

Education Quarterly Reviews

Thuan, L. T. H., Linh, N. T., Thuy, N. T. B., Thien, N. C., Mai, N. T., & Hoan, N. T. (2023). Survey on Ecological Ethics Status of Vietnamese Students of Economic and Business Administration Sector in the Current Period. *Education Quarterly Reviews*, 6(2), 281-296.

ISSN 2621-5799

DOI: 10.31014/aior.1993.06.02.756

The online version of this article can be found at: https://www.asianinstituteofresearch.org/

Published by:

The Asian Institute of Research

The *Education Quarterly Reviews* is an Open Access publication. It may be read, copied, and distributed free of charge according to the conditions of the Creative Commons Attribution 4.0 International license.

The Asian Institute of Research *Education Quarterly Reviews* is a peer-reviewed International Journal. The journal covers scholarly articles in the fields of education, linguistics, literature, educational theory, research, and methodologies, curriculum, elementary and secondary education, higher education, foreign language education, teaching and learning, teacher education, education of special groups, and other fields of study related to education. As the journal is Open Access, it ensures high visibility and the increase of citations for all research articles published. The *Education Quarterly Reviews* aims to facilitate scholarly work on recent theoretical and practical aspects of education.





The Asian Institute of Research Education Quarterly Reviews

Vol.6, No.2, 2023: 281-296 ISSN 2621-5799

Copyright © The Author(s). All Rights Reserved DOI: 10.31014/aior.1993.06.02.756

Survey on Ecological Ethics Status of Vietnamese Students of Economic and Business Administration Sector in the Current Period

Le Thi Hong Thuan¹, Nguyen Thuy Linh², Nguyen Thi Bich Thuy³, Nguyen Chi Thien⁴, Ngo Thanh Mai⁵, Nguyen Thi Hoan⁶

1,2,3,4,5,6 National Economics University

Correspondence: Le Thi Hong Thuan. Email: shunly1206@gmail.com/thuanlth@neu.edu.vn Tel: +084~977266982

Abstract

The ecological ethics of students today is not a new issue but has always been of concern, especially during the explosive development of information technology. This study provides information on the ecological ethics situation, the contents, methods, and forms of surveying the ecological ethics status of Vietnamese students in economics and business administration. Through the study, the ecological ethics status of Vietnamese students majoring in economics and business administration has been shown on the following issues: (1) Perception, (2) Consciousness, (3) Standards, and (4) Eco-ethical behavior, thereby proposing some solutions to improve ecological ethics for Vietnamese students in the field of economics and business administration in the current context.

Keywords: Ecological Ethics, Economics, Business Administration, Vietnamese Students, Status

1. Introduction

The structure of ecological ethics is the fusion of environmental consciousness and ecological ethics behavior. Both of these parts have a close relationship, influence, and complement each other to form the moral system in society. Meanwhile, previous studies on this issue have shown that students in different regions, areas, and training disciplines have different levels of ecological ethics. In the current situation, it is necessary to promote students' social responsibility towards nature; in particular, students need to be *able to identify the benefits or harms of their activities* in the process of affecting the heart. To do this, we need to build a new ecological ethics system - one that takes into account the harmony between the interests of the subject (business) and the object (nature), that is, should not know only the use and pragmatic values of natural things, but also respect, preserve and protect the intrinsic values of elements in the natural environment. To improve students' ecological ethics, we need to take many measures in which ecological ethics education for students has both short-term and long-term benefits, and

so this is considered a has the most significant, profound, and lasting effect. Eco-ethical education promotes behavior changes, helps people make decisions, and participates in environmental protection voluntarily and actively. We can conduct eco-ethical education at many levels of education and for all subjects. Still, eco-ethical education in universities occupies a special place, where the young generation is trained, future owners of the country.

Currently, Vietnam has more than 2.2 million full-time students with about 500 universities and colleges, accounting for a large part of the population structure of our country. The Universities of Economics and Business Administration make up a large proportion of the country's universities, especially the schools specializing in Training in economics and business administration have a large number of full-time students. Such as National Economics University, Trade University, Academy of Finance, Banking Academy, Foreign Trade University, University of Economics Ho Chi Minh City, University of Economics Da Nang, University of Vinh... Those are the leading training institutions in economics and business administration that attract many regular students, not to mention students in the work-study program, distance learning system, and graduate students. Ph.D. students, every year, about 6,000 bachelors graduate from the university working in economic management, human resource management, banking and finance, commerce, financial law, marketing, accounting, auditing, statistics, insurance, resource management, urban environment... Therefore, besides professional qualifications and ethical qualities in general, ecological ethics, in particular, is one of the criteria to assess the capacity of students upon graduation, joining human resources for national development and international integration to meet the requirements of sustainable development. But the students' ecological ethics status is a burning issue in universities. The current situation of severe environmental degradation is because each student and each of our universities are not adequately aware of the importance of ecological ethics, the problem of protecting and preserving the environment, and have not turned their awareness and responsibility for environmental protection into specific actions; The balance between economic development and environmental protection has not yet been ensured.

