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LEVEL OF AWARENESS ON ENVIRONMENTAL ISSUES AND COPING STRATEGIES AMONG JUNIOR HIGH SCHOOL LEARNERS

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ABSTRACT

This study examined the level of awareness of environmental issues and the coping strategies employed by junior high school learners at Cabanglasan National High School. Specifically, it addressed the following questions: (1) What is the level of learners' knowledge of environmental issues in terms of awareness of major global and local problems, understanding of causes and effects, and knowledge of possible solutions and sustainable practices? (2) What coping strategies do learners use in learning environmental topics in terms of personal, peer, or family support, and school-based strategies? (3) Is there a significant relationship between learners' environmental knowledge and their coping strategies? A descriptive-correlational research design was used, and data were collected from 150 junior high school learners selected through stratified random sampling. A validated structured questionnaire was employed to measure learners' knowledge of environmental issues and the coping strategies they use. Findings revealed that learners possess a very high level of environmental knowledge, demonstrating strong awareness of global and local problems, understanding of causes and effects, and knowledge of sustainable practices. They also employ effective coping strategies, including personal study techniques, peer and family support, and school-based activities, with school-based strategies being the most frequently utilized. Additionally, a positive relationship was observed between learners' environmental knowledge and their coping strategies, indicating that higher awareness contributes to more effective approaches to overcoming learning challenges. These results emphasize the importance of promoting environmental education in rural schools and providing opportunities for learners to apply knowledge through practical

and collaborative activities. Teachers are encouraged to integrate interactive and hands-on strategies, while schools may enhance programs and clubs that strengthen environmental understanding and coping skills.

KEYWORDS: *Environmental awareness, environmental knowledge, coping strategies, high school learners, rural education.*

INTRODUCTION

Environmental issues including pollution and climate change, in addition to the quick depletion of natural resources, are becoming more urgent and noticeable on a global scale. Although these issues affect people in both wealthy and impoverished regions, they are typically felt more keenly in rural areas where there are few educational resources and environmental initiatives. According to our research, it is crucial for young students worldwide to develop an awareness of environmental issues, and they are crucial in advancing environmental conservation. However, many young students could struggle to understand the causes, effects, and remedies of such problems. Schools must provide the necessary knowledge and skills to pupils since environmental problems including pollution, deforestation, and climate change still pose a threat to Philippine communities. Understanding rural learners' level of awareness and the difficulties they encounter is becoming more crucial due to environmental hazards and the lack of educational resources available to them.

According to current research, most students are at least somewhat aware of environmental challenges, but their understanding is shallow and has little practical applicability. For instance, students at the Educational and Biological Sciences Faculty of UIN Sultan Maulana Hasanuddin Banten, Indonesia, had only modest environmental literacy, according to Henukh et al. Kholifaturrohmah et al. (2022). (2023) discovered that pupils' views affect how well they comprehend environmental issues. Additionally, other researchers like Mahanta (2023) and Mahinay et al. (2023) observed that although students can remember environmental concepts in theoretical contexts, they frequently struggle to apply them to real-world activities. According to Sapanova et al.'s findings, there is less participation in eco-friendly activities in rural areas due to restricted access to resources and fewer programs offered at schools. (2023) and Takyi and associates (2023). In fact, these studies demonstrate that although children are conscious of environmental problems in the natural world, they nevertheless have poor performance and little involvement in environmental action.

Even while these studies make a significant contribution to educational research, they primarily focus on college students and metropolitan school settings, leaving rural high school students largely unexplored. Additionally, there is a dearth of research that examines both students' grasp of environmental issues and the learning difficulties that impede their comprehension. Furthermore, specialized research is required to determine how students manage these difficulties, including the use of personal coping strategies, family support, and/or school-based assistance. There isn't currently a study that focuses on environmental knowledge, difficult problems, and coping strategies of students at Cabanglasan National High School, one of the rural schools in Bukidnon with urgent environmental issues like waste management, deforestation, and climate- related risk. This clearly creates a gap that the current study seeks to close.

The current study examined high school students' understanding of environmental challenges and coping mechanisms in an effort to close the gap. It specifically assessed students' knowledge of prospective solutions, their comprehension of causes and effects, and their awareness of local and worldwide environmental concerns. It also determined the coping strategies they employ on their own, with friends or family, and at school. By doing this, the study was able to provide a more accurate picture of how rural students interact with environmental issues.

The study's conclusions provided useful information that will enhance environmental education in rural schools for students, educators, school administrators, parents, and legislators. By identifying knowledge gaps and learning obstacles, the results have helped Cabanglasan National High School and other similar contexts create improved teaching methodologies, support systems, and environmental programming. Additionally, understanding the coping mechanisms used by students could help schools strengthen or modify support systems that encourage hands- on environmental learning.

Framework of the Study

This study was guided by three major hypotheses that shed light on how rural high school students learn about environmental issues, encounter learning obstacles, and develop coping mechanisms. These include the Transactional Model of Coping and Stress, the Constructivist Learning Theory, and the Environmental Literacy Theory.

