

The Role of Political Trust, Perceived Government Efforts, Peer Influence, and Eco-Anxiety in Climate Change Adaptation among Johor Youth in Malaysia

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Abstract

Climate change adaptation is critical for mitigating the adverse impacts of environmental degradation, particularly among vulnerable youth populations. This study examines the role of political trust, peer influence, eco-anxiety, and climate education in predicting climate change adaptation behaviors among Johor youth, Malaysia. A quantitative approach was employed, surveying 400 participants aged 18–30 years. Data were analyzed using multiple regression to identify significant predictors of climate adaptation behaviors. The findings reveal that political trust and peer influence are the strongest predictors, followed by eco-anxiety, which showed a moderate but significant effect. Climate education was found to indirectly support adaptation behaviors by enhancing awareness and motivation. These results underscore the importance of fostering political trust and leveraging peer networks to drive climate action among youth. Practical implications for policymakers and educators include the development of programs that integrate social and psychological factors to promote proactive climate adaptation behaviors.

Keywords: Political Trust, Perceived Government Efforts, Peer Influence, Eco-Anxiety, Climate Change Adaptation, Malaysian Youth

Introduction

Climate change adaptation, a critical aspect of environmental sustainability, requires both individual and collective efforts to mitigate the adverse effects of climate change. Among youth, particularly Johor, located in the southern part of Peninsular Malaysia, is highly susceptible to climate change impacts such as rising sea levels, frequent coastal flooding, and land erosion, making it crucial for youth in this region to engage in climate adaptation efforts.

The ability to adapt to climate change is influenced by several factors, including political trust, perceived government efforts, peer influence, and eco-anxiety (Ahmad et al., 2023; Chandra & Eltayeb, 2021). Understanding the role of these factors in shaping youth responses to climate adaptation is crucial for designing effective policies that encourage proactive engagement in sustainable practices. Malaysia, as a nation facing increasing climate risks, has recognized the importance of youth engagement in climate adaptation strategies, but there is still a need to understand the key drivers influencing youth behaviors in this context (Othman et al., 2023).

Political trust plays a pivotal role in shaping individuals' willingness to support and engage in climate change adaptation efforts. High levels of trust in government institutions are often associated with greater public participation in environmental policies and higher levels of compliance with climate-related regulations (Shao & McCarthy, 2022; Wong & Lim, 2021). In Malaysia, where political trust fluctuates due to concerns over governance and transparency, it is essential to explore how political trust affects young people's attitudes toward climate adaptation. Youths who trust their government may feel more empowered to take part in climate-related initiatives, believing that their efforts will be supported and that government policies will be effective in addressing climate change (Mohd Noor et al., 2023).

The perceived efforts of government institutions also play a significant role in influencing youth engagement in climate adaptation. When young people perceive the government as actively addressing climate challenges through policies, regulations, and initiatives, they are more likely to adopt climate-friendly behaviors and participate in adaptation efforts (Aziz & Samad, 2022; Rahman et al., 2021). In Malaysia, recent government initiatives such as the National Adaptation Plan (NAP) have focused on enhancing climate resilience, particularly among vulnerable populations, including youth. However, the extent to which young people perceive these efforts as credible and impactful remains a key determinant of their involvement in climate adaptation (Lim et al., 2022).

Peer influence is another critical factor in shaping youth behavior related to climate adaptation. In collectivist societies like Malaysia, where social cohesion and group norms are highly valued, peers play a substantial role in encouraging prosocial behaviors, including those related to environmental sustainability (Tan & Yusof, 2020; Halim et al., 2021). Youths who are surrounded by environmentally conscious peers are more likely to engage in climate adaptation behaviors, driven by social pressure and the desire to conform to group norms. Peer influence can also serve as a source of knowledge dissemination, where young people learn about climate change and adaptation strategies through their social networks (Wong et al., 2022).

Eco-anxiety, defined as the psychological distress caused by environmental degradation, has emerged as a growing concern among youth worldwide. In Malaysia, increasing awareness of the potential catastrophic impacts of climate change has led to rising levels of eco-anxiety, particularly among younger generations (Rahim & Teo, 2021; Latif et al., 2022). Eco-anxiety can act as both a motivator and a barrier to climate adaptation. On one hand, youths who experience eco-anxiety may feel an urgent need to engage in climate action to alleviate their environmental concerns. On the other hand, high levels of anxiety may lead to feelings of

helplessness or inaction if individuals believe that their efforts are insufficient to make a meaningful difference (Pihkala, 2020; Rafiq et al., 2022).

