Exploring the Motivations of First-Year Students in Enrolling Environmental Science at Eastern Visayas State University, Tacloban City

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ABSTRACT

Motivation is a crucial psychological construct that directs, energizes, and sustains human behavior. It influences individuals' choices, effort, and persistence toward goal attainment. This study examined the motivational factors influencing first-year students' decision to enroll in the Bachelor of Science in Environmental Science (BSES) program at Eastern Visayas State University–Main Campus to provide insights in developing responsive curriculum and enhancing student support mechanisms. A mixed-method design employing a descriptive survey approach was utilized, with purposive sampling to identify the participants. Data were collected by means of a researcher-developed questionnaire administered via Google Forms. Descriptive and inferential statistics were used to analyze the numerical data while thematic analysis was used for the non-numerical data. Findings revealed that the majority of respondents were 18 years old, female, and mostly graduates of the Technical-Vocational-Livelihood (TVL) strand. More than half indicated that BSES was their first choice. Across all demographic groups, personal values emerged as the highest-rated motivational dimension, reflecting strong intrinsic motivation anchored in environmental concern, sustainability principles, and personal beliefs. Qualitative data reinforced these results, highlighting themes of passion, curiosity, and self-fulfillment. Conversely, social influence received low mean scores, suggesting limited effect of peers, family, or teachers on students' enrollment decisions. Statistical analyses revealed no significant differences in motivation by age, course preference, or enrollment status. However, significant variations were observed in personal values by gender ($t = 2.19$, $p = 0.02$) and academic strand ($F = 3.21$, $p = 0.02$), and in social influence by student status ($t = 2.44$, $p = 0.01$). These findings suggest that gender and prior educational exposure play key roles in shaping students' intrinsic motivation toward environmental science education.

Keywords: Motivation, Environmental Science, Responsive Curriculum, Student Support System, Higher Education

INTRODUCTION

Background

Motivation creates a significant impact on a person's decision-making. It is a powerful driving force that dictates human behavior. It influences how individuals choose certain actions, how much effort they exert, and how long they persist in achieving their goals. In the context of education, motivation determines not only the decision to enroll in a particular course but also the level of engagement and persistence students show in their academic journey. Studies show that motivated individuals demonstrate higher levels of learning, creativity, and performance because motivation links personal meaning to learning, making academic tasks more purposeful and relevant (Ryan & Deci, 2000). Similarly, motivation shapes learning outcomes by encouraging students to invest effort, overcome challenges, and develop resilience (Schunk, Pintrich, & Meece, 2014).

Thus, motivation is a powerful psychological engine that transforms potential into action, turning academic aspirations into concrete achievements.

As the world is confronted by the predicament brought about by climate change, environmental degradation, and unsustainable human practices, education becomes a valuable weapon. It plays a pivotal role in developing awareness and prompting constructive environmental action among the people. Along this, academic institutions worldwide have responded by offering specialized programs in Environmental Science. These programs aim to equip students with the knowledge and skills needed to understand, analyze, and address complex environmental challenges (UNESCO, 2021).

In the Philippines, a growing appeal and demand for such courses have been observed. According to the Philippine Statistics Authority's Compendium of Philippine Environment Statistics 2014–2023, environmental-related degree programs—including Environmental Science, Environmental Management, and Environmental Planning—have experienced a steady rise in enrollment through 2022 and into 2023. This condition is promising since the need for more environment professionals and workers is massive. However, the increase in enrolment alone does not guarantee the production of the needed human resources. To be successful in their academic journey, students must possess what it takes to endure in their chosen program. Environmental science as a field of study demands both intellectual commitment and a strong sense of responsibility toward addressing urgent global and local environmental issues. Thus, in order to fully engage with the learning process, sustain their academic efforts, and maximize their potential for success, students must be driven by strong interest and stimulation. Motivation not only pushes students to participate actively in classroom activities but also helps them overcome challenges and persist in achieving their goals. Additionally, without sufficient motivation, students may find it difficult to connect their academic learning with real-world applications such as climate action, sustainability practices, and community-based environmental initiatives.

However, despite the collective underscoring of previous studies that motivation is a critical driver of higher learning, creativity, and academic success (Ryan & Deci, 2000; Schunk et al., 2014; Richardson & Bond, 2012; Honicke & Broadbent, 2016; Csikszentmihalyi, 1990), there is limited research on what specifically motivates students to choose a particular academic path, for example, Environmental Science program. While the response of academic institutions to the pressing environmental challenges is praiseworthy, their ultimate achievement lies in the success of their students. Therefore, understanding the motivations of students in enrolling in the Environmental Science program is necessary. Awareness of the forces that have driven the students enrolling in Environmental Science will provide insight into how these stimuli shape their educational choices and determination to prevail over possible academic challenges and eventually apply their knowledge and skills in the real world.

For educational institutions offering environment-related programs like Eastern Visayas State University (EVSU), such action could generate far-reaching results. Understanding and nurturing student motivation is essential to ensure that they not only succeed academically but also develop into environmentally conscious individuals who can contribute meaningfully to society. This study, therefore, seeks to explore the motivational factors that influence the decision of the first-year college students in enrolling Bachelor of Science in Environmental Science in order to provide insights for shaping responsive curriculum, improving academic support systems, and enhancing institutional efforts to promote environmental science education.

Objectives

The primary objective of this study is to identify and analyze the motivational factors that influence first-year college students at Eastern Visayas State University, Tacloban City, in choosing the Bachelor of Science in Environmental Science program. Specifically, the study aims to: (1) describe the demographic profile of the students; (2) assess the extent of influence of the following motivational factors: environmental advocacy, personal values, academic ambition, social influence, and career orientation in shaping the students' decision to enroll in the Environmental Science program; (3) test whether these factors differ according to demographic profile of the students; (4) explore any underlying themes through the responses of the students on the open-

ended question; and, (5) provide recommendations for enhanced curriculum and relevant student support scheme.