The Constructivist Learning Theory, developed by Piaget (1973) and Vygotsky (1978), influenced our comprehension of how students would build their environmental knowledge through social and experiential learning. This hypothesis is predicated on the idea that

students who actively participate in research and apply what they have learned to their daily life achieve superior learning outcomes. The results of this study shed light on how rural learners created meaning from their surroundings and context, as well as the reasons why they could find it difficult to learn when environmental teachings are not imparted through practical instruction or community-based activities.

According to Roth's (1992) idea, students will learn about environmental issues and help the next generation take responsible care of the environment. According to this notion, learning about the environment encompasses not only knowledge but also sustainable behaviors and positive attitudes. The study was able to assess how learners' behavior and decision-making might be impacted by their understanding of environmental issues thanks to this dataset. Additionally, the Transactional Model of Coping and Stress by Lazarus and Folkman (1984) was used to determine how students will handle difficulties that arise from learning environmental ideas. According to this hypothesis, people employ a range of coping strategies to deal with adversity and adjust to difficult situations. However, this study (in relation to free problem definition) will clarify the difficulties that students encounter, such as the scarcity of learning resources, the lack of instructor assistance, or the complexity of environmental subjects.

Thus, the current study investigated the environmental awareness and coping mechanisms of rural high school students. Based on this premise, it was motivated by the notion that when faced with an environmental learning challenge, students' academic coping strategies may be impacted by their awareness and comprehension of environmental concepts. Additionally, the framework clarifies how knowledge affects behavior and adaptation, especially when students struggle to understand or apply environmental themes.

The schematic diagram in Figure 1 illustrates the investigation. The understanding of learners about environmental issues will be the independent variable. This understanding will be divided into three dimensions: (1) awareness of major local and global environmental challenges like pollution, deforestation, and climate change; (2) comprehension of the causes and effects of these issues; and (3) information about potential solutions and sustainable practices. In order to influence learners' perspectives and involvement with environmental learning, it is essential to comprehend these categories.

Conversely, the dependent variable will focus on how students use coping mechanisms to overcome their learning obstacles. Examples of these include: (1) individual strategies, such as self-study, online research, and time management; (2) peer or family support strategies,

such as group studies and conversations with family or friends; or (3) school-based strategies, such as ways to ask teachers for assistance or taking part in school-related environmental projects or clubs. These coping mechanisms show how students cope and adjust to their rural school environments.