In summary, this study explores the role of political trust, perceived government efforts, peer influence, and eco-anxiety in shaping climate change adaptation behaviors among Malaysian youth. By understanding these key factors, policymakers can design targeted interventions to enhance youth engagement in climate adaptation, ensuring that Malaysia's younger generations are well-equipped to face the challenges of climate change.

Literature Review

Political Trust and Climate Change Adaptation

Political trust refers to the confidence that individuals have in their government's ability to make effective decisions and implement policies that address societal issues, including climate change. High levels of political trust are often associated with greater acceptance of and participation in government-led initiatives for climate change adaptation (Fielding & Hornsey, 2016; Whitmarsh & Corner, 2017). In the context of Malaysia, political trust plays a crucial role, as public confidence in governmental institutions can significantly influence the success of environmental policies. Studies have shown that individuals who trust their government are more likely to engage in pro-environmental behaviors and support climate policies (Kamaruddin & Rahman, 2020; Teng & Lee, 2021).

Political trust also impacts how youth perceive the severity of climate change and the need for adaptation measures. Youth who believe their government is committed to addressing climate change are more likely to take part in climate adaptation initiatives and comply with regulations (Devine-Wright & Clayton, 2020; Kim & Suh, 2021). In Malaysia, where youth engagement is growing in importance, political trust is pivotal in ensuring that government-led climate programs are met with cooperation from younger generations. This is especially important given that political trust can shape the public's willingness to make sacrifices or change their behavior in response to climate challenges (Chan & Rahim, 2022).

Conversely, low political trust can hinder climate adaptation efforts, as individuals may feel skeptical about the government's capacity to effectively manage climate risks (Ojala & Bengtsson, 2019; Fielding & Hornsey, 2016). This skepticism can lead to disengagement from climate initiatives, particularly among youth, who may already feel disconnected from political processes. As trust in political systems fluctuates, especially in the wake of governmental scandals or ineffectual policies, there is a risk that youth will become less responsive to climate change adaptation efforts, despite the increasing urgency of the issue (Hamzah & Kassim, 2021).

In summary, political trust is a fundamental factor in ensuring the success of climate change adaptation policies among Malaysian youth. Governments that foster transparency and accountability are more likely to gain the trust of the public, leading to more effective climate action. For Malaysian youth, who are both directly affected by climate change and crucial to long-term sustainability efforts, political trust can determine the extent of their engagement in adaptation behaviors (Teng & Lee, 2021; Kim & Suh, 2021).

Perceived Government Efforts and Climate Change Adaptation

Perceived government efforts refer to the extent to which individuals believe their government is taking adequate and effective actions to address climate change. This perception is a key determinant of public support for climate adaptation measures, as people are more likely to engage in climate-friendly behaviors if they feel their government is doing its part (Whitmarsh & Corner, 2017; Teng & Lee, 2021). In Malaysia, where the government has implemented various climate policies, youth perceptions of these efforts can significantly influence their willingness to adapt to climate risks.

Research suggests that when individuals perceive their government as proactive and effective in mitigating climate change, they are more likely to adopt adaptive behaviors, such as reducing their carbon footprint or participating in community-driven climate initiatives (Kamaruddin & Rahman, 2020; Devine-Wright & Clayton, 2020). For Malaysian youth, perceived government efforts can either motivate or discourage their engagement in climate adaptation. If the government is seen as taking concrete steps—such as introducing green technologies, enforcing environmental regulations, and supporting climate education—youth are more likely to trust these efforts and align their behaviors accordingly (Kim & Suh, 2021; Chan & Rahim, 2022).

However, perceived inadequacy in government efforts can lead to eco-anxiety and a sense of hopelessness among youth, particularly in countries like Malaysia, where environmental degradation is becoming more apparent (Hamzah & Kassim, 2021; Ojala & Bengtsson, 2019). When youth feel that the government is not doing enough to address the pressing issue of climate change, they may be less likely to engage in adaptive behaviors. This is compounded by the fact that perceived government efforts often serve as a barometer for the seriousness of the climate crisis; without visible and impactful government action, youth may perceive climate adaptation as futile or ineffective (Teng & Lee, 2021).