There have been many research works in this field in Vietnam and abroad. Jennifer A.Wade (1999) Analyzed, the United Nations has encouraged young people to be responsible for the environment to ensure the long-term health of the typical home - the earth. UK government policy has also recognized the importance of effective environmental education, and education is seen as a positive force for changing ecological perceptions. The author mentioned that if hotel management students could perceive the fundamental importance of environmental issues, they could have become influential changers of the problems. If hospitality management education could have given students the skills and motivation to be proactive with the environment, they would have been effective agents of change and ensured the hospitality industry operates with a sustainable vision. A survey of seniors showed that students were very interested in this issue. Combining effective teaching and learning strategies resulted in a majority having a personal commitment to the subject with environmental responsibility. If students had been exposed to examples of best practices underpinned by knowledge, the ecological agenda would not have been ignored when they became influential managers or entrepreneurs. The environmental education program should be well planned so that students acquire the knowledge and skills necessary to become effective environmental stewards.

The author - Li Xia (2009) They have analyzed the meaning of innovation in innovation by discussing the meaning of innovation, the meaning of innovation, and the content of innovation. Then, the author emphasized that the current revolutionary education in China has difficulties in three aspects, lacking the idea of systematic education, lacking the concept of universal education, and defaulting to the idea of comprehensive education. People should solve these problems by following the law of moral socialization.

Author 张彭松- Zhang Peng-song (2014), in the article "Environmental Ethics Education: Ecological Instruction and Practical Exploration." They emphasized that environmental ethics education for university students is an objective requirement to solve—environmental issues in China, conducive to the vast improvement of the comprehensive quality of university students. The author uses traditional knowledge-based teaching methods to teach ecological ethics in colleges and universities. As a branch of applied ethics, environmental ethics is a new kind of ethical thought compared to theoretical ethics. It expands the moral worldview from man to man and nature

so that man can accept character morality. The author determines that environmental ethics education should go beyond knowledge teaching methods, paying attention to practical ecological teaching methods. The aim is to enable the educated person to establish correct environmental ethics, master a wide range of knowledge and skills to protect the environment, and form good behavioral habits. Current environmental ethics education mainly focuses on transferring knowledge and skills to protect the environment but ignores emotional and experiential education on environmental attitudes, environmental responsibility, and ecological ethics.

Two authors 王晓艳- Wang Xiaoyan, 翁善波- Weng Shanbo (China) with the article "Ecological Ethics Education" (2015) have affirmed that today, the advancement of science and technology has brought conveniences, great benefits, and achievements for humanity. Still, at the same time, major ecological and environmental problems are also becoming more and more serious. Faced with the issue of resource limitation, severe environmental pollution, and ecosystem degradation, we must adhere to nature, respect, and protect wildlife from awakening people's ecological consciousness and sublimating their ecological sense. Environmental protection should be oriented through education. As the main force of future nation-building, university students need to be educated in eco-ethical knowledge, help build a civilized society, improve comprehensive quality, and enrich political and ideological education content. Colleges should develop curriculum theory, improve classroom teaching, build faculty, strengthen ecological culture construction, and implement environmental practice and legal education.

Authors Żeber-Dzikowska Ilona, Chmielewski Jarosław, and Wojciechowska Mariola (2016) in the article "Ecological and environmental education in the ethical context," present an important aspect related to ecological and environmental education in the context of complex ethical issues. Thereby it makes readers aware of the critical role of service education when it is connected with environment-friendly education and innovation, aiming to determine people's attitudes toward nature. They emphasize the importance of innovation for society to function correctly. We should take care of nature, treat it like a family member with love and kindness, and then we can be sure that it will not surprise us with surprises. We should take care of everything that nature has, that is, plants, animals, water, soil, and air because when we take care of all these aspects, we also care for ourselves and all society.

Author Levchenko, Natalia (2017), in the article "Ecological education in Russian universities: civil activism in formal education." analyze the ecological teaching process in technical universities in the Russian Federation. The data obtained is the result of a study conducted in 2014 - 2017, using in-depth interviews with university administrators and lecturers. The article shows how the liquidation of the subject "Ecology" from the school program affects the participants' preparation level. The reasons for changing societal attitudes towards environmental issues in the early 2000s and the decline of interest in ecology were examined. Thereby analyzing whether there is a process of forming an environment-oriented perspective among university students. The role of lecturers in teaching subjects related to environmental protection and ecological culture development is demonstrated.

Ecological ethics education has yet to be paid attention to by all levels and sectors. This concept is reflected in jobs such as Ethical and environmental education for crucial staff by author Le Binh (2005); Summary Report on Environmental ethics education for junior high school students, code B2006 - 37-30 by Duong Quang Ngoc (2009). In general, the authors argued that:

Firstly, the Party and State have promulgated viewpoints and leadership lines and built and perfected the legal system to protect natural resources and the environment, thereby orienting ecological awareness and a sense of ethics.

Secondly, the education of ecological ethics in our country needs to be paid more attention to, not on par with the requirements and requirements of the education and training career.

Thirdly, Vietnam has yet to develop a separate educational program on ecological ethics; ecological ethics education has only been integrated into several subjects.

1.2. Research projects on ecological ethics education for students in Vietnam today

In the works: Summary report on the topic Environmental ethics education for junior high school students, code B2006-37-30 by Duong Quang Ngoc (2009); Environmental education through geography by authors Nguyen Phi Hanh, Nguyen Thi Thu Hang (2004); Eco-ethics and ecological ethics education for critical officials at the district level in the northern provinces of our country today by Vu Trong Dung (2004); Ethical ethics education and building a cultural environment in the schedule of the 21st century by Do Huy (2007), in general, the authors believe that: There are many methods of building ecological ethics, including three basic techniques, which are ecological ethics education in the family, school, and society; Law in the role of building ecological ethics; Cultural lifestyle in the part of building ecological ethics. Ecological ethics education plays a decisive role in building ecological ethics.

