

From Fields to Feelings: Climate Anxiety, Pro-Environmental Behavior, and Coping Mechanism of Filipino Gen Z in Farming Families

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ABSTRACT

The study explored the differences and relationship between climate change anxiety and pro-environmental behaviors of Filipino Generation Z, particularly individuals from farming households in Jones and San Agustin, Isabela. Using a sequential-explanatory mixed-methods design, the study first gathered quantitative data from a large sample of 830 Gen Z participants aged 12–27 years, then followed with in-depth interviews among 10 selected respondents identified as being at risk of high climate change anxiety. The quantitative results showed that participants generally experienced low to moderate climate change anxiety, with a smaller but important group at high risk, and demonstrated a moderate level of pro-environmental behavior. Significant differences were observed across socio-demographic factors, especially age, while climate change anxiety showed a positive relationship with pro-environmental behavior. The qualitative findings further revealed that participants used varied coping strategies, including avoidance, seeking emotional support, reflecting on their feelings, and engaging in environmental actions. These results suggest that climate anxiety can function both as a psychological burden and as a motivation for constructive environmental behavior, depending on the individual's coping resources, social support, and opportunities for action. Overall, the study highlights the need for a balanced and multi-level response that addresses both the psychological and behavioral dimensions of climate change anxiety among young people.

Keywords: climate change anxiety, pro-environmental behaviors, ecopsychology, climate change, Gen Z

INTRODUCTION

The Philippines continues to face repeated typhoons, flooding, drought, and other climate-related threats every year that affect not only the economy and agriculture but also the mental well-being of its people. For many young Filipinos today, especially Generation Z, climate change is no longer just a topic in school or on social media; it is something they can already feel and experience in their daily lives through extreme heat, disrupted farming activities, unstable food supply, scarcity of resources, and worries about the future. These experiences can lead to climate change anxiety or eco-anxiety, an emerging phenomenon affecting young individuals' ability to work and socialize (Gibson et al., 2020; Hajek and König, 2022; Heeren et al., 2022; Massazza et al., 2022; Tam et al., 2023; Clayton and Karazsia, 2020). This is a growing psychological concern marked by fear, worry, and distress about environmental decline.

In the Philippines, alarming data from a cross-national study found that 59% of adolescents were very or extremely worried about climate change, and more than 45% reported impairment of everyday functioning because of climate change anxiety (Hickman et al., 2021). At the same time, this anxiety may also encourage or discourage young people to engage in pro-environmental behaviors, such as conserving resources, recycling, reducing waste, participating in climate action, or they may experience eco-paralysis, limiting or preventing

them from engaging in environmental action. Understanding this relationship is important because concern alone does not always lead to action, and in some cases, it may even lead to helplessness or avoidance.

It was found that Filipino youth engage in unhealthy coping with their anxiety about climate change. Tendency of environmental apathy is more common among young people, who struggle to cope with climate-related distress, making them more prone to denial and indifference (e.g., eco-paralysis) than adults (Fritze et al., 2008). Consequently, on the other hand, several studies suggest that anxiety can be a motivational agent. Since 2018, Gen Z activists have been pushing for robust public action on climate change, inspiring the Alpha generation of activists (Walker, 2021)—They are considered politically and socially active and promote causes that are consistent with their values, like slowing down the effects of climate change and promoting greater justice and equity for all (Bogueva & Marinowa, 2022).

These conflicting attitudes among Gen Z highlight critical gaps that must be addressed to bridge the divide between concern (worry) and action. Therefore, examining Gen Z's climate change anxiety, pro-environmental behaviors, and how they cope with climate change anxiety provides a comprehensive understanding of how climate change impacts youth today, especially for those who are more susceptible and directly experiencing climate change, like our farming households.

In light of these issues, a mixed-method design was utilized. This contributes to a better comprehension of the psychological and emotional costs that climate change places on people and communities. This study may further contribute to the limited breath of scholarly materials on ecopsychology and for the attainment of the various Sustainable Development Goals, specifically: SDG 3: “Good health and well-being”; and SDG 13: “Climate Action” in the region, and in helping local agencies like the Municipal Disaster Risk-Reduction and Management Office (MDRRMO), National Disaster Risk-Reduction and Management Office (NDDRMO), School Guidance Counselors, Psychology Faculty, Youth Organization, and Local Government Unit (LGU) in spreading and advocating awareness on the effects of climate change and in promoting environmental actions at various levels.

The study was intended mainly to determine the differences and relationship between climate change anxiety and the pro-environmental behaviors of Gen Z at Jones and San Agustin, Isabela, Philippines, and how they cope with climate change. Specifically, this study sought to answer the following: (1) what is the socio-demographic profile of the participants according to sex, age: adolescent and emerging adult; (2) what is the level of climate change anxiety of the participants; (3) what is the level of pro-environmental behaviors of the participants; (4) what is the significant difference between climate change anxiety and pro-environmental behaviors when grouped according to their socio-demographic profiles; (5) what is the significant relationship between climate change anxiety and the pro-environmental behaviors of the participants; and (6) what is the prevalence of individuals at risk of climate change anxiety; (7) how do the participants cope with the psychological impacts of climate change; and (8) how levels of climate change anxiety of the participants influence their propensity for pro-environmental conduct, specifically: Attitudes Towards the Behavior (ATB); Subjective Norms (SN); and Perceived Behavioral Control (PBC).

The researcher then assumed that (1) Most Gen Z participants experience climate change anxiety at average to high levels, with a large group experiencing high levels of climate change anxiety; (2) Most Gen Z participants experience pro-environmental behaviors at average-to-high levels; (3) Males likely show lower levels of climate change anxiety and pro-environmental behaviors than females; (4) Adolescents likely show higher levels of climate change anxiety and pro-environmental behaviors than emerging adults; and (5) Climate change anxiety is expected to have no positive relationship with pro-environmental behavior; and (6) Participants may cope with climate change anxiety in different ways at varying levels.

Theoretical Framework

This research study is based on various factors in assessing the propensity for pro-environmental conduct based on the Theory of Planned Behavior that includes three components: (a) Attitudes Towards the Behavior (ATB); (b) Subjective Norms (SN), and (c) Perceived Behavioral Control (PBC).

Theory of Planned Behavior

Actions that lessen detrimental human impacts on the environment, or "pro-environmental behavior," are essential in mitigating the negative effects of climate change (Stern, 2006). Since people are the ones who make policy decisions in addition to driving more significant changes like public pressure, individual behaviors are at the core of the climate change problems (Liverani, 2009). These elements reflect how individuals view their environment and how much weight they give to environmental concerns. Hence, this implies that pro-environmental behavior is largely driven by elements such as consciousness, perception, knowledge, and attitudes toward behavior (Masud, et al., 2016).