Theoretical Framework

This study is anchored on three interrelated theories: the Expectancy-Value Theory, Self-Determination Theory, and the Theory of Planned Behavior. The Expectancy-Value Theory posits that students' educational choices are influenced by their expectations of success and the value they assign to a task (Wigfield, 1994; Wigfield & Eccles, 2000). In the context of this study, students may choose Environmental Science because they believe they can succeed in the course and perceive it as valuable for personal growth, societal impact, or future careers (Eccles & Wigfield, 2002). Correspondingly, Self-Determination Theory emphasizes the importance of intrinsic motivation which means that a person's choice or action is inspired by autonomy, competence, and relatedness. This theory explains how students who value environmental protection, seek academic fulfillment, and feel connected to a community of like-minded individuals may be intrinsically motivated to pursue the course (Deci & Ryan, 1985). Meanwhile, the Theory of Planned Behavior highlights how students' decisions are shaped by their attitudes toward the environment, the influence of significant others (e.g., family, peers, or teachers), and their perceived control over succeeding in the program (Ajzen, 1991). Together, these theories provide a comprehensive framework for understanding the complex interplay of personal values, academic goals, social influences, and career aspirations that drive first-year students at Eastern Visayas State University, Tacloban City, to enroll in the Bachelor of Science in Environmental Science program.

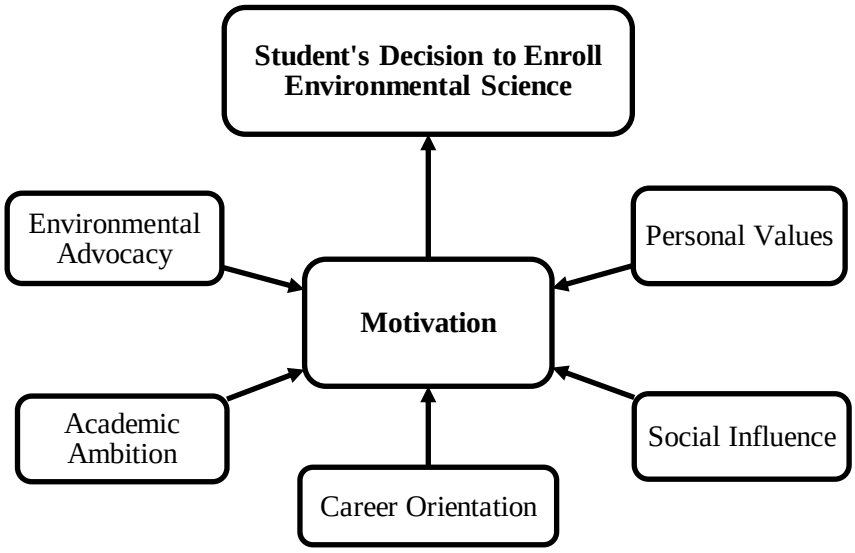

Figure 1. Conceptual Framework: Motivational Factors Influencing Students' Choice of Environmental Science

LITERATURE REVIEW

Environmental Science Education

Globally, environmental science programs have gained prominence as climate change and sustainability issues have become pressing concerns. Studies have shown that students choosing environmental science are often motivated by a desire to contribute to environmental protection and sustainability (Kagawa, 2007; Fernández-Manzanal, Rodriguez-Barreiro, & Carrasquer, 2007). In the Philippine context, environmental awareness has increased in recent years due to frequent natural disasters and intensified environmental advocacy efforts (Roces & Tolentino, 2020). However, local research focusing on the motivational dynamics behind students' enrollment in environmental science programs remains limited, making this study timely and relevant.

Environmental Advocacy

Environmental advocacy refers to individuals' commitment to environmental protection and sustainability efforts. Research indicates that students who perceive environmental issues as urgent and personal are more likely to pursue studies in environmental science or related fields (Zelezny & Schultz, 2000). In another study, environmental concern was strongly correlated with pro-environmental behavior and academic engagement in environmental fields (Hines, Hungerford, & Tomera, 1987). Similarly, in Southeast Asian contexts, students motivated by ecological crises often express a desire to "make a difference" through environmental education (Leiserowitz et al., 2023). Thus, environmental advocacy can serve as a key intrinsic motivator influencing program choice.

Personal Values

Personal values—such as responsibility, altruism, and stewardship—have been found to significantly affect students' academic and career choices (Schwartz, 2012). According to Value-Belief-Norm theory (Stern, 2000), environmental behavior arises from internalized values that promote ecological responsibility. Students with strong biospheric and altruistic values may view environmental science as a means of aligning personal beliefs with professional aspirations. In the Philippine cultural context, where collectivist and community-oriented values are prevalent, personal values related to environmental preservation can strongly influence academic motivations (Javier, 2019).

Academic Ambition

Academic ambition, defined as a student's aspiration for academic excellence and intellectual growth, also contributes to program selection. Studies have shown that students who perceive environmental science as intellectually stimulating or interdisciplinary are more inclined to pursue it (Hidi & Renninger, 2006). Academic ambition often intertwines with curiosity and the desire to engage in scientific inquiry related to environmental problems (Ting, 2018). Such motivation aligns with intrinsic drives toward mastery and competence, as discussed in SDT.

Social Influence

Social factors play a pivotal role in shaping educational decisions. Parents, teachers, peers, and even media can significantly influence students' program choices (Wigfield & Eccles, 2020). In the Philippine setting, parental encouragement and societal perception of environmental careers may either motivate or discourage students from entering the field (Orsal & Racca, 2016). Moreover, peer networks and exposure to environmental organizations can reinforce students' interest in environmental science (Bandura, 1986). Institutional reputation and outreach programs also serve as social motivators influencing students' enrollment decisions (Ariola, 2020).

Career Orientation

Career orientation pertains to students' long-term goals and their perceptions of future job opportunities. Research suggests that students are more likely to enroll in programs they believe offer stable or socially meaningful careers (Lent, Brown, & Hackett, 1994). Although environmental science is not traditionally viewed as a high-income profession, it attracts students motivated by social contribution, sustainability careers, and opportunities in environmental management and policy (UNESCO, 2019). In developing regions, the growing emphasis on environmental governance and green jobs may enhance the program's appeal (ADB, 2021).

Demographic Attributes and Motivation

Demographic variables such as age, gender, socioeconomic status, and educational background have been found to influence motivational patterns (Wigfield, Eccles, & Rodriguez, 2017). For instance, female students often exhibit stronger pro-environmental attitudes than their male counterparts (Zelezny, Chua, & Aldrich,

2000). Similarly, students from rural or disaster-prone areas may display heightened environmental concern due to firsthand experiences with ecological degradation (Perez & Lucero, 2020). Examining these demographic variations provides valuable insights for tailoring recruitment and support programs in environmental science education.