Firstly, educating ecological ethics in families, schools, and society about the necessity of environmental ethics education.

In recent years, we need to pay more attention to eco-ethical education for subjective and objective reasons, even considering it unimportant. It is necessary to pay attention to students to achieve the goal of ecological ethics education.

It is necessary to pay attention to eco-ethical education for the sustainable development of humans and the natural world" (Phan 2006). Secondary school students are the subjects who need to pay attention to ecological ethics education. Because people are unaware of the importance of environmental resources for life and do not have the correct behavior toward the environment, education in this period is decisive for personality formation. Ecological ethics education will exist with the children throughout their lives (Ngoc 2009).

About the content of ecological ethics education

In the current works on *Ecological ethics and ecological ethics education for critical officials at the district level* in the northern provinces of our country, the author Vu Trong Dung (2004) (2004), *Eco-ethical education and* building a cultural environment in the schedule of the 21st century by author Do Huy (2007) have the same common assumptions: The content of ecological ethics education in the period to form and educate innovation standards; Implementing innovative behavior is the fulfillment of human obligations and responsibilities towards the environment; thereby combating and criticizing ecologically unethical acts.

There are many solutions to improve ecological ethics in Vietnam in the current period, in which the author has focused on three main groups of solutions: 1- strengthening the role of law in building ecological ethics, 2- further supporting the education of environmental ethics, 3- to create a cultural environment and a cultural lifestyle. Ecological ethics education is critical in building an artistic lifestyle, contributing to successful environmental ethics.

Building eco-ethics; it must be done through education on ecological ethics, considering this a regular, long-term, and inevitable task. Therefore, it is necessary to cooperate with the whole political system by setting out the content of educational methods suitable for each object. Works: *Ecological - humanistic culture (Environmental education)* by Tran Le Bao (editor, 2005); author Pham Van Bong (2001) with the article *Building ecological consciousness - a guarantee for sustainable development*; Vu Dung (2011) with the project *Environmental ethics in our country - theory and practice*; Phan Thi Hong Duyen (2011) with the project *The problem of ecological ethics education for Vietnamese students today*; Nguyen Van Phuc (2013) with the work of *Environmental Ethics*; Master's thesis on *Environmental Education Environmental protection education for students at Dong Thap Pedagogical University* (2013) by Le Hieu Duong; Master's thesis Philosophy *The issue of ecological ethics education for students in universities and colleges in Hung Yen in the current period* (2013) by Nguyen Cong Cuong; Master thesis of Philosophy of *Environmental Ethical Education for students of the Central College of Natural Resources and Environment* (2014) by Mai Thi Thu Hang; the article "*Strengthening environmental ethics education for students*" by Nguyen Thi Tho (2014); The article "*Environmental education in North Central pedagogical schools*" by Dr. Bui Van Dung (2014); the article "*Ethical ethics education - solutions to overcome the degradation of natural resources in Vietnam*" by Nguyen Thanh Thuy (2015); the essay "*Students study and*

follow Ho Chi Minh's moral example on environmental protection" by Hoang Thi Ngoc Minh (2016); The article "Improving the effectiveness of ecological ethics education for the young generation of our country today" (2016) by the group of authors Pham Minh Ai - Nguyen Thi Thuy Huong.

2. Research Methods

2.1. Proposed research model

After referring to the above theories and viewpoints on ecological ethics, the Research Overview section, and indepth interviews, the authors discussed and decided to build a research model based on the reference and edited from research by Pham Thi Ngoc Tram et al.

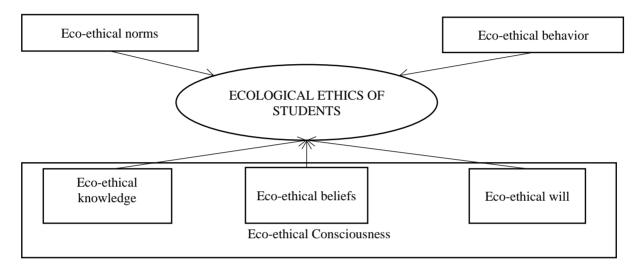


Figure 2.1: Research model proposed by the team

2.1.1. Scale design

H2-3

The study used mainly a Likert scale from 1 (strongly disagree) to 5 (strongly agree) and from 1 (never) to 5 (very often). The Likert scale is about 5 to 7 levels commonly used in research to describe people's attitudes toward social science behavior. Regarding the results, questions with multi-level answers, such as Likert, help the research team get the most detailed feedback possible, minimizing depression for survey participants.

In the above section, the research team has introduced the concepts of observed variables studied: Eco-ethical Consciousness (Knowledge of ecological ethics) (H1), Eco-ethical Consciousness (Belief in Ecological ethics) (H2), Eco-ethical Consciousness (Ecological ethics policy) (H3), Eco-ethical logical ethics standards (H4), Eco-ethical behavior (H5), ecological ethics of students (N).

We need to collect some personal information and the student's need for information on biodiversity and the ecoethical evaluation scales as in the table below.