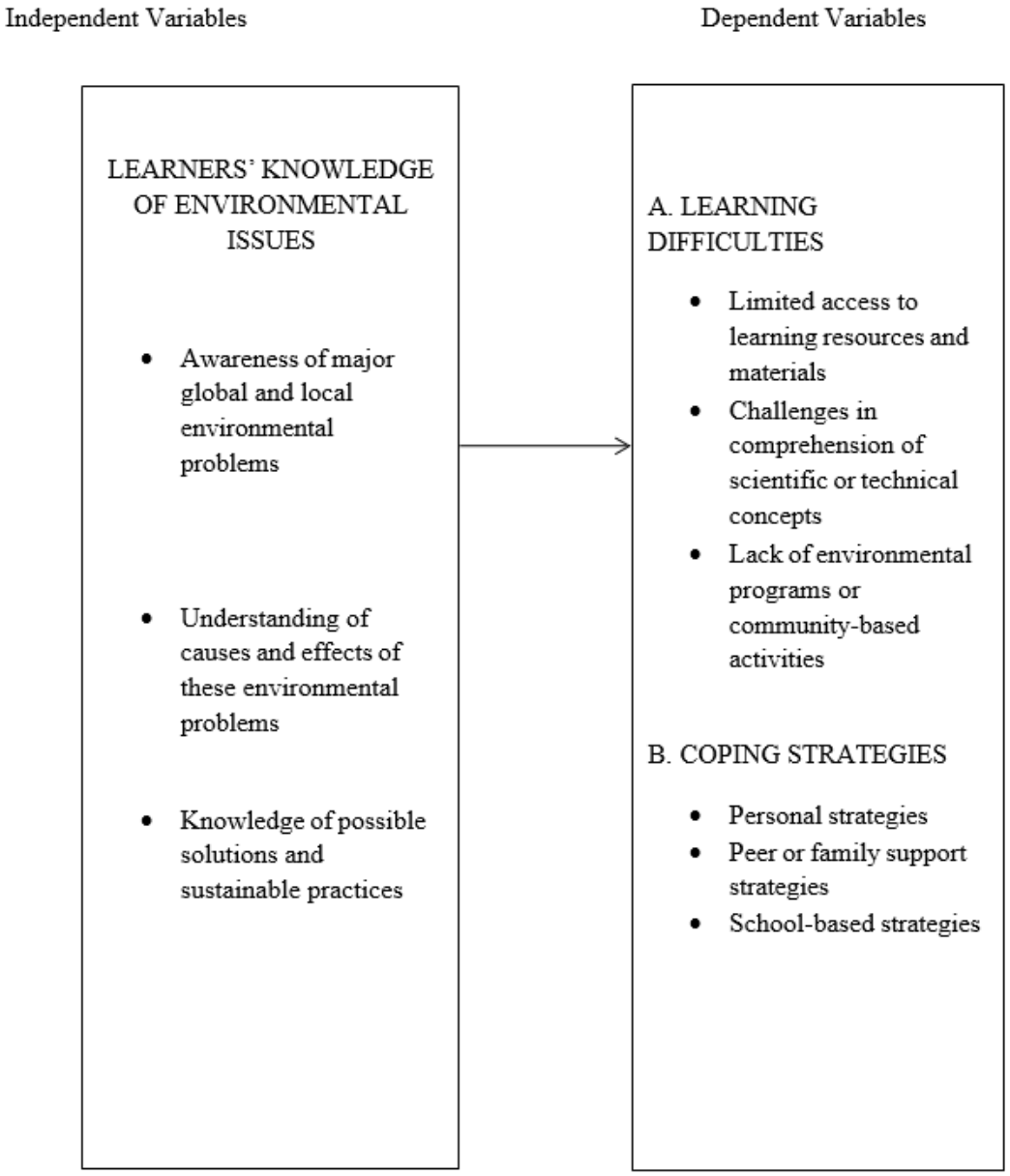

Figure 1. Schematic diagram of the study.

Scope

This study determines the coping strategies and environmental awareness of rural junior high school learners in Cabanglasan National High School, Cabanglasan Bukidnon. It focused on two major components: (1) the learners´ consciousness about environmental issues such as

pollution, deforestation and climate change; and (2) its way of coping—personal, peer or family and school. The study participants were restricted to junior high school students in grades 7 through 10, and responses for the study were accessed only during the period of 2025–2026 school year. The report does not include senior high school students, urban schools or a specific environmental programs evaluation; its scope is limited to reporting on students' experience within their rural school environment.

By the same token, this study possesses limitations. Data were only collected from the respondents who are enrolled in Cabanglasan National High School because of time and resource constraints, limiting the generalizability of results to similar rural sites. The study relied on self- reported data from survey questions, which could have been affected by students' social desirability, recall capacity or honesty. Moreover, this study did not control for certain variables that could influence the students' knowledge and coping strategies, such as the home environment of the students and how successful their teachers are. Yet, despite its limitations, the study aimed to provide meaningful insights into the nature of rural learners' experiences of environmental education.

Review of Related Literature and Studies

This chapter contains the relevant research and literature that support the investigation of rural high school students' coping mechanisms, learning challenges, and environmental awareness. Additionally, it features regional and global conversations that shed light on how students understand environmental issues, the challenges they face during the learning process, and the solutions they think of. The review serves as the foundation for identifying research gaps and strengthening the study's theoretical underpinnings.

Knowledge of and Concern for Environmental Issues

Because it affects how students interact with descriptions and actions related to sustainability, environmental education is an essential part of formative processes. According to research, students' awareness of environmental issues including pollution, deforestation, and climate change influences their sense of environmental responsibility. This could be a barrier to learners' comprehensive understanding and awareness of environmental challenges in rural settings.

Henukh et al. (2025) also examined the environmental literacy profiles of students at Musamus University through a case study. A questionnaire was used to gather data for this study, which used a quantitative descriptive method. The study's objective was to evaluate students' understanding of fundamental environmental concepts. The results indicated that most pupils' environmental literacy fell into the moderate group. This suggests that even while they were aware of environmental hazards, their comprehension and application of this knowledge in earlier use and behavior modifications were still lacking.

In a similar vein, Kholifaturrohmah et al. (2023) looked at the connection between high school students' social attitudes and environmental literacy. J. They investigated the relationship between students' social values and their comprehension of environmental issues using a correlational research method. Data on societal views and the level of environmental literacy were gathered through surveys. The variables have a positive association, according to the results. Students who are more socially conscious and concerned about the welfare of others are consequently more likely to be informed and responsible about environmental issues.

Additionally, Mahanta (2023) used questionnaire surveys to examine higher education students' understanding of the environment. In this way, the study aimed to determine how well the students understood environmental issues and how they used their knowledge in practical situations. Students' theoretical understanding of environmental problems, such as pollution and climate change, was strong. However, few students actively participated in environmental conservation initiatives. This demonstrates a gap between what they know and how they act when it comes to protecting the environment.

Additionally, Mahinay et al. (2023) used a descriptive research approach to ascertain students' comprehension of pollution and related environmental themes in order to investigate environmental literacy levels and pollution awareness among tenth graders in senior high school. According to Yin et al. (2022), "Most students successfully recognized the causes and effects of pollution in their surroundings." However, they found it difficult to apply environmental principles to actual actions and workable remedies. This statistic raises concerns about the lack of interest in experiential and hands-on learning activities that promote environmental literacy, such as "It would be great to help snatches responsibility."

Similarly, Mustofa and Sueb (2023) investigated environmental consciousness and literacy in advancing sustainability and the environment. Students from the various schools took part in surveys and interviews to learn more about how they acquired environmental ideologies and

concepts that they applied to their everyday lives. It was discovered that while students had a basic conceptual understanding of environmental issues, such as waste management and conservation, their sense of responsibility toward sustainability was still developing, particularly in schools without environmental programs and activities.