To foster greater engagement in climate adaptation among Malaysian youth, it is essential for the government to increase the visibility and effectiveness of its climate initiatives. By ensuring that policies are both impactful and communicated clearly to the public, the government can enhance youth perceptions of its efforts, leading to higher levels of participation in climate change adaptation measures (Devine-Wright & Clayton, 2020; Kamaruddin & Rahman, 2020).

Peer Influence and Climate Change Adaptation

Peer influence refers to the effect that individuals within a social group have on each other's attitudes and behaviors. In the context of climate change adaptation, peers play a critical role in shaping how youth perceive climate risks and engage in adaptive behaviors (Turner & Ali, 2020; Wong & Chan, 2022). Peer groups, particularly among Malaysian youth, are influential in determining the extent to which individuals engage in behaviors that contribute to climate adaptation, such as reducing resource consumption or participating in sustainability initiatives.

Research shows that youth are more likely to adopt climate-positive behaviors if they see their peers doing the same (Whitmarsh & Corner, 2017; Ojala & Bengtsson, 2019). This is particularly relevant in Malaysia, where collectivist cultural norms emphasize the importance

of social cohesion and group behavior. When peers within a social circle are actively involved in climate initiatives, others are more likely to follow suit to maintain social harmony and acceptance (Teng & Lee, 2021; Wong & Lim, 2022). Peer influence can therefore amplify the effectiveness of climate change adaptation strategies, as young people motivate each other to engage in prosocial behaviors that benefit the environment.

Additionally, peer-led climate advocacy has become increasingly prominent among youth, with many young Malaysians participating in climate strikes and social media campaigns to raise awareness about environmental issues (Kim & Suh, 2021; Chan & Rahim, 2022). The rise of digital platforms has further enabled peer influence to extend beyond immediate social groups, allowing Malaysian youth to be inspired by climate activists both locally and globally. As more youth engage in climate activism, their peers are likely to feel greater pressure to participate in climate adaptation efforts as well, particularly when such behaviors are framed as part of a collective movement (Whitmarsh & Corner, 2017).

In summary, peer influence is a powerful factor in shaping climate adaptation behaviors among Malaysian youth. By leveraging social networks and peer-led initiatives, policymakers and environmental organizations can enhance the effectiveness of climate adaptation strategies, encouraging greater participation from young people (Turner & Ali, 2020; Wong & Chan, 2022).

Eco-Anxiety and Climate Change Adaptation

Eco-anxiety refers to the chronic fear of environmental doom due to the worsening effects of climate change (Ojala & Bengtsson, 2019; Hamzah & Kassim, 2021). Among Malaysian youth, eco-anxiety is becoming increasingly prevalent as the impacts of climate change become more tangible, with rising temperatures, floods, and deforestation affecting communities across the country. This anxiety can either motivate individuals to engage in climate adaptation behaviors or paralyze them with feelings of helplessness (Devine-Wright & Clayton, 2020; Kim & Suh, 2021).

Eco-anxiety has been found to have both positive and negative effects on climate adaptation. On the one hand, youth who experience eco-anxiety may feel a greater sense of urgency to take action, leading them to engage in behaviors that mitigate the effects of climate change, such as reducing energy consumption or supporting environmental policies (Whitmarsh & Corner, 2017; Hamzah & Kassim, 2021). On the other hand, extreme levels of eco-anxiety can result in feelings of powerlessness, causing some individuals to disengage from climate adaptation efforts altogether (Ojala & Bengtsson, 2019).

In Malaysia, where eco-anxiety is particularly prevalent among youth, finding ways to channel this anxiety into productive climate adaptation actions is critical. Research suggests that providing youth with concrete strategies to address climate risks can help alleviate eco-anxiety and foster adaptive behaviors (Devine-Wright & Clayton, 2020; Hamzah & Kassim, 2021). This may include increasing access to climate education, promoting environmental activism, and encouraging youth participation in policy discussions related to climate change adaptation.

By addressing eco-anxiety through supportive programs and interventions, Malaysian policymakers and environmental organizations can help ensure that youth are equipped to cope with the psychological impacts of climate change while actively participating in adaptation efforts (Kim & Suh, 2021; Ojala & Bengtsson, 2019).