Observed **Content** variables Eco-Ethical Consciousness (Knowledge) H1-1 Humans should live in harmony with nature H1-2 Humans cannot live in isolation from nature H1-3 Nature does not need to serve humans H1-4 You find your ecological knowledge is not enough and want to learn more H2-1 Individuals can contribute to protecting the ecological environment H2-2 Your family can contribute to protecting the ecological environment

Table 2.1: Preliminary scale

People around you can contribute to protecting the ecological environment

H2-4	Covernment can contribute to metacting the coolegical environment
	Government can contribute to protecting the ecological environment
H2-5	Non-governmental organizations can contribute to protect the ecological environment.
H3-1	Protecting the ecological environment is the responsibility of individuals
H3-2	Environmental protection is the responsibility of family and society
H3-3	Environmental protection of the government's responsibility
H3-4	Environmental protection is the responsibility of NGOs
Ecological, et	thical standards
H4-1	Attitude to actions that negatively affect the environment (wasting resources,): Firmly oppose
H4-2	Attitude to actions that negatively affect the environment (wasting resources,): Following the majority opinion
H4-3	Attitude to actions that negatively affect the environment (wasting resources,): Respect the leader's decision (Government,)
H4-4	Attitudes to negative actions affecting the environment (wasting resources,): Persuading but not then giving up
H4-5	Attitude to actions that negatively affect the environment (wasting resources,): I do not care; I do not waste.
H4-6	Attitude to actions that negatively affect the environment (wasting resources,): Ignore them because I am also wasting
H4-7	You comply with the regulations on environmental protection
H4-8	Do you oppose the use of products made from rare animals?
H5-1	You participate in cleaning up garbage that is left indiscriminately in the places where you live and travel.
H5-2	You limit the use of environmentally harmful products
H5-3	You choose to use environmentally friendly products (within your means).
H5-4	You remind your friends when you see yourself littering
H5-5	You save resources (electricity, water,)
H5-6	You reduce plastic waste
H5-7	You propagate environmental protection knowledge to your family
H5-8	You put garbage in the right place
N1-1	People need to change their current living habits to improve the ecological environment.
N1-2	Today's environmental problems cannot be ignored

2.1.2. Sampling method

The preliminary survey was conducted on a narrow scale in Hanoi to complete the questionnaire and avoid errors and misunderstandings in the process of answering the questionnaire. The research team provides five latent variables with 29 observed variables regarding the independent variables. The research team provided one latent variable with three observed variables regarding dependent variables. The research team adjusts spelling errors and expressions to avoid mistakes and misunderstandings in answering consumer votes. The survey form is presented in detail in the Appendix.

Overall, the research subjects are students majoring in economics and business administration at ten universities in the North of Vietnam. Include:

National Economics University

Hanoi University of Natural Resources and Environment

Northwestern University

University of Economics and Industry

Vietnam Maritime University

Banking Academy

Foreign Trade University

University of Economics - Vietnam National University, Hanoi

College of Economics and Business Administration - Thai Nguyen University

Financial institutions

The research team performed exploratory factor analysis (EFA) to quantify the correlation between observed variables and factors. According to Hair et al. (1998,111), choose an appropriate study sample size $N \ge 5*x$ (x: total

number of observed variables) equivalent to a minimum length of 50 or better, 100 or more. The ratio of observations to an analytic variable is 5:1, with the number of comments interpreted as the number of valid votes required. Therefore, according to this principle, the research group with 5 factors and 29 observed variables means the minimum sample size is N=29x5=145. This study had N=1000, so it was determined to have a reliable sample size.

Due to objective factors, the research team conducted a 100% quantitative study using an online survey. The number of votes collected after the initial official survey period was N=1059; however, after screening invalid votes, the group used 1000 votes to conduct the official analysis.

2.1.3. Methods of data collection and Analysis

The study was carried out with the data collection method by questionnaire with a sample size of 1000, an immediate investigation by electronic questionnaire.

To achieve the above sample results, we opened the questionnaire from //2021 to the end of //2021; the results were statistically analyzed via Excel. The questionnaire is completed directly by individuals within the research object; each quantitative question is measured on a Likert scale of 5 levels (strongly disagree, disagree, neutral, agree, strongly agree) and 1 (never) to 5 (very often). After finishing, the collected data was entered into SPSS 23 to filter and analyze the results.

The study uses Cronbach's Alpha as the most common test score reliability coefficient with single management. It eliminates variables with small-sum correlation coefficients, testing the preliminary scale by the EFA discovery factor.

2.1.4. Evaluation of Cronbach's Alpha reliability coefficient

This method removes unsuitable variables before EFA factor analysis because garbage variables can generate dummy factors (Nguyen et al. Mai Trang, 2009). is to remove the observed variables whose index does not meet the scale condition. Variables with a small total correlation coefficient (less than 0.3) will be eliminated, and the criterion for choosing the scale when it has more significant reliability Alpha (the more extensive the Alpha, the higher the intrinsically consistent confidence). (Nunally & Burnstein 1994; cited by (Nguyen et al. Mai Trang, 2009).

However, assessing the level of achievement of the reliability coefficient Alpha is: greater than 0.8 - a good measurement scale, 0.7-0.8 is a usable scale, from 0.6 or more is suitable. in case the theoretical research basis is new or new in the research context (Nunally, 1978; Peterson, 1994; Slater, 1995); cited by (Hoang et al. Mong Ngoc, 2005).

2.1.5. EFA. exploratory factor analysis

Besides Cronbach's Alpha coefficient, SPSS 23 software is also used in EFA exploratory factor analysis, KMO, and Bartlett test, allowing the research team to assess the relevance of EFA exploratory factor.