Similarly, Radzi et al. (2025) examined the sustainability knowledge of students (2014– 2025 years old) from Millennial to Generation Z at a public higher education institution. The researchers used a comparative survey method to measure students' awareness and knowledge of environmental sustainability. The study aimed to find generational differences in attitudes toward environmental issues; Gen Z learners demonstrated greater awareness and knowledge about sustainability than Millennials, primarily due to their increased use of digital media platforms and participation in online environmental campaigns.

Additionally, Sapanova et al. (2023) conducted a study to assess Kazakhstani high school students' environmental knowledge, attitudes, and awareness. The results of the researchers' quantitative assessment of students' comprehension and concern for environmental issues revealed that while most students are concerned about environmental issues such as pollution or climate change, their scientific and factual knowledge of these issues is limited. Students in remote areas, where there were little educational resources and environmental programs, were most affected by this.

An investigation into environmental literacy in Indian colleges was carried out by Shri and Tiwari (2021). Survey questionnaires were used to gather information on students' exposure to and awareness of important environmental topics. The study's goal was to assess students' comprehension of subjects like pollution, waste management, and conservation. The results showed that students had moderate levels of environmental literacy. Few had a thorough scientific understanding of environmental processes and their practical applications, even though they were aware of general environmental challenges.

Lastly, Takyi et al. (2023) used a mixed-method research strategy by integrating survey and interview data to investigate Kumasi students' eco-awareness. Students' awareness, attitudes, and involvement in environmental preservation actions were the main emphasis of the study. The majority of students possessed a rudimentary understanding of sustainability and environmental protection, according to the results. However, their real involvement and advocacy efforts, such as helping with clean-up campaigns or incorporating eco-friendly practices into their daily lives, were comparatively muted. This demonstrated the necessity of supporting school-based learning programs that encourage early involvement and long-term

dedication to environmental stewardship.

Learning Difficulties in Understanding Environmental Concepts

Due to limited exposure and instructional strategies, kids may find it challenging to comprehend environmental ideas. First, Lagasca-Hiloma et al. (2021) investigated how pupils in Grades 5 and 6 were affected by the WWF-Philippines waste management manual. Through questionnaires and observations in the classroom, they discovered that although students had learnt the fundamentals of waste segregation, they struggled to apply these notions to their daily lives. It shows that students need more practical and contextual learning experiences before they completely grasp environmental science concepts, even when they are working with formal resources. For this reason, in order to promote a greater comprehension, environmental education should be complemented by real-life experiences.

Additionally, Garcia and Cobar-Garcia (2021) evaluated the environmental literacy of teachers from Manila and Nueva Ecija using a mixed-method approach. According to their findings, teachers exhibited a moderate level of expertise but lacked confidence when it came to communicating complicated environmental topics to children. This kind of restriction prevents students from accurately comprehending environmental topics, especially in scientific contexts. Ironically, students often memorize terms that they are completely ignorant of. Thus, instructional strategies and teacher preparation can enhance various learning trajectories.

Additionally, Hoffmann and Muttarak (2020) investigated the connection between pro-environmental behavior and education in the Philippines using survey data. Higher education increased awareness, according to their research, but it did not necessarily translate into a deeper comprehension or sustainable environmental behavior. This implies that strong environmental literacy might require more than just education. Students may be aware of what has to be done, but they may lack the critical thinking abilities or drive to carry it out. In order to increase students' awareness of the environment, academic learning must be combined with real-world experiences in the classroom.

Similarly, Galorio and Naling (2024) use surveys and interviews to find out how aware senior high school students and teachers are of this topic. The results showed that while both groups were conscious of environmental challenges, their knowledge of scientific and ecological concepts was lacking. Students find it more challenging to apply their knowledge in practical situations as a result. Furthermore, teachers were seldom given the right teaching resources to make these difficult concepts understandable. The study came to the conclusion that it's

critical to provide educational materials that help students understand environmental concepts.

Additionally, Baring et al. (2024) investigated how Catholic life formation influenced the environmental attitudes of a sample of Filipino SHS students using qualitative interviews. The results revealed that although students had a great moral and spiritual regard for nature, they lacked a conceptual grasp of environmental systems. This suggests that while values-based education promotes environmental consciousness, it could not strengthen scientific comprehension. Students must therefore strike a balance between moral development and cognitive learning in order to fully comprehend environmental issues. For a more thorough and comprehensive approach, the study suggests combining science-based instruction with faith-based programming.

Similarly, Arioder et al. Hollon et al. (2020) introduced new environmental concepts to young elementary students through a constructivist teaching style. Students were able to autonomously explore and discover concepts through activities such as modeling slime molds. Without the proper assistance, the students continued to have difficulty understanding scientific explanations. It showed that while curious constructionist approaches encourage participation, they also require clear instructor guidance and efficient scaffolding. To assist kids understand complicated environmental issues, teachers should combine planned education with exploration.