Synthesis and Research Gaps

Existing literature establishes that motivation for choosing environmental science is multidimensional—rooted in advocacy, values, academic curiosity, social influence, and career considerations. However, few empirical studies have comprehensively examined these factors in the Philippine context, particularly among first-year students who are in the early stages of forming academic identity and commitment. Furthermore, the interaction between demographic characteristics and motivational dimensions remains underexplored. This study thus contributes to the growing discourse by providing localized insights that can guide curriculum development, student support initiatives, and environmental education advocacy in Eastern Visayas State University and similar institutions.

METHODOLOGY

Research Design

To achieve the objectives of this study, a mixed-method research design was employed, integrating both quantitative and qualitative approaches. A survey questionnaire was used as the primary data-gathering tool, complemented by an open-ended question to capture the respondents' deeper insights. This approach was deemed appropriate for systematically identifying and analyzing the motivational factors influencing first-year college students at Eastern Visayas State University, Tacloban City, in choosing the Bachelor of Science in Environmental Science program. The survey questionnaire aided in the efficient collection of standardized quantitative data, ensuring reliability and comparability of results. Meanwhile, the inclusion of an open-ended response provided qualitative depth, allowing students to articulate personal perspectives and unique motivations beyond predefined categories. This combination of methods facilitated a more comprehensive understanding of both the measurable trends and the nuanced individual factors shaping students' academic choices.

Respondents of the Study

A total of 73 first-year Bachelor of Science in Environmental Science students from Eastern Visayas State University–Main Campus participated in the study during the First Semester of Academic Year 2025–2026. The respondents were selected using purposive sampling, as the study specifically focused on first-year students who represent the target group of investigation. This population was chosen for two primary reasons. First, first-year students have not yet been extensively exposed to the course, which allows for a clearer assessment of their initial motivations in enrolling in the program. Second, they are at a critical stage of transition into higher education and may require additional academic and motivational support as they begin their university journey. By focusing on this group, the study aimed to provide valuable insights into the foundational factors influencing their academic decisions.

Research Instrument

To collect the necessary data, a self-constructed survey questionnaire was developed and administered to the respondents. The instrument utilized a five-point Likert scale and was divided into three main parts. The first part focused on the demographic profile of the students, which included: (1) Age, (2) Gender, (3) Strand taken in Senior High School, (4) Course preference, and (5) Status of enrollment. The second part assessed the extent of influence of the motivational factors on the students' decision to enroll in the Environmental Science program. This section was further divided into five dimensions: (1) environmental advocacy, (2) personal values, (3) academic ambition, (4) social influence, and (5) career orientation. Each dimension contained statements that the respondents rated according to their level of agreement using the following scale: 5 – Strongly Agree, 4 – Agree, 3 – Neutral, 2 – Disagree, and 1 – Strongly Disagree.

The third and last part of the instrument provided an open-ended question: In your own words, why did you choose to take up Bachelor of Science in Environmental Science (BSES)? This question was designed to capture deeper insights and emerging themes regarding the students' decision to pursue Environmental Science. This allowed respondents to freely express personal motivations that might not have been fully captured by the structured survey items.

To ensure the validity of the instrument, the questionnaire underwent content validation by a panel of experts composed of faculty members of the university specializing in Environmental Science and educational research. Their feedback was used to refine the clarity, relevance, and comprehensiveness of the items. In addition, a pilot test was conducted with a small group of Environmental Science students from other year-levels to check for potential ambiguities and to determine the instrument's reliability. The pilot data were utilized to compute Cronbach's alpha coefficient for the internal consistency of the survey instrument. The coefficient obtained was 0.75 which is considered acceptable for research purposes (Tavakol & Dennick, 2011).

Data Gathering Procedure

In order to collect the data, an online survey was conducted via Google Forms. This method was used for purposes of convenience and expediency. Prior to data collection, approval was sought from the appropriate academic authorities of Eastern Visayas State University–Main Campus. The respondents were informed of the purpose, objectives, and significance of the study, as well as their role in contributing to the achievement of the research goals. Participation was entirely voluntary, and with informed consent. The respondents accomplished the first and second parts of the survey questionnaire by ticking the circle corresponding to their answer. The third part of the questionnaire was answered through a short paragraph.

To uphold the principle of confidentiality and anonymity, no personally identifiable information was required or recorded in the survey instrument. All responses were treated with strict confidentiality and were used exclusively for academic purposes. The study also observed the principle of non-maleficence, ensuring that no harm, risk, or undue burden—whether physical, emotional, or psychological—would result from participation. Additionally, to ensure compliance with legal standards, the research process strictly observed the provisions which safeguards the gathering, management, and storing of personal data (Data Privacy Act, 2012).

Data Analysis

The Kolmogorov-Smirnov Test was used to determine the normality of the data acquired. As the data followed a normal distribution, appropriate parametric statistical tools were employed for analysis and interpretation. Percentage was used to describe the demographic profile of the students. Mean scores were utilized to assess the extent of influence of the 5 motivational factors on the students' decision to enroll in the Environmental Science program. T-test was conducted to determine whether the motivational factors differ according to gender, course preference, and enrolment status while Analysis of Variance (ANOVA) was performed to test the difference in the factors according to age and academic strand.

The extent of influence of the 5 motivational dimensions was interpreted using the following scale parameters.

Scale	Range	Description	Interpretation
5	4.21 – 5.00	Very high	Considered to be an extremely influential factor
4	3.41 – 4.20	High	Considered to be an influential factor
3	2.61 – 3.40	Moderate	Considered to be a fairly influential factor
2	1.81 – 2.60	Low	Considered to be a lightly influential factor
1	1.00 – 1.80	Very low	Considered to be not an influential factor

Source: Authors, 2025

Additionally, a thematic analysis of the students' responses on the open-ended question was done to explore any underlying notions regarding their decision in choosing the Environmental Science program.

RESULTS

Respondents' Demographic Profile

As shown in Table 1, 43 or 59% of the respondents were 18 years of age. Eighteen or 25% of them were above 18 years old while only 12 or 16% were below 18 years old.

