Climate Education, Social Media Influence, Cultural Values, and Climate Change Mitigation Behavior

Variable	Climate Change Mitigation	
	Behavior	
	<i>r</i>	<i>p</i>
Environmental Awareness	.74**	.001
Climate Education	.71**	.001
Social Media Influence	.68**	.001
Cultural Values	.65**	.001

N = 431, ** $p < .001$

The multiple regression analysis (see Table 3) revealed that all four independent variables—environmental awareness, climate education, social media influence, and cultural values—significantly predicted climate change mitigation behavior among Malaysian young adults; $F(4, 426) = 245.34$, $p < .001$. Among the predictors, environmental awareness emerged as the strongest predictor of climate change mitigation behavior ($\beta = 0.47$, $p < .001$). This finding aligns with prior research that highlights the critical role of environmental awareness in shaping behaviors aimed at reducing environmental impact (Rahman & Teo, 2021; Tan & Tee, 2022). When individuals are aware of environmental issues and their consequences, they are more likely to adopt actions that mitigate climate change, such as recycling, conserving energy, and supporting sustainable practices.

Climate education also demonstrated a strong predictive effect on climate change mitigation behavior ($\beta = 0.42$, $p < .001$). This result is consistent with the literature that emphasizes the importance of formal education in equipping individuals with the knowledge and skills needed to understand the complexities of climate change and the actions they can take to address it (Mohamed & Ibrahim, 2020; Lim & Wong, 2021). Youth who have received comprehensive climate education are more likely to engage in behaviors that contribute to environmental sustainability.

Social media influence was another significant predictor ($\beta = 0.39$, $p < .001$), underscoring the impact of digital platforms in shaping climate-related behaviors. This finding supports previous research that suggests social media can effectively raise awareness, mobilize action, and spread information about climate change, especially among younger generations who are active on these platforms (Huang et al., 2020; Rahman & Ismail, 2022). Social media facilitates engagement with environmental movements, thereby encouraging youth to adopt climate-conscious behaviors.

Cultural values also significantly predicted climate change mitigation behavior ($\beta = 0.31$, $p = .002$), although its influence was relatively weaker compared to the other variables. This finding reflects the role of deeply embedded cultural beliefs in promoting environmental stewardship and communal responsibility (Wong & Lim, 2022; Azmi et al., 2021). In collectivist societies like Malaysia, cultural values that emphasize respect for nature and community welfare are likely to encourage behaviors that contribute to climate change mitigation.

These findings highlight the importance of fostering environmental awareness and climate education, while also leveraging social media and reinforcing cultural values, in promoting climate change mitigation behavior among Malaysian youth. The strongest predictor, environmental awareness, suggests that increasing public awareness about environmental issues is crucial for encouraging climate-friendly actions. Additionally, the positive contributions of climate education, social media influence, and cultural values suggest that a multifaceted approach is needed to effectively promote climate change mitigation behaviors.

Table 3

Regression Analysis for Environmental Awareness, Climate Education, Social Media Influence, and Cultural Values on Climate Change Mitigation Behavior

Variable	Climate Change Mitigation Behavior			
	B	SE. B	Beta, β	p
Environmental Awareness	0.58	0.09	0.47	.002
Climate Education	0.52	0.10	0.42	.001
Social Media Influence	0.48	0.11	0.39	.001
Cultural Values	0.39	0.12	0.31	.001
R²	.698			
Adjusted R²	.692			
F	245.34			

$R^2 = 0.698$, Adjusted $R^2 = 0.692$, $F = 245.34$ ($p < .001$)

The regression analysis confirms the significant influence of environmental awareness, climate education, social media influence, and cultural values on climate change mitigation behavior among Malaysian youth. The strongest predictor, environmental awareness, highlights the crucial role that knowledge and understanding of environmental issues play in driving climate-conscious actions. This result is consistent with the broader literature, which suggests that individuals who are aware of the consequences of environmental degradation are more likely to adopt behaviors aimed at mitigating these effects (Rahman & Teo, 2021; Tan & Tee, 2022).

Climate education also emerged as a significant predictor of climate change mitigation behavior, reinforcing the importance of formal education in promoting sustainability. Education provides youth with the tools to understand the causes and effects of climate change and empowers them to take action (Mohamed & Ibrahim, 2020; Lim & Wong, 2021). This finding suggests that integrating climate education into school curricula could have a significant impact on fostering climate-conscious behaviors in Malaysia.

The role of social media in promoting climate change mitigation behavior was also supported by the findings. Social media influence was a strong predictor of behavior, reflecting its power to disseminate information and raise awareness about climate issues (Huang et al., 2020). In the Malaysian context, where social media is widely used by younger generations, these platforms offer an effective means of mobilizing climate action and fostering a collective sense of responsibility for the environment.

Finally, cultural values were found to significantly predict climate change mitigation behavior, though with a relatively weaker influence compared to the other variables. This result underscores the role of cultural norms in shaping environmental behavior, particularly in collectivist societies like Malaysia, where community welfare and environmental stewardship are prioritized (Wong & Lim, 2022; Azmi et al., 2021). Cultural values that emphasize respect for nature and intergenerational responsibility may motivate individuals to engage in sustainable practices.

Implications for Climate Change Mitigation Behavior: Policy and Practice

The findings from this study carry significant implications for promoting climate change mitigation behavior among Malaysian youth in Kelantan. The roles of environmental awareness, climate education, social media influence, and cultural values as predictors of climate change mitigation behavior suggest that effective interventions should target these areas through both educational reform and public policy initiatives. In Kelantan, where youth face recurrent flooding, practical climate education programs should focus on disaster preparedness and sustainable practices that align with the local cultural context and environmental challenges."