The authors conduct this analysis step to evaluate two essential scale values: concurrent value and discriminant value. The Exploratory Factor Analysis (EFA) method belongs to the group of interdependent multivariate analysis; there is no dependent or independent variable, but it relies on the correlation between the variables. EFA is used to reduce a set of k observations into a set of k of more significant factors. This reduction is based on the linear relationship of factors with primitive variables (observed variables). Each observed variable will be assigned a ratio called the factor loading coefficient, which indicates to which element each variable belongs. According to Hair et al. (2006) then:

• The KMO coefficient (Kaiser - Meyer - Olkin) must reach a value of 0.5 or more $(0.5 \le \text{KMO} \le 1)$, showing that the factor analysis is appropriate.

- Bartlett's test has statistical significance (Sig < 0.05), showing that observed variables are correlated with each other in the population.
- The condition for exploratory factor analysis is to satisfy the following requirements: Factor loading > 0.3, provided that the sample is more significant than 350 observations.
- Total Variance Explained reaches a value of 50% or more.
- Eigenvalue (representing the variation explained by each factor) > 1, then the extracted element has the best information summary significance. Multiple regression analysis: To test the regression model to assess the model's fit, identify the main factors affecting the research results in the order of more or less of each element, and analyze and explain the significance of the study.

2.2. Data check

2.2.1. Cronbach's Alpha reliability test

During the analysis of the results, 1000 questionnaires were processed using SPSS 23 software; the scales were preliminarily evaluated through Cronbach's Alpha coefficient test and the calculation of the total correlation coefficient. According to Nguyen Dinh Tho et al. (2009), this test checks the degree of the close correlation between the observed stations in the single-factor cf. Cronbach's Alpha test before the principal component EFA to eliminate inappropriate variables because these variables make the research results inaccurate.

The results of the reliability analysis of the scale of the independent and dependent factors are presented in Table 2.2. Initial official survey data includes 32 observed variables for 6 independent factors (29 observed variables) and 1 dependent variable (3 observed variables) after performing reliability analysis for all variables. The scale shows that 34 observed variables are reliable enough to carry out the next steps of research (only variables H4-3 = -0.11 and H5-8 = 0.238 less than 0.3 are not reliable enough. removed from the scale).

Symbol Factor name Alpha. coefficient TT Eco-Ethical Consciousness (Knowledge) 0.614 NT 0.970 Eco-Ethical Consciousness (Belief) YC Eco-Ethical Consciousness (Will) 0.899 0.835 CMEco-ethical standards HV Eco-ethical behavior 0.811 Ecological ethics Dependent variable: Ecological ethics of 0.616 students

Table 2.2: The results of Cronbach's Alpha test of the scale

Source: Compiled from analysis results on SPSS

2.2.2. EFA. exploratory factor analysis

The results of the first EFA analysis presented in Table 2 show that 27 observed variables are extracted into 5 factors, of which:

- KMO coefficient = 0.886 in the test for independent variables and KMO = 0.629 (Table 2.2) at the Sig level of significance (Bartlett test) = 0.000 < 0.5; this shows that the factor analysis is examined. Analysis of factors that are entirely relevant, reliable, and meaningful indicates that the observed variables are correlated with each other in the population.
- The analysis results (Table 3) also show that all factors have Eigenvalues > 1; the extracted variance is 61.594% > 50% is satisfactory. With the method of extraction and analysis of principal components and Varimax rotation, 5 factors were extracted from 27 observed variables; this shows that 5 extracted factors explained 61,594% of the variation of the variable depending on the observation/data population.

Table 2.3: EFA analysis results for the scale of independent and dependent variables

Variable name	Factor loading factor	
Eco-Ethical Consciousness (Knowledge)	·	
H1-1	0.721	
H1-2	0.709	
H1-3	0.694	
H1-4	0.576	
Eco-Ethical Consciousness (Belief)		
H2-1	0.922	
H2-2	0.933	
H2-3	0.915	
H2-4	0.920	
H2-5	0.812	
Eco-Ethical Consciousness (Will)		
H3-1	0.701	
H3-2	0.761	
Н3-3	0.847	
H3-4	0.836	
Ecological Ethical Standards		
H4-1	0.663	
H4-2	0.685	
H4-4	0.775	
H4-5	0.827	
H4-6	0.783	
H4-7	0.624	
H4-8	0.607	
Behaviors showing concern for the ecological enviro	nment	
H5-1	0.653	
H5-2	0.764	
H5-3	0.787	
H5-4	0.708	
H5-5	0.634	
H5-6	0.538	
H5-7	0.555	
Dependent variable: Ecological ethics of students	T a = 0.0	
N1-1	0.789	
N1-2	0.685	
N1-3	0.788	

Source: Compiled from analysis results on SPSS

Based on the table of research results, the conclusion is made: The observed variables have loading coefficients greater than 0.5 (Hair & Ctg, 2009), so they will be kept in the model.

Since then, the research team has identified 5 main factors related to students' ecological ethics that will be used in the analytical model instead of 5 latent variables like the original hypothetical model, such as: in the table above.

2.2.3. Regression analysis

The research team used SPSS software with 1000 valid questionnaires to analyze the linear regression of "Student's Eco-ethics" according to 5 independent variables, namely "Eco-ethical consciousness (Knowledge)," "Eco-ethical Consciousness (Belief)," "Eco-ethical Consciousness (Ethical Consciousness)," "Eco-ethical Standards," "Behaviours showing concern for the ecological environment."