On the other hand, Mendoza (2023) used surveys and activity-based assessments to gauge the environmental literacy and citizen science skills of sixth-grade Filipino students. The results demonstrated that although students had a basic understanding of environmental issues, they were unable to explain topics like pollution, climate change, and biodiversity loss. This means that developing environmental literacy requires more than simply factual knowledge. Young people need greater opportunities to watch, experiment, and participate in realistic environmental projects if they are to comprehend how nature actually functions. Thus, this gap between knowledge and comprehension is filled by the pedagogical addition of citizen scientific activities in schools.

Coping Strategies toward Environmental Learning Challenges

Students that struggle to understand their surroundings frequently come up with novel strategies for learning and managing. For instance, they could ask their teachers for assistance, participate in class debates, use photos in the classroom, or work on environmental initiatives at school. By using these strategies, students may close the

knowledge gap between theory and practice and make environmental courses more relatable. The papers that follow describe several tactics that teachers and students employ to overcome obstacles in environmental learning.

Mendoza et al. (2024) looked into how Filipino environmental behaviors were affected by experience-based environmental education. The study found that direct experiences, such participating in fieldwork and community clean-ups, helped impacted learners gain a deeper appreciation for nature. These findings were based on surveys and interviews. These encounters also encouraged sustained environmental care and active participation. The researchers found that students felt better capable of applying their environmental knowledge in daily life as a result of experiential learning. Therefore, the finding suggests that realistic and practical experiences are effective means of overcoming learning challenges.

In keeping with the same topic, Ibañez (2025) discussed socio-economic resilience and deep ecology as ways to deal with environmental concerns in the Philippines. According to the findings, students and locals can deal with environmental issues through qualitative analysis when ecological ideals are incorporated into community programming. Additionally, it helped students develop a mindset of simplicity and connection to nature, which enhanced their emotional and social resilience. This suggests that people can approach complicated environmental learning in a way that contextualizes and aligns information with real-life experiences through deep ecological thinking (Gottlieb, 2021). As a result, the study emphasizes the role that values-led and holistic learning play in environmental education.

Furthermore, Nayle et al. (2024) investigated student leaders' awareness of environmental ethics and civic engagement in Philippine higher education institutions. They found through a descriptive study that people who knew more about environmental ethics exhibited higher levels of environmental behavior, including planning sustainable projects. However, they claimed that limited institutional backing and time constraints prevented more widespread participation. To address these issues, students acquired new competencies in advocacy-based pedagogy and peer collaboration. As a result, the study demonstrates how ethical consciousness may affect people's ability to actively cope and participate in environmental education.

Furthermore, Malaluan et al. (2022) talked about how environmental principles can act as a link between behavior and scientific reasoning. They discovered through a framework-based analysis that incorporating environmental subjects into science classes improves students' critical thinking and problem-solving skills. However, several pupils struggled to apply

abstract scientific ideas to practical environmental issues. Teachers created inquiry-based classes and continuously contextualized examples to bridge this gap. As a result, the study highlighted how integrating science with environmental settings strengthens comprehension and behavior.

In a similar vein, Ablak and Yeşiltaş (2020) used surveys to assess secondary school pupils' knowledge of environmental education principles. The results showed that, while having a general comprehension of environmental processes, pupils lacked confidence in their ability to explain them. In order to make lessons more engaging, teachers should encourage group projects and the use of visual aids. These techniques help students overcome obstacles and more effectively communicate their conceptual understanding. According to the study, interactive and mutually supportive classroom practices specifically aid students in navigating challenging environmental lessons.

Lastly, Corpuz et al. (2022) looked into the incorporation of environmental education into Philippine teacher preparation programs. They concluded that many teacher-training institutes were beginning to "green" their curricula to include issues linked to sustainability based on document analysis and interviews; nevertheless, those patches of content and training opportunities are still, at best, irregular. Nevertheless, as teachers, they adjusted by teaching environmental ideas through project-based learning and location-specific examples. The study emphasized the necessity of enabling educators to play a crucial role in assisting pupils in overcoming the obstacles to learning posed by environmental reality.

Research Methodology

A descriptive-correlational research design was used for the current investigation. The descriptive component involved determining and elucidating the level of rural high school students' understanding of environmental issues and how they deal with such difficulties. The correlational component examined whether students' awareness of environmental issues influences their coping mechanisms during the learning process and whether greater awareness and comprehension result in distinct coping mechanisms.

Because the researcher had gathered quantitative data via a survey questionnaire and could assist studies regarding how these variables may show patterns without changing them, this approach was appropriate. It has made it easier to examine the current situation of rural students, such as those at Cabanglasan National High School, who lack access to environmental education resources.

Validated tools to assess environmental literacy (knowledge, attitudes, and behavior) that

have a strong correlation with coping mechanisms and environmental issue knowledge were used to create the questionnaire for this study. The Mendoza Environmental Literacy Instrument (ELI) is one useful tool. In 2023.

As a result, the accepted instrument included a structured questionnaire with parts that matched the variables of the study: (a) knowledge of environmental issues (awareness, comprehension of causes and effects, potential solutions); and (b) coping mechanisms (personal, peer/family, school-based). To suit the rural setting of Cabanglasan National High School, the instruments will be changed or altered based on the items from valid instruments (ELI and the Environmental Literacy Questionnaire).