Table 1. Distribution of Respondents According to Age Group

Age Group	Count	Percentage	Rank
Below 18 Years Old	12	16	3
18 Years Old	43	59	1
Above 18 Years Old	18	25	2
Total	73	100	

Source: Authors, 2025

Of the 73 respondents, 52 or 71% were female while 21 or 29% were male (Table 2).

Table 2. Distribution of Respondents According to Gender

Gender	Count	Percentage	Rank
Female	52	71	1
Male	21	29	2
Total	73	100	

Source: Authors, 2025

As to the Senior High School academic strand taken by the respondents (Table 3), 18 or 25% of the students took TVL. A total of 17 or 23% took GAS and HUMSS respectively. Fourteen or 19% took STEM while 7 or 10% took ABM.

Table 3. Distribution of Respondents According to Academic Strand

Academic Strand	Count	Percentage	Rank
ABM	7	10	4
GAS	17	23	2
HUMSS	17	23	2
STEM	14	19	3
TVL	18	25	1
Total	73	100	

Source: Authors, 2025

Forty-two or 58% of the respondents considered BS Environmental Science as their first choice while 31 or 42% did not consider it as their first choice (Table 4).

Table 4. Distribution of Respondents According to Course Preference

Course Preference	Count	Percentage	Rank
First Choice	42	58	1
Not First Choice	31	42	2
Total	73	100	

Source: Authors, 2025

In terms of enrolment status (Table 5), 69 or 95% of the respondents were regular first year students while 4 or 5% have an irregular enrolment status.

Table 5. Distribution of Respondents According to Enrolment Status

Enrolment Status	Count	Percentage	Rank
Regular	69	95	1
Irregular	4	5	2
Total	73	100	

Source: Authors, 2025

Extent of Influence of the Motivational Factors

According to age group

As illustrated in Table 6, personal values (FM=4.22) got a "very high" factor mean and ranked top among the factors. Environmental advocacy (FM=4.15) obtained a "high" factor mean and ranked second. Both career orientation (FM=3.92) and academic ambition (FM=3.86) registered "high" factor means and ranked third and fourth respectively. Social influence (FM=2.80) got a "moderate" factor mean and ranked lowest among the factors.

In terms of environmental advocacy, both 18 years old (M=4.21) and below 18 years old (M=4.23) students registered "very high" mean scores. Those who were above 18 years old (M=4.00) got only a "high" mean score.

On personal values, both 18 years old (M=4.31) and below 18 years old (M=4.25) students obtained "very high" mean scores. Those who were above 18 years old (M=4.10) registered only a "high" mean score.

All age groups, 18 years old (M=4.08), above 18 years old (M=3.83) and below 18 years old (M=3.67) got "high" mean scores in academic ambition while all age groups 18 years old (M=2.77), above 18 years old (M=2.99) and below 18 years old (M=2.65) registered only "moderate" mean scores in social influence. However, in terms of career orientation, all age groups 18 years old (M=3.88), above 18 years old (M=4.15) and below 18 years old (M=3.75) posted "high" mean scores.

Table 6. Extent of Influence of Motivational Factors according to Age Group

Motivational Factors	Age Group	Mean	Factor Mean	Description
Environmental Advocacy	Below 18 Years Old	4.23		Very high
	18 Years Old	4.21		Very high
	Above 18 Years Old	4.00		High
			4.15 (2)	High
Personal Values	Below 18 Years Old	4.25		Very high

	18 Years Old	4.31		Very high
	Above 18 Years Old	4.10		High
			4.22 (1)	Very high
Academic Ambition	Below 18 Years Old	3.67		High
	18 Years Old	4.08		High
	Above 18 Years Old	3.83		High
			3.86 (4)	High
Social Influence	Below 18 Years Old	2.77		Moderate
	18 Years Old	2.99		Moderate
	Above 18 Years Old	2.65		Moderate
			2.80 (5)	Moderate
Career Orientation	Below 18 Years Old	3.88		High
	18 Years Old	4.15		High
	Above 18 Years Old	3.75		High
			3.92 (3)	High

Source: Authors, 2025

According to gender

Table 7 presents the extent of influence of the motivational factors according to gender. Personal values (FM=4.20) obtained the highest factor mean described as “high”. Next in rank was environmental advocacy (FM=4.06) which scored a “high” factor mean. Academic ambition (FM=3.94) and career orientation (FM=3.93) also got “high” factor means and ranked third and fourth respectively while social influence (FM=2.69) registered a “moderate” factor mean and ranked the lowest among the factors.

Both female (M=4.20) and male (M=3.93) students posted “high” mean scores in environmental advocacy. However, in terms of personal values, female students (M=4.48) got a “very high” mean score while male students (M=3.93) obtained only a “high” mean score.

As to the academic ambition, both the female (M=4.10) and male (M=3.79) students registered “high” mean scores. Moreover, female (M=2.58) scored “low” while male (M=2.80) students posted a “moderate” rating in social influence. Regarding career orientation, both female (M=3.98) and male (M=3.88) obtained “high” mean scores.

Table 7. Extent of Influence of Motivational Factors according to Gender

Motivational Factors	**Gender**	**Mean**	**Factor Mean**	**Description**
Environmental Advocacy	Female	4.20		High
	Male	3.93		High
			4.06 (2)	High
Personal Values	Female	4.48		Very high
	Male	3.93		High
			4.20 (1)	High
Academic Ambition	Female	4.10		High
	Male	3.79		High
			3.94 (3)	High
Social Influence	Female	2.58		Low
	Male	2.80		Moderate

			2.69 (5)	Moderate
Career Orientation	Female	3.98		High
	Male	3.88		High
			3.93 (4)	High

Source: Authors, 2025

According to academic strand taken in Senior High School

The data on Table 8 show the extent of influence of the motivational factors according to academic strand taken in Senior High School. Personal values (FM=4.29) registered a "very high" factor mean. It was followed by environmental advocacy (FM=4.17) which got a "high" factor mean. Academic ambition (FM=4.02) and career orientation (FM=4.02) equally posted "high" factor means and ranked third while social influence (FM=2.90) ranked lowest with only a "moderate" factor mean.