The table in the Appendix shows that the adjusted R squared is 52.8%, which means that the research factors contribute 52.8% of the change of the dependent variable, so there is enough basis to confirm the effect of the independent variable on the dependent variable. The Durbin-Waston coefficient is 2.075 ($1 \le 2.075 \le 3$), so the model does not have autocorrelation.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		REMOVE	Std. Error	Beta		
first	(Constant)	.489	.198		12,367	.000
	TT	.205	.046	.127	10,736	.007
	NT	.138	.036	.171	12,207	.001
	YC	.167	.051	.269	8,527	.008
	CM	.300	.034	.424	6.544	.005
	HV	.240	.039	.155	12.721	.000

Table 2.4: Regression model

Source: Compiled from analysis results on SPSS

Based on the above table of results, all variables TT, NT, YC, CM, and HV have sig test t less than 0.05, so these variables are statistically significant, and all variables in the model with all shapes affect the dependent variable of Crescent.

Linear Regression:

$$\widehat{DDST}$$
 = 0.489 + 0.205*TT + 0.138*NT + 0.167*YC + 0.300*CM + 0.240*HV + ε

According to the Beta coefficient and sig coefficient of the above table, we see that the variable that has the most impact on students' ecological ethics is "Eco-ethical Standards," with a beta coefficient of 0.300; ranked second is the variable "Behavior shows concern for the ecological environment" (beta = 0.240), third is "Knowledge" (Beta coefficient is 0.205), followed by "Will" with Beta coefficient = 0.167 and the last is "Belief" (beta coefficient = 0.138).

2.3. The ecological ethics status of Vietnamese students majoring in Economics and Business Administration

Eco-ethical consciousness includes the following factors: knowledge, emotion, belief, and eco-ethical will.

About eco-ethical knowledge: The survey results show that most students have the correct eco-ethical knowledge. This is reflected in the student's awareness of the role of the ecological environment in human life, the relationship between humans and the natural world, and the impacts of humans on nature.

Up to 86% of the students surveyed said the ecological environment is critical to human life. Humans must live in harmony with nature. Correct perception is the prerequisite for forming the proper behavior. With a clear

awareness of the importance of the ecological environment, most students also have an accurate perception of the relationship between humans and the natural world.

According to the survey results, most students acquire ecological knowledge through primary sources such as the subjects in the university curriculum (78.5%), television, the internet, and social networks (89.2%), books, newspapers (outside the issue) (66%). In addition, there are other sources such as family and friends (49.8%), propaganda activities of the Youth Union (38%), and other sources (27.1%). Most students felt their ecological knowledge needed improvement and wanted to learn more (74%). Although ecological knowledge is a cressed from many different sources, more is required, and the need for ecological knowledge is a practical requirement of students. Students have a relatively high demand for ecological knowledge. Therefore, it is necessary to include the content of ecological knowledge and ecological ethics education in universities.

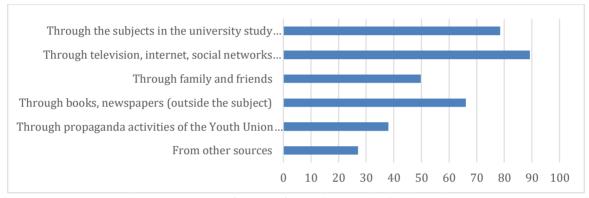


Chart 2.1: Sources of Income for Students' ecological knowledge Source: Author's group compiled according to survey results

About eco-ethical beliefs: Conclusion The survey results show that the majority of students have an idea that their actions will help protect the environment, this belief is really "strong" when 45.1% agree, and 46.8% agree with the view that "students themselves will be able to contribute to environmental protection." At the same time, students also believe that family, community, NGOs, and government will be essential contributors to protecting the environment. In it, self-belief is expressed at the highest level.

Table 2.5: Survey Results of Students' Ecological, ethical beliefs Who can contribute to environmental protection?

	Totally disagree	Disagree	No idea	Agree	Totally agree
Myself	5.0	0.1	2.1	46.8	45.1
My family	4.7	0	3.0	48.3	43.5
People in the area where I live	4.6	0	3.6	47.0	44.1
Government	4.9	0	3.2	44.4	46.8
Non-governmental organizations	5.4	2.3	6.0	41.1	44.9

While most students believe their actions will help protect the natural environment, a few do not believe in themselves, the community, and society. A small percentage (less than 5%) do not express their eco-ethical belief about themselves, the community, and culture, and a part fluctuates (less than 6%) when not expressing personal views.

The change of an entire community, a country, or the whole of humanity begins with the evolution of each individual. Students' beliefs about participating in their actions to protect the natural environment will create a ripple effect, creating a broader instability, not only within the school campus.

About the eco-ethical will: The eco-ethical intention is the factor that helps students overcome all difficulties and is determined to fight and prevent activities that harm the ecological environment.

According to the survey results, over 90% of students agree or completely agree that protecting the ecological environment is the responsibility of themselves, individuals, their families, and the whole society, not just the government or non-governmental organizations. However, besides the majority of students who have the right innovation will, there is still a small number of students whose perceptions could be more accurate. Some students still think that they and their families cannot contribute anything to protecting the environment (5%) and that they are not responsible for severe ecological problems (4.5%). Many students know that environmental protection is necessary but consider it a macro-level job, a task of the government and large organizations. They need to realize that significant change must start with small actions.