According to Icek Ajzen's Theory of Planned Behavior (1991), three primary factors influence a person's behavior, and in this study, propensity for pro-environmental conduct: *Attitudes Towards the Behavior* (ATB), *Subjective Norms* (SN), and *Perceived Behavioral Control* (PBC). Attitude toward the behavior is reflected in an individual's general evaluative response, based on their ideas about the behavior's outcomes. Subjective norms, meanwhile, describe how someone may feel obligated to live up to others' standards and depict the social pressures to perform. Finally, a person's perception of their ability to carry out a behavior, taking into account both their capabilities as well as external variables that could affect their decisions, is known as perceived behavioral control (PBC) (Ajzen, 1991). This approach provides insight into how to encourage sustainable behaviors in communities by demonstrating how pro-environmental acts are influenced by both individual beliefs and external factors (Masud, et al., 2016).

METHODOLOGY

Research Design

A sequential-explanatory design was used in determining the climate change anxiety and pro-environmental behaviors of the participants. It is a research design that employs two designs in one study, incorporating both quantitative and qualitative designs. The quantitative design, as Phase I of the study, was utilized in determining the levels of climate anxiety of Gen Z using a standardized questionnaire called the "Climate Change Anxiety Scale" (CCAS), and a survey of Pro-environmental Behaviors that was developed was used in determining the level of pro-environmental behaviors of the participants. Consequently, the qualitative design, which is Phase II of the study, used a validated questionnaire to provide a deeper understanding or explanation of the coping strategies and the propensity for pro-environmental conduct of the participants on climate change.

Participants

The population of this study comprises individuals from Generation Z whose parents are farmers, or whose means of livelihood is from agriculture. According to the statistical database of the Municipal Agriculture Office (MAO) of Jones, Isabela, Philippines, as of 2025, there are 7,002 resident farmers in the locality, whose families are composed of Gen Z. On the other hand, in San Agustin, Isabela, the number of farmers with Gen Z individuals in their household is 3,387. Using the formula of Krejcie and Morgan, the sample sizes from Jones, Isabela, are 383 and 380 from San Agustin, Isabela.

Specifically, there were 425 respondents from San Agustin, Isabela, and a total of 405 respondents from Jones, Isabela. In total, the study has a total of 830 respondents. Among the respondents, 441, comprising 53.13%, were adolescents and emerging adults, comprising a number of 389, which is 46.87%. Furthermore, 436 respondents or 52.53% were males, and 394 or 47.47% comprised females.

Also, the researcher applied the theory of psychosocial development by Erikson in dividing the participants into two age strata: 12-18 years old (adolescents) and 19-27 years old (emerging adults), comprising Gen Z. This process necessitated the researcher to differentiate the age gap between stages.

In Part II of the study, a subset of 10 participants from the survey group who are at risk of climate change anxiety were selected for the in-depth interviews. In selecting the subset of 10 participants, a random sampling method was utilized from the identified 151 at-risk individuals: the researcher first alphabetically arranged and then

assigned each individual their corresponding number, and finally, the “spin-the-wheel” method was used to draw the subset of 10 participants.

Measures

The researcher used the following instruments in the gathering of data and in achieving the objectives of the study:

Climate Change Anxiety Scale. The Climate Change Anxiety Scale (CCAS) is a self-report questionnaire consisting of 13 items (5-point Likert scale) that measure emotional response to climate change, including 8 items that measure cognitive-emotional impairment and 5 items that measure functional impairment. This will be used to identify the prevalence of individuals (Gen Z) at risk of climate change anxiety. The scale was answered by how often an individual experiences such statements daily, ranging from “Never”, “Rarely”, “Sometimes”, “Often”, and “Almost Always”. The CCAS overall score was determined by dividing the sum of each item's scores by 13. The Cognitive-Emotional Impairment subscale score is calculated by adding the answers to items 1 through 8 and dividing the result by 8. The Functional Impairment subscale score, on the other hand, is calculated by dividing the total responses for 9–13 by 5. Although the CCAS has two distinct subscales, in this study, the researcher did not further explore these subscales separately because the CCAS should be treated on a scale-level but not as smaller units.

Furthermore, Clayton and Karazsia (2020) created the CCAS, which has been validated in several countries, including China, Japan, India (Tam et al., 2023), Germany (Wullenkord et al., 2021), Italy (Innocenti et al., 2021), France (Mouguiama-Daouda et al., 2022), Finland (Niskanen, 2022), Poland (Larionow et al., 2022), Korea (Jang et al., 2023), and others. Additionally, according to the study of Pajarillo in 2021, on climate change anxiety and mental health among Gen Z Filipinos, found that the overall CCAS score in this study has a Cronbach's alpha reliability of .90. Findings suggested that the reliability results of CCAS overall, both overseas and in the country, have good psychometric properties. However, to ensure its validity and reliability, the researcher employed pilot testing to acquire the necessary norms and reliability before administering it to the participants. In the conducted pilot testing, a total of 155 individuals participated in the survey. The overall reliability of the CCAS is $\alpha = .92$, ensuring that the tool is reliable and ready for administration.

The interpretation of the results of the CCAS overall score was divided into three levels of score range, namely: Low Climate Change Anxiety (13-31 scores); Average Climate Change Anxiety 32-42 scores); and High Climate Change Anxiety (43-65 scores).

Survey of Pro-environmental Behaviors. This survey is a self-report questionnaire consisting of 14 items (5-point Likert scale) that measure pro-environmental behaviors. The survey was answered by how often an individual performs such behaviors daily, ranging from “Never”, “Rarely”, “Sometimes”, “Often”, and “Always”. Participants who had higher scores indicated that they engage more in pro-environmental behaviors. The survey's overall score is determined by dividing the sum of each item's scores by 14.

Before distributing it to the participants, the researcher employed pilot testing to obtain the required standards to guarantee its reliability. With 155 participants, the result showed $\alpha = .84$. Since it was locally validated and suited to the study's goals, the Survey of Pro-environmental Behaviors is ready for administration and survey. Furthermore, to interpret the scores of the PEBS, it was divided into three levels of score range, namely: Low Pro-environmental Behaviors (14-43scores); Average Pro-environmental Behaviors (44-59 scores); and High Pro-environmental Behaviors (60-70 scores).

Self-made questionnaire. The interview guide questions were used to collect qualitative data. It was composed of 4 major questions and several prompts aligned with the objectives of the study: to explore the coping, experiences, attitudes, and behaviors of the participants pertaining to climate change anxiety and pro-environmental behaviors. Also, the questionnaire was validated by experts in the field to ensure the validity of the questions. The researcher then consolidated the suggestions and comments of the validators. Thus, the questionnaire was ready for administration.

Procedures

Initially, before the researcher conducted the study, the researcher sought approval from the institutional research ethics board (IREB) of the university for the study. This is to obtain ethical clearance from the Ethics Review Committee of Isabela State University's Echague Campus, guaranteeing adherence to guidelines for studies involving vulnerable groups.