As for environmental advocacy, students who took ABM (M=4.43), GAS (M=4.32) and HUMSS (M=4.37) obtained "very high" mean scores. Those who took STEM (M=3.91) and TVL (3.83) registered only "high" mean ratings.

In terms of personal values, students who took ABM (M=4.71), GAS (M=4.43) and HUMSS (M=4.56) got "very high" mean scores. Meanwhile, those who took STEM (M=3.95) and TVL (M=3.82) posted only "high" mean scores.

As to the academic ambition, students who took ABM (M=4.46) got a "very high" mean rating while those who took GAS (M=3.94), HUMSS (M=4.10), STEM (M=3.79) and TVL (M=3.79) registered only "high" mean scores.

Regarding social influence, students who took ABM (M=3.04), GAS (M=2.76), HUMSS M=3.10) and STEM (M=3.09) posted "moderate" mean scores while those who took TVL (M=2.53) got a "low" rating.

For the career orientation, both the students who took ABM (M=4.25) and HUMSS (M=4.38) obtained "very high" mean scores. However, those who took GAS (M=3.87), STEM (M=3.82) and TVL (M=3.79) registered only "high" mean scores.

Table 8. Extent of Influence of Motivational Factors according to SHS Academic Strand

Motivational Factors	**Academic Strand**	**Mean**	**Factor Mean**	**Description**
Environmental Advocacy	ABM	4.43		Very high
	GAS	4.32		Very high
	HUMSS	4.37		Very high
	STEM	3.91		High
	TVL	3.83		High
			4.17 (2)	High
Personal Values	ABM	4.71		Very high
	GAS	4.43		Very high
	HUMSS	4.56		Very high
	STEM	3.95		High
	TVL	3.82		High
			4.29 (1)	Very high
Academic Ambition	ABM	4.46		Very high
	GAS	3.94		High

	HUMSS	4.10		High
	STEM	3.79		High
	TVL	3.79		High
			4.02 (3)	High
Social Influence	ABM	3.04		Moderate
	GAS	2.76		Moderate
	HUMSS	3.10		Moderate
	STEM	3.09		Moderate
	TVL	2.53		Low
			2.90 (4)	Moderate
Career Orientation	ABM	4.25		Very high
	GAS	3.87		High
	HUMSS	4.38		Very high
	STEM	3.82		High
	TVL	3.79		High
			4.02 (3)	High

Source: Authors, 2025

According to course preference

As indicated in Table 9, personal values (FM=4.26) got a "very high" factor mean. It was tailed by environmental advocacy (FM=4.16) which obtained a "high" factor mean. Career orientation (FM=4.02) and academic ambition (FM=3.95) registered also "high" factor means and ranked third and fourth respectively. Social influence (FM=2.87) got only a "moderate" factor mean which was the lowest among factors.

In terms of environmental advocacy, those who considered environmental science as their first choice (M=4.20) and those who did not consider environmental science as their first choice (M=4.11) registered "high" mean scores.

Both groups, first choice (M=4.27) and not first choice (M=4.25) obtained "very high" mean scores in personal values. Moreover, first choice (M=4.04) and not first choice (M=3.86) posted "high" mean scores in terms of academic ambition.

As to social influence, first choice (M=2.91) and not first choice (M=2.84) got only "moderate" mean scores. However, both groups, first choice (M=4.06) and not first choice (M=3.98) registered "high" mean scores in career orientation.

Table 9. Extent of Influence of Motivational Factors according to Course Preference

Motivational Factors	**Course Preference**	**Mean**	**Factor Mean**	**Description**
Environmental Advocacy	First Choice	4.20		High
	Not First Choice	4.11		High
			4.16 (2)	High
Personal Values	First Choice	4.27		Very high
	Not First Choice	4.25		Very high
			4.26 (1)	Very high
Academic Ambition	First Choice	4.04		High
	Not First Choice	3.86		High

			3.95 (4)	High
Social Influence	First Choice	2.91		Moderate
	Not First Choice	2.84		Moderate
			2.87 (5)	Moderate
Career Orientation	First Choice	4.06		High
	Not First Choice	3.98		High
			4.02 (3)	High

Source: Authors, 2025

According to enrolment status

Table 10 presents the extent of influence of the motivational factors according to enrolment status. Personal values (FM=4.34) ranked first among the factors with a "very high" factor mean. Ranking second was environmental advocacy (FM=4.00) which registered a "high" factor mean. Both career orientation (FM=3.87) and academic ambition (FM=3.75) got "high" factor means and ranked third and fourth respectively. Social influence (FM=2.38) registered a "low" factor mean and ranked lowest among the factors.

In terms of environmental advocacy, both the regular (M=4.18) and irregular (M=3.81) students posted "high" mean scores. However, for personal values, both regular (M=4.25) and irregular (M=4.44) students manifested "very high" mean scores.

As to the academic ambition, both regular (M=3.99) and irregular (M=3.50) students registered "high" mean scores. Moreover, regular (M=2.94) students got a "moderate" mean score while irregular (M=1.81) students scored "low" in social influence.

For the career orientation, both regular (M=4.05) and irregular (M=3.69) students obtained "high" mean scores.

Table 10. Extent of Influence of Motivational Factors according to Enrolment Status

Motivational Factors	**Course Preference**	**Mean**	**Factor Mean**	**Description**
Environmental Advocacy	Regular	4.18		High
	Irregular	3.81		High
			4.00 (2)	High
Personal Values	Regular	4.25		Very high
	Irregular	4.44		Very high
			4.34 (1)	Very high
Academic Ambition	Regular	3.99		High
	Irregular	3.50		High
			3.75 (4)	High
Social Influence	Regular	2.94		Moderate
	Irregular	1.81		Low
			2.38 (5)	Low
Career Orientation	Regular	4.05		High
	Irregular	3.69		High
			3.87 (3)	High

Source: Authors, 2025

Differences in Motivational Factors across Demographic Profile

Among age groups

As shown in Table 11, there was no significant difference among the three age groups in all the motivational factors: Environmental advocacy (f=0.41, p=0.67); Personal values (f=0.21, 0.81); Academic ambition (f=1.17, p=0.32); Social influence (f=0.73, p=0.49); and, Career orientation (f=0.76, p=0.47). The mean differences between the groups were tested at p<.05 level of significance.