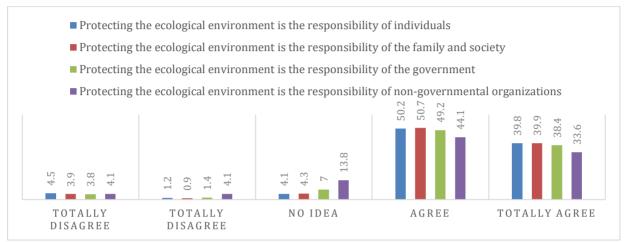


Chart 2.2: Survey Results on the Ecological, ethical will of Students Source: Author's group compiled according to survey results

2.3.1. Status of ecological ethical standards

The eco-ethical standards represent a measure of the eco-ethical behavior of each individual. For students, it is reflected in fundamental issues such as: saving in the use of resources, respecting and protecting biodiversity, and actively propagating environmental protection.

When asked, "For projects that harm the ecological environment, what would your attitude be?", 69.3% of students expressed the determination to "resolutely oppose." The majority of students also said their personal opinions clearly when they did not choose to "follow the majority opinion" (11.7% of students answered completely disagree, 34.2% of students replied that they disagreed with "follow the majority opinion" majority opinion").

At the same time, the eco-ethical standards also require the implementation of all objects. They are reflected in the individual's sense of reminding and persuading others in the community to follow eco-ethical standards. According to the survey results, when asked, "When you see other people wasting resources, you will?" the percentage of students choosing to agree or completely agree with the view "persuade until the person changes, if not, prevent such behavior" is relatively high (78.7%); the percentage of students choosing not to agree or completely disagree with the point of view "persuading but not working" also accounted for 46.2%. Students have adequately recognized Eco-ethical standards and are considered a daily must-do.

When you see others wasting resources, you: 70 60 50 40 30 20 10 Persuasion until thev Persuade but if they don't Don't care. I don't waste Ignore it because I'm change their mind, if not agree then stop it wasting it too then stop ■ Totally disagree ■ DisagreeNo idea ■ No idea ■ Agree ■ Totally agree

Table 2.3: Survey results on ecological, ethical standards of students

Source: Author's team compiled from survey results

However, from the survey results, it can also be seen that there is still a part of students who have not shown their determination in ensuring innovation standards are implemented in life when still more than 20% Agree or agree with the point of view "Persuasion but not," and up to 30% of students did not give an opinion on this point of view.

Most students also complied with regulations on environmental protection, accounting for 90.4%. Students also have a sense of "going green" when protesting against the use of products from rare and precious animals and plants, although the rate is not high, only 76.3%; at the same time, still, 21% did not clearly express their personal views on this issue. Using products from rare animals and plants (such as rhino horn, bear bile, red coral, etc.) in some places and individuals are considered normal. This status is an act worthy of condemnation. Young people need to be more aware of the dangers of widespread use of these products.

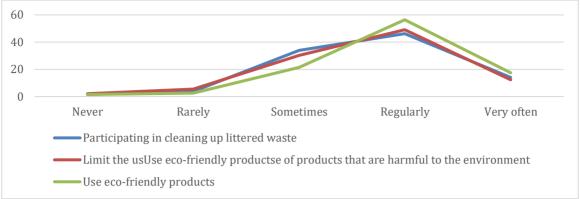
Students have initially recognized the basic standards of ecological ethics; it is necessary to continue to improve the standards and help students understand from there to practice eco-ethical behavior.

2.3.2. Status of eco-ethical behavior

Eco-ethical behavior is manifested in particular and daily life issues such as throwing garbage in the right place or strictly observing regulations on environmental protection. Most students had the correct behavior and perfect self-awareness about their behavior.

The survey results show that most students are self-conscious about participating in garbage cleaning at their residence (60.3%), the number of which needs to be consciously accounted for only a tiny part (5.2%). The students also changed their daily lifestyle when purposely limiting the use of products that are harmful to the environment (61.5%) and regularly choosing to use eco-friendly products (71.9%). Although students were aware of eco-ethical behaviors, the frequency of students' practice of eco-ethical behavior was not high, when about one-third of the students surveyed answered that implementing eco-ethical behaviors is only "occasionally."

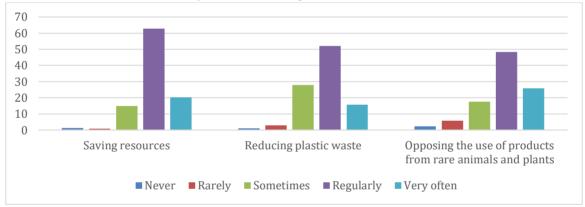
Table 2.4: Survey Results on Ecological, ethical behavior of Students



Source: Author's team compiled from survey results

The survey results showed that the students also actively cleaned up the garbage left indiscriminately in the places where they lived, studied, and even traveled. These actions are all voluntary actions stemming from the individual's awareness and needs; it shows young people's responsibility for their own lives and the future of humanity. In daily life, the behavior of biodiversity is also clearly demonstrated in saving resources (such as electricity, water...), limiting plastic waste, or opposing the use of products from animals and rare plants.

Table 2.5: Survey Results on Ecological, ethical behavior of Students



Source: Author's team compiled from survey results

They automated their behavior, and the students proactively reminded them to correct their friends' misbehavior. 74.7% confirmed that they regularly remind their friends when they see them throwing garbage in the wrong place. These seemingly small actions will gradually create a substantial spillover to change an entire generation's behavior.

The students also actively participated in environmental protection propaganda activities organized by the Youth Union and the Student Union of the schools or participated in the programs of non-profit organizations. Environmental clubs have also been established in many universities, such as Environment Club 360 ° - under the Student Union of National Economics University, which is one of the oldest units operating in the world. Both: Environment and Volunteering. All activities and programs are associated with the goals and directions that the unit always aims for, which is to propagate and promote environmental protection and preservation in the student community and the general community.