Before data collection. The researcher sought permission and approval from the head of the local government unit of Jones and San Agustin, Isabela, Philippines, and various participating schools through written correspondence. Upon approval, the researcher then started administering the questionnaires through a face-to-face set-up, ensuring full participation, encapsulating the informed consent or assent form explaining the importance of the study, and the privacy or data protection of the information they would provide. Clear instructions were given to ensure valid and honest responses.

After the administration of the survey, the researcher employed a proper debriefing process of a potential anxiety-related issue to the respondents before leaving the premises. Then, the researcher collected the responses accordingly. After collecting the survey questionnaires from the participants, the collected data were organized and analyzed using appropriate statistical tools.

After the consolidation of the data and choosing which participants would complete the subset from the sample, the researcher then set another schedule for the second phase of the study, particularly on the conduct of the in-depth interview. The interviews were conducted in person, lasting approximately 15-20 minutes per session. Then the in-depth interviews were recorded for transcription and underwent Thematic Analysis.

Statistical Treatments

The collected data from the CCAS and Survey of Pro-environmental Behaviors were treated using the following statistical tools based on the objectives of the study: particularly, descriptive statistics such as simple frequency counts and percentages were employed to examine the demographic profile of the participants and to identify the participants who are at risk of climate change anxiety. On the other hand, to determine the differences between Climate Change Anxiety and Pro-environmental Behaviors of the participants according to their demographic profiles, the Welch independent samples t-test was employed. Lastly, the Pearson Correlation Coefficient was used to determine the relationship between climate change anxiety and the Pro-environmental Behaviors of the participants.

Ethical Considerations

Before participating in the study, participants were given information about the program's timetable, general goal, and withdrawal rights. The researcher guaranteed to the participants that their identity confidential. Research participants received a copy of their informed consent or assent form to engage in the study. All involvement was entirely voluntary, and volunteers did not receive any compensation, tokens, or any other kind of reward. Additionally, the researcher informed the participants about confidentiality and privacy, as well as anonymity, which were maintained during and after data collection and storage. This is governed by the Data Privacy Act of 2012. Finally, impartiality was declared during the conduct of the study; there was no conflict of interest, and all related processes in the entire study were conducted ethically.

RESULTS AND DISCUSSION

The section presents the participants' demographic profile, discusses, and implicates the descriptive and inferential findings on climate change anxiety and pro-environmental behaviors of the participants, including their distributions, group differences by sex and age, their association, and the prevalence of individuals classified as at risk, and relates these to the qualitative findings and other studies.

Socio-demographic Profile of the Participants

This table presents the socio-demographic profiles of the participants by sex and age group, their frequencies, and percentages.

Table 1. Socio-demographic profile of the participants by sex and age

Sex	N (830)	%
Sex		
Male	436	52.53
Female	394	47.47
Age Group		
Adolescents (12–18)	441	53.13
Emerging adults (19–27)	389	46.87

As shown in Table 1, the sample consisted of 830 participants with a slightly higher proportion of males ($n = 436$, 52.53%) than females ($n = 394$, 47.47%). In terms of age group, adolescents aged 12–18 comprised a small majority ($n = 441$, 53.13%), while emerging adults aged 19–27 accounted for 46.87% ($n = 389$). Data indicate that there are slightly more male participants than female, and the majority of the participants are adolescents.

Based on the data of EDCOM II in 2026, climate-related problems are meaningful to the context of farming households, especially adolescents and emerging adults, because they were exposed to environmental concerns at an early age through the livelihood of their families. This demographic is relevant in understanding how climate anxiety influences responsible environmental actions in the Philippine setting (EDCOM II, 2026). Since youth has cemented its role in these developmental and social issues, their perspective on climate change is also important because environmental actions are likely to be shaped by them.

The Level of Climate Change Anxiety of the Participants

The table presents the level of climate change anxiety of the participants and the distribution of the participants with Low, Average, and High Climate Change Anxiety.

Table 2. The Level of Climate Change Anxiety of the Participants.

Variable	Mean	Interpretation	Category	N (830)	%
Climate Change Anxiety	31.78	Average	Low Climate Change Anxiety (13–31)	471	56.75
			Average Climate Change Anxiety (32–42)	208	25.06
			High Climate Change Anxiety (43–65)	151	18.19

Note. The interpretation of the climate change anxiety level is based on the established scoring range of the instrument.

Overall, the mean CCAS total score ($M = 31.78$) corresponds to Average Climate Change Anxiety. The distribution further clarifies this pattern: over half of the participants were classified as Low Climate Change Anxiety (13–31; $n = 471$, 56.75%), about one fourth were Average (32–42; $n = 208$, 25.06%), and a meaningful minority fell under High Climate Change Anxiety (43–65; $n = 151$, 18.19%). These findings indicate that climate

anxiety is not dominant for most participants, but a nontrivial subset shows elevated anxiety levels that warrant attention. Qualitative findings help explain why the majority fall under low to average levels. Many participants employ emotion-focused coping strategies that regulate distress and prevent escalation: “*nagkukulong nalang po ako sa kwarto...*” (Participant 4) (“I just stay in my room.”). This is also manifested by Participant 10, who claims that: “*nanonood po ng YouTube video... naglalaro lang po ako ng sports para i-relieve yung stress...*” (Participant 10) (“I watch YouTube videos or play sports to relieve stress.”) These responses indicate that participants actively manage their emotional reactions, which may keep anxiety within average levels. However, the presence of the 18.19% high-anxiety group is also supported by qualitative evidence showing that some participants experience cognitive and emotional strain: “*hindi ka makakapag isip ng tama... dahil sa sobrang init*” (Participant 2) (“You cannot think properly because of the extreme heat.”)

These responses indicate that participants regulate their anxiety through both reflective and emotion-focused coping, maintaining anxiety at average levels. This pattern mirrors the broader literature that eco-anxiety can exist as worry and distress with variable intensity, and only a subset shows stronger health or functioning implications (Boluda-Verdú et al., 2022; Gianfredi et al., 2024).

From the perspective of the Theory of Planned Behavior (TPB), the findings imply that climate anxiety may influence pro-environmental behaviors through attitudes, subjective norms, and perceived behavioral control (Ajzen, 1991). Participants who cognitively process climate change and reflect on possible solutions demonstrate stronger environmental awareness and concern, which may strengthen positive attitudes toward environmental action. This supports TPB's assumptions that attitudes toward environmental problems can shape behavioral intentions. Moreover, Gen Z participants are heavily exposed to climate discourse through social media, schools, peer groups, and online communities, which may reinforce subjective norms that encourage environmental awareness and sustainable practices. Thus, the study supports TPB by showing that climate anxiety may either encourage or inhibit pro-environmental behaviors depending on how individuals cognitively interpret and emotionally regulate their experiences.