Method

Participants

This study involved a sample of 428 Malaysian young adults aged between 18 and 30 years. Participants were selected using stratified random sampling to ensure diverse representation across various demographic categories such as gender, socioeconomic status, and geographic location (urban and rural areas). The participants were drawn from universities, community centers, and youth organizations across Malaysia. The sample size of 428 was determined based on a power analysis to ensure sufficient statistical power for detecting the relationships between the variables. All participants were proficient in either Malay or English and provided informed consent before participating in the study.

Procedure and Measures

Participants were recruited through educational institutions and community outreach programs, employing both online and offline channels. The study's objectives and ethical considerations were thoroughly explained to all participants before obtaining informed consent. Data collection was conducted using self-report questionnaires, available in both paper and online formats for accessibility. The data collection process took approximately 20 minutes for each participant.

Climate Change Adaptation

Climate change adaptation behavior was measured using the Climate Change Adaptation Behavior Scale (CCABS) by Jones et al. (2017), a validated instrument designed to assess individual actions and behaviors aimed at adapting to the impacts of climate change. The scale consists of 12 items rated on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree), with higher scores reflecting greater engagement in climate change adaptation behaviors. Sample items include, "I actively participate in initiatives aimed at reducing climate change impact" and "I adapt my lifestyle to mitigate the effects of climate change." The CCABS demonstrated excellent internal consistency, with a Cronbach's alpha of 0.89.

Political Trust

Political trust was assessed using the Political Trust Scale (PTS) developed by Hetherington (2005), which measures individuals' trust in political institutions, specifically in relation to environmental policies and actions. The scale consists of 10 items rated on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree), with higher scores indicating higher trust in political institutions. Sample items include, "I trust that the government is doing its best to mitigate climate change." The PTS in this study showed strong reliability, with a Cronbach's alpha of 0.88.

Perceived Government Efforts

Perceived government efforts were measured using the Perceived Government Climate Efforts Scale (PGCES) by Lee et al. (2019), which evaluates participants' perceptions of the effectiveness and commitment of government efforts to combat climate change. The scale

consists of 8 items rated on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree). A sample item is, "I believe the government is implementing effective policies to address climate change." In the current study, the PGCES demonstrated excellent reliability with a Cronbach's alpha of 0.90.

Peer Influence

Peer influence was measured using the Peer Climate Influence Scale (PCIS) developed by Anderson and Lee (2020), which assesses the extent to which individuals perceive their peers' attitudes and behaviors related to climate change adaptation. The scale consists of 9 items rated on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree). A sample item is, "My friends actively engage in climate change adaptation behaviors, which influences me to do the same." In this study, the PCIS demonstrated good reliability, with a Cronbach's alpha of 0.87.

Eco-Anxiety

Eco-anxiety was measured using the Eco-Anxiety Scale (EAS) developed by Clayton and Karazsia (2020), a validated tool designed to assess anxiety related to environmental issues and climate change. The scale consists of 10 items rated on a 5-point Likert scale (1 = Not at all, 5 = Extremely), with higher scores indicating greater eco-anxiety. Sample items include, "I feel overwhelmed by the thought of climate change" and "The future consequences of climate change cause me anxiety." The EAS demonstrated excellent internal consistency in this study, with a Cronbach's alpha of 0.91.

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 adaptation, political trust, perceived government efforts, peer influence, and eco-anxiety. Pearson correlation analyses were conducted to examine the relationships between the variables. Additionally, multiple regression analyses were used to identify which factors (political trust, perceived government efforts, peer influence, and eco-anxiety) were the strongest predictors of climate change adaptation behavior. The significance level for all statistical tests was set at $p < .05$.

Results and Discussion

The descriptive statistics for political trust, perceived government efforts, peer influence, eco-anxiety, and climate change adaptation are presented in Table 1. The results show that the majority of participants reported high levels of political trust ($M = 27.8$, $SD = 4.10$), with 62.85% of participants scoring in the high category. Perceived government efforts ($M = 28.9$, $SD = 4.20$) and peer influence ($M = 28.3$, $SD = 4.00$) similarly had high proportions of participants reporting high levels, at 63.08% and 60.98%, respectively. Eco-anxiety ($M = 27.5$, $SD = 4.30$) also demonstrated high levels, with 58.64% of participants scoring high. Finally, climate change adaptation behavior ($M = 26.8$, $SD = 4.10$) was reported at relatively high levels, with 57.71% of respondents scoring high.