For several items, comments about attitudes, challenges encountered, and coping mechanisms used a Likert scale to gauge frequency (e.g., Always to Never) or degree of agreement (e.g., Strongly Agree to Strongly Disagree). To gauge comprehension of state facts, causes and effects, and awareness of remedies, knowledge items may consist of multiple-choice or true/false questions.

Frequency and percentage for demographics and statistics were used to examine the data gathered from respondents in accordance with each study topic. The quantitative data (number of questionnaire responses) gathered from the aforementioned questionnaire was then analyzed using descriptive and inferential statistics.

For RQ1, the study used Weighted Mean and Standard Deviation to gauge students' awareness, comprehension, and solutions to environmental problems. These tools indicated whether students' knowledge was very high, high, moderate, low, or very poor based on the average level and consistency of their responses.

For Research Question 2, which identified coping mechanisms the students may employ to deal with their learning challenges, the same statistical techniques Weighted Mean and Standard Deviation—were employed. These guided the frequency and effectiveness of students' use of school-based, peer/family, and personal initiatives.

Lastly, the Pearson Product-Moment Correlation Coefficient (r) was employed to address Research Question 3, which aimed to ascertain whether learners' understanding of environmental issues and their coping mechanisms are significantly correlated. This test evaluated the strength and direction of the association between variables, indicating whether higher knowledge levels are associated with fewer problems and more practical solutions.

Findings

Determining students' understanding of important environmental issues aids in determining whether or not they are sufficiently informed about the problems that exist both locally and globally. Environmental Awareness The development of responsible attitudes and behaviors toward the environment and its resources is facilitated by environmental awareness. Being aware of environmental issues makes it easier to become concerned about the environment and take part in conservation and sustainability initiatives.

Second, evaluating students' awareness enables teachers to identify areas in the curriculum where further instruction and environmental integration takes place. By determining how well students are aware of the major environmental issues, schools may develop successful teaching tactics, enhance environmental education, and cultivate environmentally conscious citizens. To address this challenge, learners' awareness of significant environmental issues was examined, and the results are displayed in Table 1.

Table 1 ***Level of Learners' Awareness of Major Global and Local Environmental Problems.***

Indicators	***M***	***SD***	**Interpretation**
Understanding of the importance of waste management in environmental protection	4.55	0.66	Strongly Agree
Awareness of the global impact of climate change	4.53	0.90	Strongly Agree
Awareness of serious environmental problems in the Philippines, such as flooding and land degradation	4.49	0.66	Strongly Agree
Awareness of air and water pollution as major community problems	4.33	0.71	Strongly Agree
Familiarity with the causes and effects of deforestation	4.12	0.80	Agree
Overall Mean	4.41	0.53	Very High Knowledge
Note. M = Mean; *SD* = Standard Deviation. Responses were measured using a 5-point Likert scale, where 5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, and 1 = Strongly Disagree.			

"Understanding of importance of waste management to protect environmental responsibilities" has the highest mean, as indicated in Table 1, with a mean of 4.55 (SD = 0.66), which is translated as Strongly Agree. This outcome demonstrates that students understand the importance of appropriate waste management in preserving the environment. This high rating may be a sign that they have been reached by school initiatives, community clean-up events, and frequent conversations on appropriate trash segregation and disposal procedures. This finding suggests that learner awareness and comprehension are more likely

to increase when environmental activities are clearly seen in the community.

Table 2

Level of Learners' Understanding of the Causes and Effects of Environmental Problems

Indicators	***M***	***SD***	**Interpretation**
Understanding of the contribution of plastic use to global pollution	4.39	0.78	Strongly Agree
Knowledge of the environmental effects of improper waste disposal	4.39	0.71	Strongly Agree
Understanding of the relationship between pollution and health problems	4.26	0.66	Strongly Agree
Ability to describe the impact of deforestation on biodiversity loss	4.04	0.83	Agree
Ability to explain how human activities cause environmental problems	3.99	0.81	Agree
Overall Mean	4.21	0.51	Very High Knowledge
Note. M = Mean; *SD* = Standard Deviation. Responses were measured using a 5-point Likert scale, where 5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, and 1 = Strongly Disagree			

This conclusion is further supported by Mahinay et al. (2023), who noted that students exhibit a clear comprehension of environmental issues because they are instantly present in their surroundings. In a similar vein, Lagasca-Hiloma et al. (2021) showed that students who are frequently exposed to obvious environmental issues had more comprehension and awareness.

Table 3 Level of Students' Knowledge of Possible Solutions and Sustainable Practices.

Indicators	***M***	***SD***	**Interpretation**
Knowledge of the role of tree planting in mitigating climate change	4.69	0.60	Strongly Agree
Awareness of the importance of recycling and reusing materials	4.67	0.56	Strongly Agree
Understanding of the importance of waste reduction in environmental protection	4.62	0.61	Strongly Agree
Awareness of the role of participation in environmental programs in promoting sustainability	4.41	0.67	Strongly Agree
Awareness of simple ways to conserve water and electricity	4.33	0.65	Strongly Agree
Overall Mean	4.54	0.42	Very High Knowledge
Note. M = Mean; *SD* = Standard Deviation. Responses were measured using a 5-point Likert scale, where 5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, and 1 = Strongly Disagree			

The high degree of agreement may suggest that students are familiar with the tree-planting activities that schools and communities frequently participate in. This is consistent with the findings of Galorio and Naling's (2024) study, which shows that students who are exposed to sustainability-based campaigns emphasize having a solid understanding of how to

solve environmental problems. In a similar vein, Mustofa and Sueb (2023) noted that kids gain a real understanding of how to become responsible through environmental activities.