In the course of investigating the first assumption of the study: (1) Most Gen Z participants experience climate change anxiety at average to high levels, with a large group experiencing high levels of climate change anxiety. It was revealed that most Gen Z participants experience climate change anxiety at low-to-average levels, with a meaningful minority group experiencing high levels of climate change anxiety. Therefore, the first assumption does not hold in the study area and was rejected.

The Level of Pro-environmental Behaviors of the Participants

The table presents the level of pro-environmental behaviors of the participants and the distribution of the participants with Low, Average, and High Pro-environmental Behaviors.

Table 3. The Level of Pro-environmental Behaviors of the Participants.

Variables	Mean	Interpretation	Category	N (830)	%
Pro-environmental Behaviors	50.33	Average	Low Pro-Environmental Behaviors (14–43)	170	20.48
			Average Pro-Environmental Behaviors (44–59)	451	54.34
			High Pro-Environmental Behaviors (60–70)	209	25.18

Note. The interpretation of the Pro-environmental Behaviors level is based on the established scoring range of the instrument.

Results suggest that the participants' PEB total score was ($M = 50.33$), which corresponds to Average Pro-environmental Behaviors. The categorical distribution supports this overall interpretation: a majority were classified as Average (44–59; $n = 451$, 54.34%), while one quarter were High (60–70; $n = 209$, 25.18%), and one

fifth were Low (14–43; $n = 170$, 20.48%). Hence, the sample demonstrates a generally positive behavioral orientation toward environmental protection, but with meaningful variation across participants.

Qualitative findings explain why most participants fall within the average category, as they tend to engage in selective and manageable actions rather than sustained or comprehensive behaviors: “*lagi po akong nagdadala ng water tumbler para mabawasan ang paggamit ng bottled water*” (Participant 4) (“I always bring a water tumbler to reduce the use of bottled water.”) “*binabawasan ko nalang po yung pag consume ng energy para kahit konti maka tulong*” (Participant 3) (“I reduce my energy consumption so that I can help, even in small ways.”) These responses reflect a pattern of partial engagement, where individuals contribute through small, feasible actions but may not extend this behavior across all domains. Furthermore, these responses illustrate that participants prefer manageable and habitual behaviors, which explains the high ratings for routine environmental practices.

The presence of a high-behavior group (25.18%) is supported by qualitative evidence of participants who demonstrate strong environmental commitment and motivation: “*It motivates me po na gumawa na makakatulong sa environment*” (Participant 3) (“It motivates me to do something that helps the environment.”). Consequently, the existence of a low-behavior group (20.48%) can be explained by barriers identified in the qualitative data, which limit participation: “*kakulangan sa oras at gamit*” (Participant 2) (“Lack of time and resources.”) “*hindi rin ganon ka-responsible yung iba kaya nahihirapan ako sumunod*” (Participant 10) (“Others are not responsible, so I find it hard to comply.”)

These statements indicate that even when participants are willing to act, external constraints limit their ability to engage in more demanding or collective environmental efforts. These results suggest that commonly accessible, routine conservation behaviors were more strongly practiced. This “routine behavior advantage” aligns with systematic reviews showing that youth pro-sustainable behavior is shaped by feasibility and environmental support, i.e., behaviors that require fewer resources or structural changes are more consistently practiced (Bhattarai et al., 2024; Liu et al., 2024).

From the perspective of the Theory of Planned Behavior (TPB), the findings strongly support the assumption that environmental behaviors are influenced by attitudes toward behavior, subjective norms, and perceived behavioral control (Ajzen, 1991). Participants who expressed motivation to help the environment demonstrate positive environmental attitudes, indicating that they recognize the value and outcomes of engaging in sustainable behaviors. The routine behaviors identified in the qualitative findings, such as conserving energy and reducing plastic use, suggest that participants are more likely to perform behaviors they perceive as feasible, practical, and personally meaningful. Meanwhile, subjective norms are reflected in participants’ concerns about other people’s irresponsibility, indicating that social influence and collective participation affect their willingness to sustain environmental actions. Participants may become discouraged when peers or communities fail to practice similar behaviors, weakening behavioral consistency. Most importantly, the findings strongly reflect perceived behavioral control, as participants repeatedly identified external limitations such as lack of resources, insufficient facilities, and limited time—this explains why more demanding or collective environmental actions were less consistently practiced compared to simple household-based conservation behaviors.

In the course of investigating the second assumption of the study: (2) Most Gen Z participants experience pro-environmental behaviors at average-to-high levels. This does not support the findings of the study; it was revealed that most Gen Z participants experience pro-environmental behaviors at low-to-average levels. Therefore, the second assumption was not consistent across the participants.

Difference between Climate Change Anxiety and Pro-environmental Behaviors when grouped according to their Socio-demographic Profiles

Tables 4.1 and 4.2 present the Welch independent samples t -tests examining group differences of the participants based on their sex and age group, which is further divided into two strata: (1) adolescence, and (2) emerging adult, reflecting their corresponding frequencies and means in relation to their climate change anxiety level and pro-environmental behaviors.

Table 4.1. Differences in climate change anxiety (CCA) and pro-environmental behaviors (PEB) by sex (Welch independent samples t-tests)

Outcome	Sex	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>Df</i>	<i>p</i>	<i>Cohen's d</i>
CCA	Male	436	32.64	11.59	2.404	826.016	0.016	0.165
	Female	394	30.84	10.00				
PEB	Male	436	49.99	9.67	-1.088	827.612	0.277	-0.075
	Female	394	50.70	8.90				

Table 4.1 indicates that there was a statistically significant difference in climate change anxiety by sex. Male participants reported higher CCAS total scores ($M = 32.64$, $SD = 11.59$) than female participants ($M = 30.84$, $SD = 10.00$), Welch's $t(826.02) = 2.40$, $p = .016$, with a small effect size (Cohen's $d = 0.17$). In contrast, no significant sex difference was observed for pro-environmental behaviors. Male participants ($M = 49.99$, $SD = 9.67$) and female participants ($M = 50.70$, $SD = 8.90$) did not differ significantly, Welch's $t(827.61) = -1.09$, $p = .277$, with a negligible effect size ($d = -0.08$). This suggests that while climate anxiety shows minor variation by sex, reported pro-environmental engagement is largely comparable across male and female respondents.

Based on qualitative findings, behavior is less dependent on individual emotion and more influenced by social context. For example, both male and female participants emphasized family influence: “*pamilya ko po yung nag-eencourage... magtanim*” (Participant 1) (“My family encourages me to plant.”) This indicates that shared social environments may equalize behavioral outcomes across sex, despite differences in emotional experience. Recent evidence shows sex differences in eco-anxiety are not always consistent across settings, and the practical point is often the size of the difference (small in this case) rather than its direction (Kühner, 2025; Samarawickrama et al., 2025).