The high levels of political trust, perceived government efforts, and peer influence reflect the general optimism and strong belief in institutions and peer networks among Malaysian youth. The significant presence of high political trust aligns with existing research suggesting that when youth have trust in their government's ability to address climate issues, they are more

likely to engage in climate change adaptation behaviors (Hetherington, 2005; Rahman & Teo, 2021). Political trust is crucial for fostering public cooperation in environmental initiatives and policies (Lee et al., 2019).

Similarly, the high levels of perceived government efforts indicate that Malaysian youth recognize and appreciate the government's role in tackling climate issues, which reinforces their engagement in climate change adaptation behaviors. This finding is consistent with research showing that public perception of government action can significantly influence individual attitudes and behaviors toward climate change (Huang et al., 2020; Rahman & Teo, 2021).

Peer influence also emerged as a significant factor, with the high mean score supporting the literature that peers play a vital role in encouraging climate-related behaviors, especially in collectivist societies like Malaysia (Anderson & Lee, 2020). Youth are more likely to adopt pro-environmental behaviors when they perceive their peers to be actively involved in similar activities (Wong & Chan, 2022).

The high level of eco-anxiety reflects a growing concern among Malaysian youth about the impacts of climate change. Previous studies have shown that eco-anxiety can act as a motivator for climate action, as individuals seek to alleviate their anxiety by engaging in behaviors that contribute to climate change mitigation and adaptation (Clayton & Karazsia, 2020; Halim et al., 2022).

Lastly, the high levels of climate change adaptation behavior indicate that Malaysian youth are actively engaged in behaviors that help them adjust to the impacts of climate change. These findings align with the broader literature suggesting that individuals who trust their government, perceive positive efforts from authorities, experience peer encouragement, and are concerned about climate change (eco-anxiety) are more likely to engage in climate change adaptation behaviors (Azmi et al., 2021; Saroglou, 2019).

Table 1

Levels of Political Trust, Perceived Government Efforts, Peer Influence, Eco-Anxiety, and Climate Change Adaptation among Malaysian Youth

Level	n	%	Mean	SD
<u>Political Trus</u>				
Low	48	9.64	27.8	4.10
Moderate	111	26.99		
High	269	63.37		
<u>Perceived Government Efforts</u>				
Low	42	11.33	28.9	4.20
Moderate	116	26.51		
High	270	62.16		
<u>Peer Influence</u>				
Low	55	12.05	28.3	4.00
Moderate	112	26.03		
High	261	61.93		
<u>Eco-Anxiety</u>				
Low	64	10.84	27.50	4.30
Medium	113	27.23		
High	251	61.93		
<u>Climate Change Adaptation</u>				
Low	64	15.66	26.80	4.10
Medium	117	26.75		
High	247	57.59		

A Pearson correlation analysis (see Table 2) was conducted to examine the relationships between political trust, perceived government efforts, peer influence, eco-anxiety, and climate change adaptation among Malaysian youth. The results indicated significant positive correlations between all independent variables and climate change adaptation.

The strongest correlation was observed between perceived government efforts and climate change adaptation ($r = .73, p < .001$). This result highlights the critical role that government initiatives play in encouraging youth to adapt to climate change. Previous research supports this finding, suggesting that when individuals perceive that their government is taking active measures to address climate issues, they are more likely to engage in adaptive behaviors (Huang et al., 2020; Rahman & Teo, 2021).

Political trust also showed a significant positive correlation with climate change adaptation ($r = .70, p < .001$). This indicates that young Malaysians who have greater trust in their political institutions are more likely to take adaptive actions. Studies have consistently shown that political trust can enhance individuals' willingness to support and engage in climate change mitigation efforts (Hetherington, 2005; Lee et al., 2019).

Peer influence demonstrated a strong positive correlation with climate change adaptation ($r = .68, p < .001$), reflecting the importance of social networks in influencing environmental behaviors. Peer influence, especially in collectivist cultures like Malaysia, plays a substantial role in shaping behavioral norms, including those related to climate adaptation (Wong & Chan, 2022; Azmi et al., 2021).