Foreign Trade University also has a 350 Vietnam Environment Club - FTU. With the slogan: "Be the change you want to see in the world" - "For the environment, let us act together," Environment Club 350 Vietnam - FTU was born to give young Vietnamese people new opportunities. To join hands to act for a better environment – for today and the future. The number 350 has a special meaning. According to the research scientists, the maximum limit of safe CO2 concentration in the atmosphere is 350 ppm (units 1 part per million). It is also the level of CO2 that we

must strive to reduce helping prevent further global warming. Therefore, 350 is a significant symbolic number known to the whole world.

The club is a gathering place for many students conscious of environmental protection. At the same time, this is also the place to create many changes in the awareness and actions of students, attracting more and more students to participate in environmental protection movements. This makes excellent changes in students' understanding and actions when environmental protection movements become more and more popular and practical for life. Students had a sense of transition from the minor activities, such as instead of using bottled water; students actively brought a water bottle to use many times.

However, many students are still aware that their behaviors may harm the ecological environment but have yet to change their behavior actively. For example, the use single-use plastic products, we all know that disposable plastic products such as bottled water, plastic cups, plastic straws, and plastic bags... are products that are difficult to decompose and cause terrible harm to the environment; however, members still use these products daily as a bad habit hard to break. Restaurants and service areas on school grounds still use disposable plastic products rampantly. This requires a drastic change in awareness from the students and the school to have stricter regulations on using single-use plastic products.

3. Conclusions and recommendations

The current environmental problems in our country have posed a requirement to improve the eco-ethics of the people in general and students in particular. Therefore, special attention should be paid to eco-ethical education for students.

Eco-ethical education for students is a long-term and regular task of each individual and society, not a separate task of the education sector. However, to effectively educate students on innovation, it requires Party committees, authorities, mass organizations, and the school's leadership board to thoroughly understand and implement all policies and guidelines of the university. Party, policies, laws of the State, directives of the Ministry of Education and Training related to eco-ethics education for students. However, the reality shows that the implementation of the Party's guidelines and guidelines, the State's policies and laws, and the task of educating students on eco-this is still passive, confusing, heavily formal, and not paying attention. Focus on quality and efficiency.

At the current universities of economics and business administration, eco-ethical education for Students is mainly carried out through activities of the Youth Union and the school's Student Union.

Therefore, it is necessary to continue to research and make necessary changes in training content and programs so that all students and majors can learn and be educated on issues related to eco-ethics and consider this as one of the "standards" required of a global citizen.

It is necessary to take adequate measures to meet the quantity and quality requirements of lecturers teaching ecoethics at universities and colleges. Because even if it is late, we must also train and foster a team of lecturers with deep expertise in eco-ethics. Besides, there should be close coordination between schools, families, and society in eco-ethical education for students. This must be done because it is the "key" to managing and protecting the environment and the country's natural resources.

One of the challenging points in educating students on eco-ethics is the "warmness" between theory and reality. At school, in class, students can listen to lectures on fundamental theoretical issues about environmental protection and its meaning, with deeply humane, compassionate, and sublime content. However, in real life, even in a specific part of the school, students can witness phenomena and behaviors lacking in innovation and ecological counterculture. Not only at school but also in the place where they live, students can also encounter eco-cultural and non-trivial behaviors, from indiscriminate littering to the use of resources wastefully. In addition to society, violating eco-ethics occurs and brings terrible impacts to the ecological environment.

The contradiction between the lessons on morality, eco-ethics, and reality poses a big problem for students in practicing eco-ethics. Students must promote their positivity, initiative, and self-discipline in practicing eco-ethics; if active, proactive, self-conscious, and consistent, the formation of consciousness, standards, and behavior is manageable.

References

- Jennifer A. Wade (1999). *Students as environmental change agents*. International Journal of Contemporary Hotel Management, MCB University Press, ISSN 0959-6119
- Ministry of Education and Training, Vietnam Institute of Educational Sciences (2009). Summary report on Environmental ethics education for junior high school students, code B2006-37-30, Experimental topic Progress Doctor Duong Quang Ngoc, Ha Noi, p. 8-12
- Levchenko, N. (2017). *Ecological education in Russian universities: civil activism in formal education*. Southern Federal University, ISSN: 2500-2155
- Peng-song, Zhang -张彭松 (2014). Environmental Ethics Education: Ecological Instruction and Practical Exploration. *Journal of Guangxi Normal University (Philosophy and Social Science Edition)*, 2014, Issue 01. pp.34-38
- Phan, Tran Si (2006). Ethical ethics Matters needing attention. *Journal of Theoretical Education*. Regional Academy of Politics I (7), p.20-23.
- Xia, Li 李霞 (2009). Ecological Ethics Education annotation, Difficulties, Countermeasures. *Ecological Economy Journal*. Issue 1. pp.444-448
- Xiaoyan, Wang, Shanbo, Weng (2015). Ecological Ethics Education. *Journal of Anhui Agricultural University* (*Philosophy & Social Sciences Edition*), Vol.24 (02), pp.30-33
- Żeber-Dzikowska Ilona, Chmielewski Jaroslaw, Wojciechowska Mariola (2016). Ecological and environmental education in the ethical context. *Journal of Environmental Protection and Natural Resources*, 01 June 2016, Vol.27(2), pp.44–47.