Investigating the third assumption of the study: (3) Males likely show lower levels of climate change anxiety and pro-environmental behaviors than females. This does not connive on the findings of the study; it was revealed that male participants reported higher levels of both climate change anxiety and pro-environmental behaviors than females (Table 4.1). Therefore, the third assumption was not supported.

Table 4.2 Differences in climate change anxiety (CCA) and pro-environmental behaviors (PEB) by age group (Welch independent samples t-tests)

Outcome	Age Group	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>	<i>Cohen's d</i>
CCA	Adolescents	441	30.04	9.64	-4.949	746.27	<.001	-0.349
	Emerging adults	389	33.76	11.85				
PEB	Adolescents	441	49.11	8.82	-3.992	791.20	<.001	-0.280
	Emerging adults	389	51.70	9.72				

Differences by age group, as shown in Table 4.2 were clearer and more consistent. Emerging adults reported significantly higher climate change anxiety ($M = 33.76$, $SD = 11.85$) than adolescents ($M = 30.04$, $SD = 9.64$), Welch's $t(746.27) = -4.95$, $p < .001$, with a small-to-approaching-moderate effect ($d = -0.35$). Emerging adults also reported significantly higher pro-environmental behaviors ($M = 51.70$, $SD = 9.72$) compared with adolescents ($M = 49.11$, $SD = 8.82$), Welch's $t(791.20) = -3.99$, $p < .001$, with a small effect ($d = -0.28$).

Qualitative data indicate that older participants may have greater exposure to environmental realities, leading to stronger emotional responses and action: “*marami naaapektuhan na kababayan natin*” (Participant 2) (“Many

of our fellow citizens are affected.”) This reflects a more developed sense of social responsibility, which may explain higher engagement in pro-environmental behaviors. These findings support that age appears to differentiate both climate anxiety and behavioral engagement: emerging adults not only report higher anxiety but also report stronger pro-environmental practice. This pattern is consistent with literature indicating that climate worry can increase with age-related awareness and future-oriented concerns, while behavioral engagement may also rise as autonomy and capacity to act increase (Hickman et al., 2021; Niedzwiedz et al., 2025).

Investigating the fourth assumption of the study: (4) Adolescents likely show higher levels of climate change anxiety and pro-environmental behaviors than emerging adults. Conversely, it was found that emerging adult participants reported higher levels of both climate change anxiety and pro-environmental behaviors than females (Table 4.2). Therefore, the fourth assumption was not supported.

The Relationship between Participants’ Climate Change Anxiety and Pro-Environmental Behaviors

Table 5. Pearson correlation between participants’ climate change anxiety and pro-environmental behaviors

Variables	<i>M</i>	<i>SD</i>	<i>R</i>	<i>p</i>
Climate Change Anxiety	31.78	10.88	0.362	< .001
Pro-environmental behaviors	50.33	9.32		

Table 5 shows a statistically significant positive relationship between climate change anxiety and pro-environmental behaviors. Pearson’s correlation indicated that higher climate change anxiety scores were associated with higher PEB scores, $r = .362$, $p < .001$. In practical terms, participants who reported greater climate-related anxiety also tended to report more frequent engagement in pro-environmental actions. The magnitude of the association is moderate, indicating that climate anxiety is meaningfully linked to behavior but does not fully determine it; other social, contextual, and motivational factors likely contribute to variations in pro-environmental practice.

Qualitative findings strongly support this relationship, as participants explicitly linked their anxiety to their actions: “*It motivates me po na gumawa na makakatulong sa environment*” (Participant 3) (“It motivates me to do something that helps the environment.”) However, qualitative data also reveal that anxiety can hinder behavior when combined with low perceived control: “*nahihiya po akong makihalubilo... natatakot ma-bully*” (Participant 1) (“I feel shy to interact... I am afraid of being bullied.”)

This explains why the relationship is moderate—anxiety both motivates and constrains behavior. This moderate positive association mirrors cross-national evidence showing climate anxiety tends to relate positively to pro-environmental action while also relating negatively to well-being (Ogunbode et al., 2022). More recent studies also show that climate worry can be linked to functional impairment, suggesting that the “anxiety-action” relationship may coexist with support needs for a subgroup (Lenhard et al., 2024; Collery et al., 2025). Research further indicates that the anxiety-behavior link can depend on attentional and cognitive processes, which may explain why the relationship is meaningful but not deterministic (Mathers-Jones & Todd, 2023).

Inspecting the fifth assumption of the study, the relationship between Gen Z’s climate change anxiety and pro-environmental behaviors revealed that there is a significant positive relationship, meaning that higher climate change anxiety leads to greater environmental action. Therefore, the fifth assumption was consistent with the findings of the study and supported.

The Prevalence of Individuals at Risk of Climate Change Anxiety

The table presents the distribution of the participants who are at risk of climate change based on their sex and age group, corresponding to their frequencies and percentages.

Table 6. The Prevalence of individuals at risk of climate change anxiety.

Grouping Variable	Category	N	Number of at-risk	% at risk
Sex	Female	394	63	15.99
	Male	436	88	20.18
Age	Adolescents	441	61	13.83
	Emerging adults	389	90	23.14
Overall		830	151	18.19

Note. At risk is operationally reported as High Climate Change Anxiety (score of 43-65)

Results showed, overall, 18.19% of the participants ($n = 151$ out of 830) fell within the at-risk group. When grouped by sex, the proportion at risk was higher among males (20.18%; 88 of 436) than among females (15.99%; 63 of 394). When grouped by age, emerging adults showed a notably higher proportion at risk (23.14%; 90 of 389) compared with adolescents (13.83%; 61 of 441).

These prevalent patterns align with the mean differences reported earlier, reinforcing that emerging adult, and to a lesser extent males, represent subgroups with a higher concentration of elevated climate anxiety. From an applied perspective, this level of risk prevalence indicates that targeted psychosocial support and climate-informed mental health interventions may be warranted, particularly for emerging adults who appear more vulnerable to high anxiety while also exhibiting higher pro-environmental engagement. This implication aligns with recent literature that frames climate worry as a mental-health-relevant exposure, particularly when linked with sleep problems and anxiety/depression risks (Collery et al., 2025; Qader et al., 2025), while also recognizing that distress may co-occur with stronger environmental engagement rather than replacing it (Ogunbode et al., 2022; Leite et al., 2023). In the Philippine context, scholars have also emphasized the need for pathways that simultaneously address climate-related distress and promote constructive climate engagement (Aruta & Guinto, 2022).

The findings provide further support for the applicability of Theory of Planned Behavior in explaining how climate-related psychological experiences may influence environmental action among Gen Z. The higher prevalence of climate change anxiety among emerging adults, alongside their higher levels of pro-environmental behaviors, suggests that emotional concern may strengthen attitudes toward environmental protection. Within the TPB framework, stronger concern about climate consequences can contribute to more favorable attitudes toward engaging in environmentally responsible behaviors, thereby increasing behavioral intention and actual action (Ajzen, 1991). This indicates that climate anxiety, when experienced at manageable levels, may function as a motivational mechanism rather than solely a maladaptive emotional state.