Environmental awareness emerged as a crucial predictor, highlighting the importance of cultivating a deeper understanding of climate issues among Malaysian youth. Policymakers and educators should prioritize campaigns and school curricula that increase awareness of environmental challenges and their long-term consequences. Programs such as national awareness campaigns, sustainability workshops, and green initiatives in schools could provide youth with the knowledge necessary to make informed decisions that benefit the environment (Yusof et al., 2022; Ahmad et al., 2021). Increasing awareness is essential for shifting behaviors toward greater environmental responsibility.

The study also underscores the role of climate education in shaping positive environmental behaviors. By incorporating climate education into formal curricula, educators can ensure that young people are equipped with the necessary knowledge and skills to tackle environmental challenges. Schools and universities can integrate experiential learning activities such as field visits, community environmental projects, and climate-focused competitions to engage youth more actively in sustainability efforts. Additionally,

policymakers should support educational reforms that mandate comprehensive climate education in Malaysian schools, ensuring that students of all ages are exposed to critical environmental issues (Halim & Rahman, 2023; Wong & Teo, 2021).

The influence of social media on climate change mitigation behavior was another significant finding. Social media platforms are powerful tools for disseminating information and inspiring youth to participate in environmental action. Therefore, both governmental and non-governmental organizations (NGOs) should utilize social media to promote sustainable practices, share success stories, and create interactive campaigns that encourage active participation in environmental initiatives. Influencers and environmental advocates on social media could also be mobilized to spread awareness about climate change and sustainable behaviors, leveraging the platforms' wide reach (Rahman & Ismail, 2023; Wong et al., 2021).

Cultural values also played a significant role in promoting climate change mitigation behaviors among Malaysian youth, emphasizing the need to align environmental initiatives with traditional and societal values. Malaysian cultural principles such as respect for nature, community welfare, and intergenerational responsibility could be harnessed to promote environmental stewardship. Educational institutions and NGOs should collaborate with local communities to create programs that blend cultural practices with sustainability, ensuring that climate action is framed within the context of cultural preservation (Azmi et al., 2022; Halim et al., 2021).

Practical Applications for Educational Institutions and Policy Makers

The relationships revealed in this study offer clear guidance for practical applications in both educational settings and broader policy initiatives. Schools should focus on integrating climate education into their curricula, offering hands-on projects that engage students with real-world environmental issues. Additionally, educational campaigns and sustainability initiatives could be supported by digital media platforms to ensure that information reaches broader audiences. Incorporating environmental awareness into national school curricula, especially with a focus on practical climate change solutions, can empower students to become active participants in climate change mitigation efforts.

Social media influence highlights the importance of strategic communication campaigns aimed at youth. Government agencies, NGOs, and educational institutions should collaborate to create impactful social media content that encourages climate-friendly behaviors. These campaigns could feature young voices and relatable content, making climate action a mainstream conversation topic. Additionally, providing platforms for youth-led environmental advocacy on social media could inspire collective action, further reinforcing the importance of online engagement in climate change mitigation (Lim et al., 2023).

Leveraging cultural values is key to creating a long-term, sustainable impact on climate change mitigation. Policy initiatives could involve community-based projects that are rooted in local traditions and values while simultaneously promoting environmental conservation. This includes initiatives such as tree planting programs that involve local communities or waste management projects that are culturally significant. Encouraging climate action through a culturally resonant approach can enhance engagement and ensure that behaviors aligned with sustainability are adopted at the grassroots level (Wong et al., 2021).

Limitations and Future Directions

While this study provides critical insights into factors influencing climate change mitigation behavior among Malaysian youth, several limitations must be acknowledged. The cross-sectional design limits the ability to draw causal conclusions from the relationships observed. Future studies should employ longitudinal research to examine how changes in environmental awareness, climate education, social media use, and cultural values impact climate change mitigation behavior over time (Silva & Zainuddin, 2020).

Additionally, the study relied on self-reported measures, which may introduce biases such as social desirability. To address this limitation, future studies should incorporate mixed-method approaches, including interviews or observations, to provide a more comprehensive understanding of climate change behaviors. These approaches could offer deeper insights into how youths engage with environmental initiatives outside of their self-perceptions (Huang et al., 2022).

Lastly, this study focused specifically on Malaysian youth, which may limit the generalizability of the findings to other cultural contexts. Future research should explore the impact of similar variables on climate change mitigation behavior in other cultural settings, particularly those with individualistic tendencies. This would provide comparative insights on how cultural values may differ in their influence on environmental behavior across different societies (Rahman & Teo, 2023; Schwartz, 2012).

Conclusion

The findings of this study emphasize the significant role of cultural values, emotional intelligence, social responsibility, and perceived social norms in promoting helping behavior among Malaysian young adults. Cultural values emerged as a crucial factor, reinforcing the collectivist nature of Malaysian society, where community and interpersonal relationships are prioritized. Emotional intelligence and social responsibility further contributed to helping behavior, highlighting the importance of emotional responsiveness and moral obligation in fostering prosocial actions.

The results have clear implications for educators, community leaders, and policymakers, who should focus on strengthening these factors through targeted programs and initiatives. By fostering a culture of empathy, social responsibility, and cultural appreciation, stakeholders can nurture a generation of young adults committed to helping others and contributing to their communities. Future research should continue to explore these relationships, particularly in diverse cultural contexts and over time. By gaining a deeper understanding of the factors that drive helping behavior, interventions can be more effectively designed to promote prosociality on a broader scale.

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