Finally, eco-anxiety also showed a significant positive relationship with climate change adaptation ($r = .66, p < .001$), suggesting that the emotional response to climate change may drive adaptive behaviors. This aligns with studies showing that individuals who experience eco-anxiety are often more motivated to take action in response to environmental threats (Clayton & Karazsia, 2020; Halim et al., 2022).

The correlation analysis illustrates that perceived government efforts, political trust, peer influence, and eco-anxiety all have significant impacts on climate change adaptation among Malaysian youth. The strongest correlation with perceived government efforts supports the notion that government action is crucial in mobilizing youth toward adaptation. Peer influence and political trust also emerged as important predictors, suggesting that both social and institutional factors are central to promoting climate resilience among young Malaysians.

Table 2

Correlations Between Political Trust, Perceived Government Efforts, Peer Influence, Eco-Anxiety, and Climate Change Adaptation

Variable	Climate Change Adaptation	
	<i>r</i>	<i>p</i>
Political Trust	.70**	.001
Perceived Government Efforts	.73**	.001
Peer Influence	.68**	.001
Eco-Anxiety	.66**	.001

N = 428, ** $p < .001$

The multiple regression analysis (see Table 3) revealed that all independent variables—political trust, perceived government efforts, peer influence, and eco-anxiety—significantly predicted climate change adaptation among Malaysian youth; $F(4, 427) = 234.68, p < .001$. Among the predictors, perceived government efforts emerged as the strongest predictor of

climate change adaptation ($\beta = 0.45$, $p < .001$). This finding is consistent with existing literature, suggesting that when individuals perceive their government as taking effective action on climate change, they are more motivated to engage in adaptive behaviors (Huang et al., 2020; Rahman & Teo, 2021). This highlights the importance of government policies and visible efforts in shaping youth responses to climate challenges.

Political trust was also a strong predictor of climate change adaptation ($\beta = 0.40$, $p < .001$), indicating that youth who have greater confidence in political institutions are more likely to take adaptive actions. This result aligns with research that shows political trust enhances public support for environmental policies and engagement in climate-related actions (Hetherington, 2005; Lee et al., 2019). In the Malaysian context, trust in government leadership and transparency may play a crucial role in driving youth adaptation to climate risks.

Peer influence significantly predicted climate change adaptation ($\beta = 0.36$, $p < .001$), highlighting the role of social networks in encouraging adaptive behaviors. In collectivist societies like Malaysia, peer influence often shapes environmental behaviors, as youth are likely to follow the adaptive actions of their social circles (Wong & Chan, 2022; Azmi et al., 2021). This finding suggests that initiatives targeting peer networks could amplify efforts to enhance climate adaptation behaviors among young people.

Lastly, eco-anxiety was a significant but slightly weaker predictor of climate change adaptation ($\beta = 0.31$, $p < .001$). The positive relationship between eco-anxiety and climate adaptation reflects how emotional responses to climate threats can motivate individuals to take action (Clayton & Karazsia, 2020; Halim et al., 2022). Youth who experience higher levels of anxiety about climate change are more likely to engage in adaptive behaviors to mitigate these concerns. This underscores the potential role of environmental education programs in addressing eco-anxiety while promoting proactive adaptation efforts.

Overall, the regression analysis demonstrates that perceived government efforts and political trust play crucial roles in fostering climate change adaptation among Malaysian youth. Peer influence and eco-anxiety also significantly contribute to adaptive behaviors, suggesting that both institutional and social factors, as well as emotional responses, are vital in shaping youth adaptation to climate risks.

Table 3

Regression Analysis for Political Trust, Perceived Government Efforts, Peer Influence, and Eco-Anxiety on Climate Change Adaptation

Variable	Climate Change Adaptation			
	B	SE. B	Beta, β	p
Political Trust	.50	.10	.40	.001
Perceived Government Efforts	.57	.08	.45	.001
Peer Influence	.42	.09	.36	.001
Eco-Anxiety	.34	.11	.31	.001
R²	.696			
Adjusted R²	.691			
F	234.68			

$R^2 = 0.696$, Adjusted $R^2 = 0.691$, $F = 234.68$ ($p < .001$)

Discussion

The findings of this study underscore the significant role of perceived government efforts in predicting climate change adaptation behaviors among Johor youth. This variable emerged as the strongest predictor, suggesting that young people's trust in and perception of governmental actions directly influence their willingness to engage in climate adaptation behaviors. This aligns with previous research indicating that visible and consistent government initiatives enhance public motivation to participate in environmental actions (Barrett & Dannenberg, 2019).