The Participants' Coping Mechanisms with Climate Change Anxiety

This section presents, discusses, and implicates the authentic responses of the participants in the study. Then relate these findings to the quantitative data and other studies.

The subsequent discussions identified four emerging themes regarding the coping mechanisms of the participants. The identified themes can be broadly categorized into: (1) Emotion-focused coping; (2) Social coping; (3) Problem-focused coping, reflecting both adaptive and maladaptive responses to environmental stressors; and (4) Reflective and cognitive coping.

Theme 1: Emotion-Focused Coping

A significant number of participants relied on emotion-focused coping strategies, which aim to regulate emotional responses rather than directly address the source of stress. These strategies often involved withdrawal, distraction, or self-soothing behaviors. For instance, one participant shared: “*nagkukulong nalang po ako sa*

kwarto...,” participant 4 said. (“I just stay in my room.”) Similarly, this coping strategy is supported by another participant as he stated: *“nagbabasa nalang po ako ng mga libro...”* Participant 1 said (“I just read books.”) Others reported engaging in leisure activities such as watching videos or playing sports: *“nanonood po ng YouTube video... naglalaro lang po ako ng sports para i-relieve yung stress...”* Participant 10, said. (“I watch YouTube videos or play sports to relieve stress.”)

These responses show that participants attempt to temporarily reduce emotional discomfort through avoidance or distraction. While such strategies may provide short-term relief, they may not fully address the underlying causes of climate-related anxiety.

This may be explained by the quantitative findings on why the participants focus on emotional coping. The survey revealed that Gen Z sometimes had difficulty concentrating, questioned their emotional reaction to climate change, experienced interference with getting things done, and applied self-appraisal of coping inadequacy. Consequently, recent studies suggest that the effectiveness of emotion-focused coping depends largely on whether the strategy serves as a permanent escape or a temporary restorative measure (Crandon et al., 2026). For instance, engaging in physical activity or immersive hobbies, just like some of the participants did, can facilitate “restorative experiences,” which help mitigate the physiological impacts of chronic stress (Hickman, 2020).

Theme 2: Social Coping

Another prominent coping strategy among participants is social coping, which involves seeking emotional support, advice, or validation from others. Many participants mentioned the importance of communication with family members and peers.

In the case of participant 2, she would often talk to her parents for suggestions and solutions so that she can help. *“nakikipag usap ako sa mga magulang ko... humihingi po ako ng suggestion”* (“I talk to my parents and ask for their suggestions.”) Similarly, Participant 3 admitted that she talks to her friends so that she would feel better. *“nakikipag-usap po sa mga kaibigan... nakakagaan na ng pakiramdam”* (“Talking to friends already makes me feel better.”)

These responses suggest that interpersonal relationships serve as protective factors against the psychological impacts of climate change. It is through communication that participants are able to process their emotions, gain perspectives, and identify possible actions. Liu et al. (2021) found that social support, resilience, and self-esteem jointly protect adolescents from common mental health problems. This confirms that social support significantly strengthens resilience and constructive coping among youth, especially in contexts of environmental stress and uncertainty. This is further strengthened by Cao et al. (2024), in their findings, which showed that social support enhances resilience among youth by shaping coping styles, which in turn promote adaptive responses to challenges such as environmental concerns.

Theme 3: Problem-Focused Coping

It is also notable that several participants demonstrated problem-focused coping, wherein they actively respond to climate anxiety by engaging in pro-environmental behaviors. This form of coping reflects a shift from emotional regulation to behavioral adaptation and solution-oriented action. For example, Participant 3 mentioned that in her own little ways she consciously lessens her energy consumption by not staying inside their house. *“binabawasan ko nalang po yung pag consume ng energy para kahit konti maka tulong”* (“I reduce my energy consumption so that I can help, even in small ways.”) Participant 6 also admitted that he used to simply cut trees and noticed later on that their farm was easily flooded after strong downpour of rain so he decided to replace the trees that they cut by planting another set of trees. *“mag tatanim po ng panibagong puno para mapalitan yung mga puno na pinuputol”* (“I will plant new trees to replace those that were cut.”)

Similarly, Participant 4 emphasized resource-conscious behavior by choosing to bring tumbler instead of buying bottled water. *“...lagi po akong nagdadala ng water tumbler para mabawasan ang paggamit ng bottled water”* (“...I always bring a water tumbler to reduce the use of bottled water.”) These problem-solving coping of the

participants, although considered as small actions, are consistent with the quantitative data, where the participants always engage in pro-environmental behaviors such as avoiding throwing trash in the street and closing the tap while brushing their teeth.

These responses indicate that participants channel their anxiety into constructive environmental actions, which suggests that climate anxiety can function as a motivational force. Hickman et al. (2021) found that climate anxiety among youth is widespread globally, but many channel this distress into activism and constructive coping, reinforcing agency and hope. Additionally, in an article by Villanueva (2021), in the Philippine Star, based on findings of the Climate Reality Project Philippines, 80% of Filipino youth suffer from climate anxiety, but problem-focused coping nurtures hope and empowers individuals to take meaningful action, thereby mitigating feelings of helplessness.

Theme 4: Reflective and Cognitive Coping

Beyond behavioral responses, some participants engaged in reflective coping through critical thinking and meaning-making regarding environmental issues. For Participant 2, reflecting on how to find solutions matters the most, which is why she often chooses to stay in a place where she can think and reflect. *“pumupunta ako sa isang lugar... para makapag-isip ng paraan para masolusyunan yung issue”* (“I go to a place where I can think of ways to solve the issue.”)

Others reported actively seeking information, just like Participant 10, who often watches YouTube videos to understand climate change better. *“nanonood po ng YouTube video kung ano nga ba yung cause and effect nitong climate change”* (“I watch YouTube videos about the causes and effects of climate change.”) This means that Gen Z applied reflective coping differently.

The aforementioned responses suggest that participants are not only reacting emotionally but are also engaging cognitively with environmental issues, which may enhance their understanding and capacity for informed action. Such reflective processes are essential in developing environmental literacy and long-term behavioral commitment. Thompson (2021) revealed that distress and anger among youth are not only emotional responses but also spark critical thinking about environmental justice and governance. This enhances environmental literacy and strengthens long-term commitment to sustainable behaviors. This idea is also supported by Valero (2025), as she emphasized that youth often move from climate anxiety to climate action through meaning-making processes. Reflective coping helps them reinterpret anxiety as a call to responsibility, leading to activism and lifestyle changes.

Based on the themes that were generated from the interview, the participants cope with the psychological impacts of climate change through a multidimensional set of strategies, including: Emotion-focused coping, Social coping, Problem-focused coping, and Reflective coping. These strategies often coexist, with participants shifting between them depending on the situation and intensity of their anxiety.