Table 11. Analysis of Variance on the Motivational Factors among Age Groups

Motivational Factors	f-value	p-value	Inference
Environmental Advocacy	0.41	0.67	Insignificant
Personal Values	0.21	0.81	Insignificant
Academic Ambition	1.17	0.32	Insignificant
Social Influence	0.73	0.49	Insignificant
Career Orientation	0.76	0.47	Insignificant

Source: Authors, 2025

Between genders

The data in Table 12 indicate that there was no significant difference between genders in the following motivational factors: Environmental advocacy (t=1.57, p=0.06); Academic ambition (t=1.16, p=0.12); Social influence (t=0.48, p=0.32); and, Career orientation (t=0.81, p=0.21). However, a significant difference between genders was registered in personal values (t=2.19, p=0.02). The mean differences between the groups were tested at p<.05 level of significance.

Table 12. T-Test on the Motivational Factors between Gender Groups

Motivational Factors	t-value	p-value	Inference
Environmental Advocacy	1.57	0.06	Insignificant
Personal Values	2.19	0.02	Significant
Academic Ambition	1.16	0.12	Insignificant
Social Influence	0.48	0.32	Insignificant
Career Orientation	0.81	0.21	Insignificant

Source: Authors, 2025

Among academic strands

As shown in Table 13, there was no significant difference among academic strands in the following motivational factors: Environmental advocacy (t=1.77, p=0.15); Academic ambition (t=1.09, p=0.37); Social influence (t=1.23, p=0.31); and, Career orientation (t=1.21, p=0.31). However, a significant difference among academic strands was posted in personal values (t=3.21, p=0.02). The mean differences between the groups were tested at p<.05 level of significance.

Table 13. Analysis of Variance on the Motivational Factors among Academic Strands

Motivational Factors	f-value	p-value	Inference
Environmental Advocacy	1.77	0.15	Insignificant
Personal Values	3.21	0.02	Significant

Academic Ambition	1.09	0.37	Insignificant
Social Influence	1.23	0.31	Insignificant
Career Orientation	1.21	0.31	Insignificant

Source: Authors, 2025

Based on the pairwise comparison of the academic strands, the difference was specifically significant (q=4.00, p=0.04) between ABM (M=4.71) and TVL (M=3.82). The mean differences between the groups were tested at p<.05 level of significance.

Table 14. Tukey HSD Pairwise Comparison of Academic Strands

Pairwise Comparisons	**HSD.05 = 0.8858 HSD.01 = 1.0710**	**Q.05 = 3.9631 Q.01 = 4.7917**	**Inference**
ABM = 4.71	0.29	Q = 1.29 (p = 0.89)	Insignificant
GAS = 4.43			
ABM = 4.71	0.16	Q = 0.70 (p = 0.99)	Insignificant
HUMSS = 4.56			
ABM = 4.71	0.77	Q = 3.44 (p = 0.12)	Insignificant
STEM = 3.95			
ABM = 4.71	0.89	Q = 4.00 (p = 0.04)	Significant
TVL = 3.82			
GAS = 4.43	0.13	Q = 0.59 (p = 0.99)	Insignificant
HUMSS = 4.56			
GAS = 4.43	0.48	Q = 2.15 (p = 0.55)	Insignificant
STEM = 3.95			
GAS = 4.43	0.61	Q = 2.72 (p = 0.32)	Insignificant
TVL = 3.82			
HUMSS = 4.56	0.61	Q = 2.74 (p = 0.31)	Insignificant
STEM = 3.95			
HUMSS = 4.56	0.74	Q = 3.31 (p = 0.15)	Insignificant
TVL = 3.82			
STEM = 3.95	0.13	Q = 0.57 (p = 0.10)	Insignificant
TVL = 3.82			

Source: Authors, 2025

Between course preferences

Table 15 reveals that there was no significant difference between students who considered environmental science as their first choice and those who did not in all the motivational factors: Environmental advocacy (t=0.45, p=0.33); Personal values (t=0.09, 0.46); Academic ambition (t=0.89, p=0.19); Social influence (t=0.32, p=0.37); and, Career orientation (t=0.33, p=0.37). The mean differences between the groups were tested at p<.05 level of significance.

Table 15. T-Test on the Motivational Factors according to Course Preference

Variable	t-value	p-value	Inference
Environmental Advocacy	0.45	0.33	Insignificant
Personal Values	0.09	0.46	Insignificant

Academic Ambition	0.89	0.19	Insignificant
Social Influence	0.32	0.37	Insignificant
Career Orientation	0.33	0.37	Insignificant

Source: Authors, 2025

Between enrolment status

The data in Table 16 show that there was no significant difference between students with regular and irregular enrolment status in the following motivational factors: Environmental advocacy (t=0.87, p=0.19); Personal values (t=-0.43, p=0.33); Academic ambition (t=1.14, p=0.13); and, Career orientation (t=0.71, p=0.24). However, a significant difference between the groups was registered in social influence (t=2.44, p=0.01). The mean differences between the groups were tested at $p<.05$ level of significance.

Table 16. T-Test on the Motivational Factors according to Enrolment Status

Variable	t-value	p-value	Inference
Environmental Advocacy	0.87	0.19	Insignificant
Personal Values	-0.43	0.33	Insignificant
Academic Ambition	1.14	0.13	Insignificant
Social Influence	2.44	0.01	Significant
Career Orientation	0.71	0.24	Insignificant

Source: Authors, 2025

Underlying Themes of Students' Responses

Based on the thematic analysis of the qualitative responses, the following themes have emerged as to the reason why the students decided to enroll in the Environmental Science program: (1) Passion for protecting nature or environment, (2) Interest and curiosity in science and environment, (3) Influence or encouragement from other people, (4) Sense of self-fulfillment, and (5) External circumstances.