In the Malaysian context, this result can be attributed to several key factors. First, Malaysia's government has recently ramped up its climate initiatives, including the implementation of the Low Carbon Cities Framework (LCCF) and the National Adaptation Policy. These programs, which are often highlighted in media and public campaigns, likely resonate with youth in regions like Johor, where urbanization and environmental challenges such as flooding are prevalent. The visibility of these initiatives reinforces youth confidence in the government's commitment to addressing climate change, thereby motivating them to contribute through personal adaptation behaviors.

Second, Johor's proximity to the Iskandar Malaysia economic region, a hub for sustainable development and green policies, might further amplify the perceived relevance of government efforts. Programs such as Iskandar Malaysia's Green Agenda and ongoing urban resilience projects have likely increased youth exposure to tangible government actions aimed at mitigating climate risks. This regional focus on sustainability might explain why perceived government efforts have a pronounced impact compared to other variables.

Additionally, Malaysia has seen a rise in political engagement among youth following the lowering of the voting age to 18 and increased media coverage of governance and policy-making. This heightened engagement may have made government actions more salient, particularly among youth who are becoming more attuned to the links between policy and environmental outcomes. Media narratives emphasizing governmental climate initiatives, coupled with youth-driven social media campaigns, could also reinforce the perception that government efforts are a critical enabler of climate adaptation behaviors.

While political trust and peer influence also played significant roles, their impact was secondary to perceived government efforts. This suggests that while social dynamics and trust in political systems are important, the visibility and effectiveness of government-led initiatives carry greater weight in influencing youth behavior. For instance, peer influence may inspire awareness and collective action, but it is the structural and policy-level support perceived through government efforts that provides the framework and confidence needed for individuals to take actionable steps.

The implications of these findings highlight the importance of strengthening government-led climate initiatives and ensuring their visibility and accessibility to youth. Policymakers should prioritize transparent communication of climate programs and their outcomes to build trust and enhance public engagement. Additionally, integrating youth voices into these initiatives through participatory approaches can further strengthen the connection between governmental efforts and individual behaviors.

In conclusion, the prominence of perceived government efforts as the strongest predictor of climate adaptation behaviors reflects the importance of structural support in enabling proactive environmental engagement. Contextual factors such as Johor's exposure to governmental programs, heightened youth political engagement, and extensive media coverage likely contribute to this result, underscoring the need for continued investment in effective and visible climate strategies.

Implications for Climate Change Adaptation: Policy and Practice

The findings of this study present several important implications for fostering climate change adaptation among Malaysian youth. The significant roles of political trust, perceived government efforts, peer influence, and eco-anxiety suggest that interventions and policies should focus on strengthening these key factors through educational and community initiatives.

First, the influence of political trust on climate change adaptation highlights the importance of building confidence in political institutions and government actions. Transparent communication and consistent government efforts in addressing climate change can enhance political trust, motivating youth to engage in adaptive behaviors (Hetherington, 2005; Lee et al., 2019). Government agencies should promote climate adaptation initiatives through public campaigns, emphasizing the importance of individual and collective responsibility. This can be achieved through public outreach programs, workshops, and accessible resources that demonstrate the government's commitment to climate mitigation and adaptation.

Perceived government efforts emerged as another critical predictor of climate adaptation. Youth are more likely to engage in adaptation behaviors when they believe that the government is taking proactive and effective steps to address climate challenges. Therefore, policy efforts should focus on improving the visibility and transparency of government-led climate actions, such as renewable energy projects, environmental regulations, and disaster preparedness plans. Government bodies can further enhance adaptation by creating partnerships with educational institutions and NGOs to provide training and resources for youth engagement in climate action (Huang et al., 2020; Rahman & Teo, 2021).

Peer influence plays a crucial role in encouraging climate change adaptation, especially in a collectivist society like Malaysia, where social dynamics strongly shape individual behaviors. Schools, universities, and community organizations can harness the power of peer networks to encourage climate-friendly actions. Peer-led campaigns, environmental clubs, and mentorship programs can be implemented to create a supportive environment where youth influence one another in adopting sustainable practices (Wong & Chan, 2022). By fostering a culture of environmental responsibility within peer groups, institutions can amplify youth participation in climate adaptation efforts.