Table 4 ***Composite Summary of Students' Environmental Knowledge.***

Dimensions	***M***	***SD***	**Interpretation**
Knowledge of Possible Solutions and Sustainable Practices	4.54	0.42	Very High Knowledge
Awareness of Major Global and Local Environmental Problems	4.41	0.53	Very High Knowledge
Understanding Causes and Effects of Environmental Problems	4.21	0.51	Very High Knowledge
Overall Mean	4.39	0.43	Very High Knowledge
Note. *M* = Mean; *SD* = Standard Deviation. Responses were measured using a 5-point Likert scale, where 5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, and 1 = Strongly Disagree			

According to the Interpretation Scale, the Knowledge of Possible Solutions and Sustainable Practices dimension had a mean score of 4.54 (SD = 0.42), indicating Very High Knowledge. When it comes to doable environmental initiatives like recycling, conservation, and tree planting, we are the most knowledgeable. The results suggest that community activities and solution-based environmental education may be successfully consolidating students' knowledge of practical environmental practices. This is an indication that education and school sustainability activities are effective since it shows that they are not only aware of environmental challenges but also know how to address them.

Table 5 ***Level of Learners' Use of Personal Coping Strategies in Learning Environmental Topics.***

Indicators	***M***	***SD***	**Interpretation**
Watching educational videos to enhance understanding of environmental concepts	3.78	0.90	Agree
Managing time effectively to review environmental lessons	3.65	0.88	Agree
Studying environmental topics independently using books or online sources	3.49	0.83	Agree
Overall Mean	3.64	0.69	Effective Coping Strategy

Note. M = Mean; *SD* = Standard Deviation. Responses were measured using a 5-point Likert scale, where 5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, and 1 = Strongly Disagree

Regarding indicators, the statement "Watching educational videos to enhance understanding of environmental concepts" received the highest mean score of 3.78 (SD = 0.90), which was interpreted as Agree. According to this research, students frequently use content as digital and visual aids to assist them understand difficult environmental issues. The preference for video suggests that instead of reading complex text-based content, students would rather watch visual explanations. Mendoza et al. (2024) support this conclusion by stating that experience-based and multimedia learning make difficult environmental concepts easier for students to understand.

Table 6 ***Level of Learners' Use of Peer and Family Support Strategies.***

Indicators	***M***	***SD***	**Interpretation**
Seeking help from classmates when environmental lessons are unclear	3.89	0.91	Agree
Participating in group study sessions for difficult topics	3.50	1.05	Agree
Discussing environmental issues with family or friends	3.37	1.08	Undecided
Overall Mean	3.59	0.76	Effective Coping Strategy
Note. M = Mean; *SD* = Standard Deviation. Responses were measured using a 5-point Likert scale, where 5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, and 1 = Strongly Disagree			

"Seeking help from classmates when environmental lessons are unclear" had the highest mean, as shown in the table, with a mean of 3.89 (SD = 0.91), which is read as Agree. This finding implies that students frequently seek clarification on difficult environmental subjects from their peers. Through peer involvement, students can think aloud using vocabulary they are familiar with, which makes challenging ideas easily understandable. According to Corpuz et al. (2022), collaborative learning spaces enhance students' involvement and comprehension of environmental themes. Similar evidence for improved environmental awareness and learning outcomes was shown by Ablak and Yeşiltaş (2020).

Table 7 Level of Learners' Use of School-Based Coping Strategies.

Indicators	***M***	***SD***	**Interpretation**
Seeking help from teachers to clarify difficult	3.75	1.02	Agree

environmental concepts			
Participating in school environmental projects or activities	3.75	1.04	Agree
Joining environmental clubs to improve knowledge and awareness	3.55	1.14	Agree
Overall Mean	3.68	0.80	Effective Coping Strategy
Note. *M* = Mean; *SD* = Standard Deviation. Responses were measured using a 5-point Likert scale, where 5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, and 1 = Strongly Disagree			

The top two indicators indicate that students actively used teacher advice and school activities to keep knowledgeable about challenging environmental ideas (M = 3.75), according to the table features of these indicators. This suggests that the structure and support that are ingrained in the educational setting improve students' comprehension of what learning is like as well as their level of involvement. These results are in line with Mendoza et al. (2024), who emphasized the value of experiential learning and teacher support in influencing students' environmental behavior. Ibañez (2025) also discussed how educational programs give pupils environmental information so they can incorporate what they've learned from theories into their actions.