This also means that climate change anxiety is not purely debilitating; rather, it can also serve as a catalyst for awareness, reflection, and action.

Participants' Propensity for Pro-Environmental Behavior

Furthermore, eight emerging themes were identified in relation to the level of climate change anxiety of the participants and its influence on their propensity for pro-environmental conduct, namely: (5) Climate Anxiety as a Motivational Agent; (6) Family Roots, Green Shoots; (7) The Paradox of Peer Influence; (8) When Responsibility Follows the Crowd; (9) When Fear Silences Action; (10) Cognitive Clouding Under Environmental Stress; (11) Structural Constraints on Green Behavior; and (12) Micro-Choices, Green Impact.

Attitudes Toward Behavior (ATB)

Theme 5: Climate Anxiety as a Motivational Agent

Analysis of participants' responses reveals that participants with moderate to high levels of climate change anxiety tend to develop stronger pro-environmental attitudes. Their emotional responses, such as fear, worry,

and concern, often translate into a heightened awareness of environmental issues and a sense of personal responsibility.

For instance, Participant 3 expressed: *“It motivates me po na gumawa na makakatulong sa environment”* (“It motivates me to do something that helps the environment.”) Similarly, Participant 6 participant stated: *“mag tatanim po ng panibagong puno para mapalitan yung mga puno”* (“I will plant new trees to replace those that were cut.”) Additionally, empathy emerged as a key factor just like in the response of Participant 2: *“marami naaapektuhan na kababayan natin.”* (“Many of our fellow citizens are affected.”)

These responses from the participants indicate that climate anxiety can function as a motivational agent that encourages individuals to adopt positive attitudes toward environmental protection. This aligns with the results of Hickman et al. (2021), who conducted a global survey of 10,000 young people across 10 countries, finding that climate anxiety is widespread but often motivates constructive engagement. Anxiety was linked to stronger pro-environmental attitudes and behavioral intentions. Similarly, Punzalan et al. (2024) examined youth environmental volunteers in the Philippines, showing a positive correlation between climate anxiety and pro-environmental behavior. Anxiety heightened their awareness and reinforced favorable attitudes toward environmental protection. In addition, the participants’ lived experiences, particularly those from farming backgrounds, intensify their emotional connection to environmental issues.

Subjective Norms (SN)

Subjective norms play a critical mediating role in determining whether climate anxiety leads to pro-environmental behavior. Participants’ actions are strongly influenced by the expectations, behaviors, and attitudes of their family, peers, and community.

Theme 6: Family Roots, Green Shoots

Family members, particularly in farming households, serve as significant sources of encouragement, just like in the case of Participant 1, where her family influences her to replace cut trees by planting new tree seedlings. *“pamilya ko po yung nag-eencourage... magtanim”* (“My family encourages me to plant.”). This indicates that family-based norms reinforce pro-environmental attitudes and behaviors. Recent studies confirm this dynamic. Valerio, Onuh, and Dalusag (2021), found that family farming practices in Cavite are sustained through intergenerational motivation and shared values, while Aquino et al. (2021) emphasized that farmers’ attitudes and behaviors are shaped by family influence directly affects farm succession decisions.

These emerging behaviors of the youth are consistent with Sikolohiyang Pilipino. Filipinos are known to be a collectivist culture where family ties are powerful, where the self is shaped through *kapwa* or shared identity rather than an isolated entity (Pe-Pua, R., & Protacio-Marcelino, E., 2000). In Filipino family settings, consistent with the response of Participant 1 of the study, values such as *pakikisama* (getting along) and *utang na loob* (gratitude/solidarity) may play a crucial role in shaping youth’s engagement in environmental action. This reinforces how youth today respond to their pro-environmental behaviors in relation to family-based norms. Thus, this theme suggests that pro-environmental behavior is further strengthened when environmental models and support are framed through family values or familial connections.

Therefore, the shared experience of environmental challenges, such as crop failure and economic loss, strengthens collective responsibility and promotes environmentally conscious practices.

Theme 7: The Paradox of Peer Influence

In contrast, peer influence is more complex and often inconsistent. Some participants reported positive reinforcement, such as the case of Participant 3, where her peers often encourage her to care for the environment: *“encourage sir to do better sa pag care sa environment”* (“They encourage me to care more for the environment.”). This finding aligns with recent studies showing that peer groups can serve as motivators for pro-environmental behavior when supportive norms prevail (Stevenson & Peterson, 2021).

However, this was not the case for Participant 6, who admitted that he experienced negative peer pressure: *“niyaya nila ako para mag putol ng puno”* (“They invited me to cut trees.”). Such experiences reflect research indicating that peers can also undermine environmental responsibility when group norms encourage harmful practices (Ojala et al., 2021). This dichotomy suggests that peers can either amplify or weaken pro-environmental behavior depending on prevailing group norms, and in cases where peers engage in environmentally harmful practices, participants may experience conflict between their personal attitudes and social expectations (Wallis & Loy, 2023).

Theme 8: When Responsibility Follows the Crowd

Another notable finding includes the idea that participants are also influenced through collective behavior. In the case of Participant 10, he admitted that he often finds it challenging to stay on his ground when it comes to caring for the environment because he can see that his peers do not comply with rules: *“hindi rin ganon ka-responsible yung iba kaya nahihirapan ako sumunod”* (“Others are not responsible, so I find it hard to comply.”). This reflects the importance of perceived social consensus. When pro-environmental behavior is not widely practiced, individuals may feel less compelled to act, even if they possess strong environmental attitudes. These findings are consistent with the Theory of Planned Behavior, which posits that subjective norms significantly influence behavioral intention (Ajzen, 1991; Wallis & Loy, 2023). They also support arguments that social context is a key determinant of environmental behavior, often explaining discrepancies between attitudes and action (Liu, 2021; Ojala et al., 2021).

These findings can also be understood through *Sikolohiyang Pilipino*, which emphasizes that Filipino behavior is deeply relational and socially embedded rather than rational and individualized. In this perspective, Participant 10’s difficulty in sustaining environmental responsibility when others are noncompliant reflects the collectivist tendency of Filipino youth: when others are weak in environmental action, the motivation of the youth to act likewise weakens because the self is understood to behave with others and by shared practices.

Perceived Behavioral Control (PBC)

Among the three TPB components, perceived behavioral control (PBC) emerged as the most significant limiting factor. Despite high levels of anxiety and generally positive attitudes, many participants reported barriers that reduced their ability to engage in consistent pro-environmental behavior.