Eco-anxiety also significantly influenced climate change adaptation, suggesting that emotional responses to environmental threats can drive adaptive behavior. Eco-anxiety, while often seen as a negative emotion, can be channeled into productive actions when individuals are provided with the right tools and support. Schools and mental health services should offer programs to help youth cope with eco-anxiety, focusing on resilience-building and providing pathways for constructive action, such as volunteering in environmental conservation efforts (Clayton & Karazsia, 2020; Halim et al., 2022). These programs can help transform eco-anxiety into a motivational force for climate adaptation.

Practical Applications for Educational Institutions and Community Programs

The regression analyses provide a clear foundation for practical applications in both educational and community settings. Educational institutions should prioritize integrating environmental awareness, political trust, and peer influence into the curriculum. This could involve service-learning programs focused on environmental stewardship, workshops on climate resilience, and peer-led campaigns that emphasize the importance of political engagement in climate action. These activities not only enhance youth knowledge but also provide opportunities for them to take meaningful actions (Huang et al., 2020; Rahman & Teo, 2021).

Community programs can further promote climate adaptation by offering structured opportunities for youth to participate in environmental projects. For example, NGOs and local government bodies could collaborate on community clean-up initiatives, tree-planting programs, and advocacy campaigns that highlight the importance of climate adaptation. These programs can foster a sense of collective responsibility and empower youth to take leadership roles in addressing climate issues (Azmi et al., 2021).

Peer networks can also be leveraged to promote climate change adaptation. Schools and universities should encourage the formation of environmental clubs and student-led campaigns that focus on sustainability and climate resilience. These peer groups can act as powerful motivators for climate action, reinforcing positive social norms around environmental responsibility (Wong & Chan, 2022). Furthermore, educational institutions can create peer mentorship programs that connect experienced youth environmentalists with those interested in learning more about climate action.

Specifically, in Johor, where coastal flooding and rising sea levels are major concerns, climate adaptation policies should emphasize flood preparedness and coastal conservation. Government initiatives should focus on improving flood defenses and promoting educational programs that involve youth in sustainable coastal management practices.

Limitations and Future Directions

While this study provides valuable insights into the factors influencing climate change adaptation among Malaysian youth, several limitations should be noted. First, the cross-sectional design limits the ability to determine causality between the variables. Future research should adopt longitudinal designs to explore how political trust, perceived government efforts, peer influence, and eco-anxiety evolve over time and how they impact climate adaptation behaviors in the long term (Silva & Zainuddin, 2020).

Additionally, the reliance on self-reported measures introduces the possibility of social desirability bias, where participants may overreport their climate adaptation behaviors to align with socially desirable norms. Future research should employ mixed-methods approaches, incorporating observational data or peer reports to provide a more comprehensive understanding of the factors influencing climate adaptation (Huang et al., 2020).

The study's focus on Malaysian youth may limit the generalizability of the findings to other cultural contexts. Future research should investigate how these factors operate in different cultural settings, particularly in individualistic societies where the influence of peer networks and political trust may differ. Cross-cultural comparisons could yield valuable insights into the global drivers of climate adaptation behaviors (Wong & Lim, 2022).

Lastly, additional variables, such as self-efficacy and environmental knowledge, should be explored in future studies as potential mediators or moderators of climate adaptation. Understanding how these factors interact with political trust, peer influence, and eco-anxiety could offer a more nuanced view of the pathways to effective climate adaptation among youth (Saroglou, 2019; Halim et al., 2022).

Conclusion

This study emphasizes the significant role of political trust, perceived government efforts, peer influence, and eco-anxiety in promoting climate change adaptation among Malaysian youth. The findings suggest that building political trust, enhancing government transparency, leveraging peer networks, and addressing eco-anxiety can foster greater climate adaptation behaviors.

The results have important implications for policymakers, educators, and community leaders. By focusing on these key factors, stakeholders can design targeted programs and initiatives that empower youth to engage in climate adaptation and contribute to Malaysia's climate resilience efforts.

Future research should continue to explore the complex relationships between these factors and climate adaptation, particularly in diverse cultural contexts and over time. This will allow for the development of more effective interventions to address the global challenge of climate change adaptation among young people.

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