Passion for protecting nature or environment

Students were motivated to take up Bachelor of Science in Environmental Science because of their love of nature, desire to protect earth, or strong concern for environmental issues. This was illustrated by the following statements:

"I choose Environmental Science because I'm passionate about protecting our planet"

Source: Transcribed Student's Response, 2025

"I choose Environmental Science because I want to help protect our mother earth…"

Source: Transcribed Student's Response, 2025

"I choose Environmental science because I have desire to understand and address environmental issues"

Source: Transcribed Student's Response, 2025

"I choose Environmental science because I want to help protect the planet for future generations…"

Source: Transcribed Student's Response, 2025

"I choose to take up Environmental Science because I genuinely care for our nature…"

Source: Transcribed Student's Response, 2025

Interest and curiosity in science and environment

Students chose the course because of their curiosity about how nature works, interest in science subjects, or desire to learn more about the environment. This motivation was expressed by the respondents through these pronouncements:

"I am curious how the nature works. I wanna learn more about it."

Source: Transcribed Student's Response, 2025

"Because I was always interested with the things around my environment then other things"

Source: Transcribed Student's Response, 2025

"i choose environmental science because this course can help me to learn more about our nature since i was a kid i love planting…"

Source: Transcribed Student's Response, 2025

"Because I was always interested with the things around my environment then other things"

Source: Transcribed Student's Response, 2025

"Because, I like Earth Science and Biology where they talk about environment and climate issues."

Source: Transcribed Student's Response, 2025

Influence or encouragement from other people

The students decided to enroll in an Environmental Science program because of the influence or encouragement of their family members, friends or mentors. This was explicitly conveyed by the respondents by saying:

"I choose to take up Environmental Science because my friend encouraged me…" –

Source: Transcribed Student's Response, 2025

"Because my tita (aunt) chose this program for me." –

Source: Transcribed Student's Response, 2025

"i choose environment because it is my shared dreams to my family and friends…"

Source: Transcribed Student's Response, 2025

Sense of self-fulfillment

The students opted for the program because it matched with their goals and personal values. They also believed that Environmental Science could lead to individual growth and satisfaction. These were articulated by the respondents in these words:

"I chose to take up Environmental Science because it aligns with my personal values…"

Source: Transcribed Student's Response, 2025

"Because I know that one day this will bring me enjoyment while I am studying this course…"

Source: Transcribed Student's Response, 2025

"Environmental science for me is a program where I could learn something…"

Source: Transcribed Student's Response, 2025

External circumstances

As stated by the respondents, their decision to take the Environmental Science program was due to external factors. These factors included limited options, availing of scholarship, non-qualification in the chosen course and others. The respondents expressed these thoughts by saying:

"Honestly, this course wasn't my first choice…"

Source: Transcribed Student's Response, 2025

"I want to be an advocate about environment. and for the scholarship also…"

Source: Transcribed Student's Response, 2025

"Because I have no choice (?)"

Source: Transcribed Student's Response, 2025

"I couldn't get in to a school with a psychology course…"

Source: Transcribed Student's Response, 2025

DISCUSSIONS

Demographic Profile and Its Implications

One of the objectives of the study is to describe the demographic profile of the students. The results showed that a majority of respondents were 18 years old, predominantly female, and most had come from the Technical-Vocational-Livelihood (TVL) strand in Senior High School. The demographic pattern observed in this study is consistent with recent international, national and local reports. For example, national statistics show that females comprised the majority of students enrolled in environment-related degree programs in 2022–2023 (PSA, 2024). Moreover, regional and institutional studies of SHS strand-to-degree alignment record that many TVL and STEM graduates proceed to science-related degree programs (Baguio et al., 2024; Gonzales, 2024). Philippine university research also reports that female students tend to exhibit stronger pro-environmental attitudes, which helps explain their greater representation in environmental science programs (Simpao & Yabut, 2022). Moreover, the predominance of female respondents supports the previous findings that women are more inclined to pursue environmental and sustainability-oriented programs due to their stronger moral identification with environmental protection and care (Moga & Bual, 2022). This trend is further corroborated by a report about a global increase in young female participation in sustainability and environmental programs, particularly among students aged 17 to 19 years (UNESCO, 2020). The findings of the present study provide insight for the university to revisit and strengthen its recruitment and outreach strategies to promote greater gender balance in the Environmental Science program. However, it has to be noted that respondents of this study were limited only to first-year students. It may have affected the results if students across year levels were included. This area could be explored in future studies.

Extent of Influence of Motivational Factors

The study aimed to assess the extent of influence of the five predetermined motivational factors in shaping the students' decision to enroll in the Environmental Science program. The findings revealed that across all demographic categories, personal values consistently ranked first, with “very high” mean ratings. This suggests that students were primarily driven by intrinsic motivations such as environmental consciousness, sustainability principles, and alignment of the course with their personal beliefs. This finding resonates with Self-Determination Theory (Deci & Ryan, 1985), which posits that individuals are most motivated when their actions are congruent with their inner values and sense of purpose. It also affirms the role of Expectancy-Value Theory (Eccles & Wigfield, 2002), indicating that students assign significant personal worth to studying Environmental Science because they believe it is meaningful and impactful.

Following personal values, environmental advocacy was another strong motivational factor. Students expressed an intense desire to protect nature, mitigate environmental problems, and contribute to sustainability efforts. This aligns with global trends in youth environmentalism and suggests that environmental education at the tertiary level appeals to students who already possess pro-environmental orientations. Recent research further reinforces the finding that environmental advocacy and internally-driven values are powerful motivators for tertiary students. In a study, it was found that students’ ownership and internalized values drove sustainability engagement (Hamukoko et al., 2024). Additionally, it was observed that youth volunteers in environmental communities emphasized meaningful contribution over external rewards (Melati et al., 2023). Likewise, a most recent study identified youth segments exhibiting high value-based orientation toward sustainability (Serio et al., 2025). The strong emphasis on intrinsic motivation across these studies reinforces the idea that environmental education attracts individuals with a pre-existing orientation toward sustainability and civic responsibility.

Meanwhile, academic ambition and career orientation both received “high” ratings, indicating that students recognized the intellectual and professional potential of the course. They viewed Environmental Science not only as a means of personal fulfillment but also as a pathway toward stable and meaningful employment in government, NGOs, and private institutions. This finding is consistent with the Theory of Planned Behavior (Ajzen, 1991), suggesting that students’ attitudes toward potential career outcomes influence their academic decision-making.

In contrast, social influence received only “moderate” or even “low” mean scores across most categories, implying that peers, family, or teachers had limited sway over students’ decisions. This reinforces the idea that students’ motivations were largely autonomous rather than externally regulated, consistent with Self-Determination Theory’s distinction between intrinsic and extrinsic motivation.