Theme 9: When Fear Silences Action

Internal factors such as fear, shame, and low self-confidence were frequently reported, just like in the case of Participant 1: *“nahihiya po akong makihalubilo... natatakot ma-bully”* (“I feel shy to interact... I am afraid of being bullied.”). This indicates that low self-efficacy can prevent individuals from expressing ideas or participating in environmental initiatives, even when they are motivated to do so. Recent studies confirm that while being environmentally aware is essential, the actual ability to demonstrate pro-environmental behavior is heavily mediated by an individual’s psychological state (Purnama et al., 2024). Specifically, emotional states such as anxiety or self-doubt can be interpreted by individuals as signs of personal inadequacy, which directly lowers their self-efficacy and hinders the transition from intention to action (Purnama et al., 2024). This withdrawal effectively creates an “aspiration-action gap,” where the desire for environmental change is stifled by perceived social and personal constraints (Onwezen & Dagevos, 2026). Furthermore, when individuals lack strong social support to buffer these anxieties, they are more likely to experience “ecoparalysis”, a state where the scale of environmental problems, combined with low self-confidence, prevents any meaningful participation (Anderson et al., 2024).

Theme 10: Cognitive Clouding Under Environmental Stress

Participants also noted that anxiety impairs cognitive functioning, such as in the case of Participant 2, who admitted that her cognitive ability is often clouded by the fact that it’s very hot around her: *“hindi ka makakapag isip ng tama... dahil sa sobrang init”* (“You cannot think properly because of the extreme heat.”). Recent research corroborates this by demonstrating that extreme outdoor heat exposure is directly associated with

diminished cognitive function and poorer mental health (Daniel et al., 2026). When environmental temperatures rise, individuals often experience "cognitive clouding," where the physiological strain of maintaining thermal equilibrium depletes the mental resources required for complex decision-making and executive control (Schilder et al., 2026). This cognitive impairment is particularly detrimental in the context of environmental initiatives, as thermal stress has been linked to increased psychological distress and a significant decrease in the ability to process information effectively (Saini et al., 2017).

Theme 11: Structural Constraints on Green Behavior

It can also be noted that the participants mentioned external barriers, like in the case of participant 3, where she noticed that there were no areas for proper waste disposal, which is why many people resort to burning their garbage: "*walang maayos na tapunan ng basura*" ("There is no proper waste disposal system.") Participant 2 also strengthened this when she mentioned that she feels that individuals lack resources for the environment: "*kakulangan sa oras at gamit*" ("Lack of time and resources.")

These findings emphasize the role of structural limitations, such as inadequate infrastructure and limited access to resources, in constraining pro-environmental behavior. Even highly motivated individuals may be unable to act due to systemic barriers. Recent studies emphasize that the absence of localized infrastructure, such as waste management systems, acts as a primary "hard" barrier that supersedes psychological motivation (Kalonde et al., 2022). When basic facilities are missing, individuals are often forced into maladaptive practices, such as open burning, which further contributes to environmental degradation and localized health risks. Furthermore, the lack of time and material resources mentioned by participants aligns with recent findings that socioeconomic constraints significantly limit "green" agency. For example, research indicates that individuals in developing urban contexts often face "time poverty," where the labor required for daily survival precludes participation in time-intensive environmental initiatives (O'Brien et al., 2025).

This suggests that for environmental interventions to be successful, they must move beyond individual behavioral nudges and prioritize the provision of accessible, reliable, and equitable infrastructure.

Theme 12: Micro-Choices, Green Impact

Despite these challenges, some participants demonstrated a sense of agency through manageable behaviors, such as participant 6, who initiates bringing her own tumbler: "*magdala ng tumbler para mabawasan plastic*" ("Bring a tumbler to reduce plastic use."). This indicates that when actions are perceived as feasible and accessible, individuals are more likely to engage in them. Such behaviors enhance perceived control and promote consistency.

Based on the responses from the participants, there is a nuanced relationship between climate change anxiety and pro-environmental behavior. This means that high levels of anxiety strengthen ATB, leading to increased environmental awareness and concern; Subjective norms (SN) determine whether these attitudes are supported or discouraged within social contexts; and Perceived behavioral control (PBC) ultimately dictates whether individuals can translate intention into action.

Climate change anxiety, therefore, can both motivate and inhibit pro-environmental behavior, depending on the presence of supportive social norms and sufficient behavioral control.

Furthermore, on the course of investigating the sixth assumption of the study: (6) Participants may cope with climate change anxiety in different ways at varying levels. This was consistent with the findings of the study where participants exhibit various ways of coping at varying levels. This includes: (1) Emotion-focused coping; (2) Social coping; (3) Problem-focused coping, reflecting both adaptive and maladaptive responses to environmental stressors; and (4) Reflective and cognitive coping.

CONCLUSIONS

This study significantly contributed to understanding the differences and relationship between climate change anxiety, pro-environmental behaviors, and coping mechanisms among Generation Z from farming households. The findings revealed that although most participants experienced average levels of climate change anxiety, a

meaningful number still experienced heightened distress that affected their emotions, thoughts, and daily functioning. At the same time, participants generally demonstrated average-level pro-environmental behaviors, indicating that climate anxiety can serve not only as a psychological burden but also as a motivating factor for environmental awareness and action; however, anxiety alone does not automatically lead to consistent environmental action. Family influence, peer norms, emotional resilience, and structural limitations such as lack of resources and inadequate environmental systems significantly shaped participants' behaviors. The coping mechanisms identified, including emotional regulation, reflection, social support, avoidance, and environmental engagement, showed that Gen Z responds to climate-related distress in varied ways depending on their psychological and social resources.

The findings also affirmed the importance of the Theory of Planned Behavior (TPB) in explaining Gen Z's environmental behaviors. Attitudes toward environmental protection, subjective norms from family and peers, and perceived behavioral control all influenced participants' willingness and ability to engage in pro-environmental actions. Among these, perceived behavioral control emerged as the most significant factor, as many participants were motivated to act but felt constrained by emotional, social, and structural barriers.

Overall, the study concludes that climate change anxiety is a complex experience that can either hinder or encourage pro-environmental behavior depending on the individual's coping capacity, social support, and perceived ability to act. The study emphasizes the need to integrate mental health, environmental awareness, and community-based interventions in empowering Gen Z to become resilient, environmentally responsible, and climate-conscious individuals.

RECOMMENDATIONS

The researcher proposes the following recommendations based on the findings and conclusions of the study:

1. Schools may integrate climate change education with mental health support by incorporating climate anxiety awareness into the curriculum;
2. Educators, students, and families are encouraged to promote adaptive coping strategies, such as problem-solving and emotional regulation;
3. Families may be engaged as key partners in environmental education by encouraging sustainable practices at home and by reinforcing positive environmental values;
4. Local authorities may address structural barriers by improving environmental infrastructure (e.g., waste management systems) and by providing accessible platforms for youth participation in environmental decision-making;
5. Mental Health Professionals may develop climate-responsive mental health programs, including workshops on managing eco-anxiety and counseling services focused on environmental stress; and
6. Future researchers are encouraged to conduct quantitative or mixed-method research to further examine the relationship between climate anxiety and behavior.

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