Table 8 ***Composite Summary of Learners' Coping Strategies in Learning Environmental Topics.***

Dimensions	***M***	***SD***	**Interpretation**
School-Based Coping Strategies	3.68	0.80	Effective Coping Strategy
Personal Coping Strategies	3.64	0.69	Effective Coping Strategy
Peer and Family Support Strategies	3.59	0.76	Effective Coping Strategy
Overall Mean	3.64	0.75	Effective Coping Strategy
Note. *M* = Mean; *SD* = Standard Deviation. Responses were measured using a 5-point Likert scale, where 5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, and 1 = Strongly Disagree			

The summary of coping mechanisms used by students to deal with unfavorable learning experiences pertaining to conventional environmental issues shows that students turn to school- based coping mechanisms as well as peer and family support (Table 6). School-based coping mechanisms had the highest mean of the three aspects (3.68), indicating that students frequently depend on instructors' structured direction and their participation in school projects or environmental groups. This suggests that the educational setting is an important source of assistance for students' comprehension of intricate environmental concepts.

Table 9 ***Test of Correlation Matrix Between Level of Learner's Knowledge Subvariables***

and Coping Strategies.

Variables	*r*	*p*-value	Interpretation
1. Awareness of Major Global and Local Environmental Problems	.31	.000	Significant
2. Understanding Causes and Effects of Environmental Problems	.42	.000	Significant
3. Knowledge of Possible Solutions and Sustainable Practices	.33	.000	Significant
Note. Correlation coefficient (Pearson *r*) is shown.			

The results shown in Table 9 show that learners' adaption techniques to learning problems and their environmental knowledge are positively correlated. Coping techniques were substantially linked with all three subvariables: knowledge of potential solutions and sustainability (r = 0.33), comprehension of the origins and effects of environmental problems (r = 0.42), and awareness of key local and global environmental concerns (r = 0.31). This implies that more knowledgeable students are more likely to use useful peer, school, and personal coping mechanisms to deal with the difficulties of learning about environmental issues. In the area of environmental problems, there was the largest correlation between the deep approach to learning and comprehending causes and effects. According to the authors, learners will be better equipped to handle difficulties if they can conceptualize how an environmental problem might appear.

Table 10 Correlation Between Level of Learner's Knowledge and Coping Strategies (Main Variables)

Variables	*r*	*p*-value	Interpretation
Level of Learner's Knowledge – Coping	.46	.000	Significant
Note. Correlation coefficient (Pearson *r*) is shown.			

With a correlation coefficient of r = 0.46 and a p-value of 0.000, the findings in Table 10 demonstrate a strong positive association between learners' coping mechanisms and their total level of environmental knowledge. This suggests that students who are better knowledgeable about environmental issues are more likely to employ useful coping mechanisms to deal with learning challenges related to the environment. The relatively strong link indicates that students are better able to use peer, school-based, and personal techniques to overcome obstacles as their knowledge of environmental issues, their origins, impacts, and potential remedies grows.

CONCLUSIONS AND RECOMMENDATIONS

The study's conclusions indicate that junior high school students at Cabanglasan National

High School have a very high degree of environmental awareness. Although some students have trouble relating specific concepts to actual circumstances, they are aware of significant local and global issues, comprehend their causes and effects, and identify potential solutions and sustainable behaviors. Students can also employ useful coping mechanisms to get beyond obstacles when learning environmental issues; the most popular strategy is school-based help. Additionally, the study shows a positive correlation between coping techniques and environmental knowledge, indicating that learners' capacity to handle learning challenges is improved by a deeper comprehension of environmental issues. Overall, the findings emphasize how crucial it is to develop both knowledge and useful tactics in order to support successful environmental education in rural high school environments.

In order to expand their understanding of environmental ideas, students have an obligation to develop personal study habits that work for them and participate in school-based activities like environmental clubs, projects, and community programs. In addition to expanding their knowledge and coping mechanisms, they ought also investigate bittersweet melancholy press with friends and relatives.

Instructors ought to incorporate even more practical, inquiry-based, and hands-on activities that connect environmental knowledge to real-world scenarios. Peer-to-peer activities that call for cooperation, group discussions, and problem-solving exercises help students develop their comprehension and overcome academic content hurdles on environmentally linked themes.

School administrators should encourage, support, and maintain environmental initiatives and programs that give pupils organized chances to apply their knowledge and improve their coping mechanisms. School gardens, environmental initiatives, eco groups, and teaching materials that encourage involvement and active engagement are a few examples.

By talking about subjects at home, exchanging educational materials with the family, and assisting students with independent study, parents and families can offer a valuable opportunity. This is crucial for reminding young people of the importance of being environmentally sensitive and for practicing coping techniques at home.

We also encourage LGUs, NGOs, and environmental organizations to collaborate with our schools by offering extra activities, workshops, and materials that improve environmental education. Additionally, these organizations can carry out teacher capacity building, engage in community outreach initiatives, and offer technical educational resources that will enhance the knowledge and coping mechanisms of students in remote areas.

Future research should also look into other factors that affect students' coping mechanisms,

such as motivation, resource availability, attitudes toward environmental preservation, and sociocultural impacts. Furthermore, by facilitating more successful learning in rural settings, recognizing these aspects can aid in the improvement of environmental education tactics.

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