However, it is interesting to note that the results contrast with several previous studies emphasizing extrinsic determinants of course choice. In one study, it was reported that career prospects and job security were the most decisive factors for Malaysian students in Environmental Science programs (Tang & Lam, 2017). Another study found that external expectations and employability concerns outweighed personal values among Portuguese university students (Azevedo & Marques, 2019). Similarly, parental influence and scholarship opportunities were identified as more influential than personal convictions among Environmental Management students in Philippine universities (Rivera & Cruz, 2020). Likewise, it was observed that students’ motivations for pursuing sustainability education were primarily instrumental, focusing on future employment advantages (Wu & Shen, 2016). These contrasting findings suggest that contextual and cultural factors—such as economic conditions and societal expectations—may mediate the relative importance of intrinsic and extrinsic motivations in shaping students’ academic choices.

Nonetheless, the findings of the current study point out specific motivational drives and the extent to which these factors influence the students. The information can serve as a guide for the university in structuring its academic support mechanisms that will highlight students’ motivations so that they will succeed in their educational venture. As this study did not include contextual and cultural factors, the results may be restricted.

Inclusion of these factors could have provided a more comprehensive understanding of students' motivation. This could be another possible subject for future research.

Differences in Motivational Factors across Demographic Variables

The study intended to test whether the five predetermined motivational factors differ according to the demographic profile of the students. The inferential results revealed no significant differences in motivational factors when grouped by age, course preference, or enrollment status, indicating that the motivational patterns were generally consistent across these variables. However, significant differences were found in personal values by gender ($t=2.19$, $p=0.02$) and by academic strand ($f=3.21$, $p=0.02$), with post hoc tests showing that ABM students rated personal values significantly higher than TVL students. These differences suggest that prior educational exposure and gender-related perspectives may shape students' environmental attitudes. Female students, in particular, demonstrated higher levels of sustainability awareness compared to males and were more engaged in practices and attitudes related to environmental stewardship (Sihombing et al., 2024). The findings of the present study provide helpful hints for the university. They may be used as guides on enriching the university's curriculum so that it will be more inspiring and responsive to the students across different demographic groups.

A significant difference in social influence was also found between regular and irregular students ($t=2.44$, $p=0.01$), implying that irregular students were less affected by external encouragement or peer support. This could reflect differences in their social networks or academic engagement, potentially pointing to the need for targeted institutional support for these students. This finding offers an opportunity for the university especially in improving social networks and promotional mechanisms so that it can expand its reach and attract more students particularly those who are interested to enroll in the environmental science program.

Themes from Qualitative Data

The study attempted to explore any underlying themes through the responses of the students on the open-ended question. Thematic analysis of the open-ended responses yielded five dominant themes: 1) Passion for protecting nature or the environment; 2) Interest and curiosity in science and environmental processes; 3) Influence or encouragement from others; 4) Sense of self-fulfillment and alignment with personal values; and, 5) External circumstances such as scholarship or course availability

These themes reinforced the quantitative findings, highlighting the predominance of intrinsic motivations such as passion, curiosity, and self-fulfillment. Students' statements like "I choose Environmental Science because I'm passionate about protecting our planet" exemplify the deeply personal and value-driven nature of their choice. Even though some respondents mentioned external factors such as scholarships or lack of alternatives, these were fewer and secondary to intrinsic factors. The indication of these factors provides relevant ideas as to improving the student support system particularly in providing more scholarships or educational assistance and possibly offering new academic programs.

Integration and Implications

Although the small sample size used in this investigation may affect the generalizability of the results, the present study provides constructive insights towards enhancing the environmental science program at Eastern Visayas State University. Primarily, this study underscores that students' motivation to enroll in Environmental Science is largely intrinsic and value-oriented. Their decisions are rooted in the concern for the environment, intellectual curiosity, and a desire for meaningful contribution to society—elements that correspond to the autonomous regulation described in Self-Determination Theory. These findings also suggest that environmental education programs like BSES at EVSU attract students who are already environmentally aware and value-driven, positioning them as potential catalysts for sustainability leadership.

For academic institutions, these insights highlight the importance of strengthening curriculum relevance, integrating advocacy-based learning, and providing experiential opportunities that nurture students'

environmental values and ambitions. By fostering intrinsic motivation, universities can help sustain students' engagement throughout their academic journey and prepare them for impactful careers in environmental stewardship.

CONCLUSION AND RECOMMENDATIONS

Based on the results of the study, the following conclusions are presented. First-year Environmental Science students at Eastern Visayas State University- Main campus are largely female with regular enrolment status and considered the program as their first choice. They are generally 18 years of age who took the Technical Vocational and Livelihood strand in Senior High School. The motivation to enroll in the Bachelor of Science in Environmental Science program is predominantly shaped by intrinsic and value-driven factors. Personal values and environmental advocacy emerged as the most influential motivations, while social influence exerted the least effect. Personal values were found to be significantly different between female and male students. Likewise, a significant difference in personal values was established in academic strand particularly between ABM and TVL graduates. Additionally, a significant difference in social influence was found between regular and irregular students. It was discovered that some students enrolled in the environmental science program due to external factors such as scholarships or lack of alternatives.

In light of these findings, it is recommended that the University enhance its Environmental Science curriculum by integrating more experiential and advocacy-based learning activities, such as community extension projects, environmental campaigns, and research-based initiatives. These can deepen students' sense of purpose and sustain their intrinsic motivation throughout their academic journey. Likewise, innovative schemes may be developed to attract more male students from diverse age groups and academic strands, particularly by highlighting the program's scientific rigor, career prospects, societal relevance and personal development. Such efforts would not only enhance gender diversity but also enrich the academic and professional perspectives within the discipline. The institution may also consider strengthening guidance and orientation programs to assist students from varied academic backgrounds, ensuring that all learners are equally supported in developing environmental literacy and professional preparedness. Furthermore, the university may expand its student support system by granting scholarships and educational assistance to encourage economically disadvantaged students to pursue their goals. Lastly, considering the limited scope of the present investigation, comparable studies may be done by including students from all academic levels who are enrolled in environmental science or other environment-related programs across campuses to provide a broader understanding of motivational patterns in environmental education.

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