

## **Model of Environmental Education Predicting Green Behavior through Public Mind**

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### **Abstract**

The populations were 11,460 undergraduate students of Ubon Ratchathani Rajabhat University of the first semester of 2022. The Multi-Stage Random Sampling technique was employed to gather the sample for 400 undergraduate students. The questionnaire was used as tool for data collection. Structural equation model (SEM) was used for model verification. The objective of research was to develop the structural equation model of environmental education predicting green behavior through public mind. The finding showed that the confirmatory factor of exogenous variable of Environmental Education (EE) was able to explain the variation of endogenous factors of Public Mind (PM) predicting to Green Behavior (GB) with 88.00 percent. PM had the most effect to GB with effect of 0.78, and subsequence was EE with effect of 0.25. These can explain the variation of GB with 88.00 percent. Additionally, confirmatory factor EE can explain the variation of confirmatory factor of PM with 70.00 percent. Altering the green behavior of undergraduate students of Ubon Ratchathani Rajabhat University, the university should launch a program to develop their environmental public mind because public mind can play as an essential and powerful factor to create and develop their green behavior.

**Keywords:** Structural Equation Model/Environmental Education/Public Mind/Green Behavior

### **Introduction**

Environmental education is accepted as an important learning development to create people's knowledge and awareness on environment by challenging and developing the required skills and expertise to emphasize the positive attitudes creation with the motivation to make correctly decisions and take responsibility to accomplish the final goal of behavioral alteration of worldwide inhabitants for upholding the ecological balance and conserving the natural resources and environment for their own generations and future generation with public consciousness (UNESCO, 1978; Thiengkamol, 2011e; Thiengkamol, 2011f). Furthermore, environmental education needs to be employed across all channels of education means including in terms of formal education, informal education, non-formal education and lifelong education. Hence, it is a learning administration with three designs and actions that were categorized into 3 forms that include 1) to learn in environment with activity management by learning from direct experience in environment, 2) to learn about environment with activity management by learning about environment content with different activities, and 3) to learn

for environment with activity arrangements that aimed to real practice and participate in environmental protection and development. There are five vital components of environmental education regarding to 1) raising consciousness for environmental problem with action to create perception to consider the problem by analyzing with holistic approaches of both problems and impacts, 2) knowledge and understanding is foundation of nature and environment with connection between human and physical environment problems with guidelines of problem solving 3) attitude as method to aid people to concern in its value by human intent to participate for environmental maintenance and improvement, 4) skill is a process to aid for investigating problem, monitoring the implementation including assisting each other to search the approach for solving these problems together, and 5) participation is a method to aid the actual problem solving. Thus, this concept is “thinks globally but acts locally because environmental problem is a global problem, but it can be solved with individual level or community level but the best way of problem solving is personal or community actions. For example, learner might think that they are unable to aid for ozone depletion, however they needed to be realized by empowering them (WCED, 1987; Palmer & Birch, 2003; Watkinson, 2009; Thiengkamol, 2011e).

But environmental education is used more generally to cooperate into all efforts by educating the public sectors and various audiences by providing print materials, websites, media campaigns, etc., including outdoor education and experiential education. It can lead to sustainable development learning by referring a socio-ecological approach across environmental education with environmental issues (Hart, 2003; Summers et al., 2003; Kyburz-Graber, 2006; Smyth, 2006; and Stohr, 2013).

The United Nations General Assembly proclaimed the period from 2005 to 2014 as the United Nations Decade of Education for Sustainable Development. It is the

decade of growing concern for future generations. Furthermore, it regards to present generation competency to manage the adverse consequences of decades due to unconscious environmental decisions of our ancestor. Thus, in different curricula should be integrated with environmental education content by focusing on sustainable development because the environmental education concept goes along with sustainable development. Sustainable development contains 18 principles which announced since 1992 that was held by United Nation International Conference at Rio de Janeiro in Brazil. Nevertheless, these principles are emphasized that “In order to attain the sustainable development, environmental protection shall be a vital part of the development process. Sustainable development and environmental protection cannot be considered separately from each other. In particular, the millennium development goals for sustainability with eradicating poverty and reducing disparities in living standards in differently global regions are essential to accomplish real sustainable development in order to meet the needs of the majority of global people. It was focus on the beliefs of teachers in teaching about sustainable development as fundamental concepts with action competence approach was identified as a strategy that some researchers believe has the greatest impact on students’ learning based on the teacher’s role as facilitating students’ engagement in critical thinking through an action competence approach (Alsop, 2007; Ravindranath, 2007; Lundegard & Wickman, 2007; Barrett, 2006; Hart, 2003; Rauch, 2002; Jensen & Schnack, 1997; Ballantyne et al., 1998).

Sustainable development is a process which meets the needs of the present without compromising the ability of future generations to meet their own need. Sustainable development in Agenda 21 (UNCED, 1992; Rauch, 2002), it implies a use of resources that

does not considerate on the health of human or environmental quality and regardless to the risk of future generations' opportunity to meet their own needs. Normally, the definition of sustainable development includes social, economic and environmental features (Summers, 2003). The framework for implementing the Decade for Education accomplishing Sustainable Development includes four thrusts including the first was the promotion and improvement of basic education for encouraging individuals to lead sustainable lives and the second thrust was the reorientation of obtainable education programs with regenerated curriculum by focusing on sustainability. The third thrust was the development of public understanding and awareness of sustainability issues with understanding the crucial society progress towards more sustainable communities. Lastly, the fourth is the final thrust was concerned with public training in all sectors of the workforce with confirming the workforce had the capability to perform their work in a sustainable manner (UNESCO, 2003).

Thailand, the environmental education was firstly introduced to the graduate level in Mahidol University, Faculty of Humanities and Social Sciences, Department of Education Under the program of environmental education for Master of Education degree since 1979. Nevertheless, the environmental education has not recognized broadly until the governmental sector, predominantly, Department of Environmental Quality Promotion, Ministry of Natural Resources and Environment had paid attention to environmental education by assigning the Social Research Institute of Chulalongkorn University to formulate project of main plan of Environmental Education for Sustainable Development (EESD) B.E. 2551-2555, had the main goals cover 1) work sectors, organizations and diverse target groups to understand and to aware the role of environmental education, 2) structured institute to support the development of environmental education sustainably, 3) collaboration and cooperation among different sectors to support development of environmental education, and 4) develop and exchange knowledge, attitude and skill about environmental education inside and outside educational institute continuously. This is also introduced environmental education to support the policy, strategy, and implementation in the local and national levels (The Social Research Institute, 2008).

Environmental education was perceived as the promotion of “environmentally sound behavior by indoctrination”. Education for Sustainable Development refers to all aspects of public awareness, education and training provided to create or enhance an understanding of the linkages among the issues for sustainable development and to develop the knowledge, skills, perspectives and values that will empower people of all ages to adopt responsibility for creating sustainable futures (Ravindranath, 2007). Though, sustainable development concept has usually been a acknowledgement of three aspects of sustainable development including 1) an economically sustainable system must be able to produce goods and services on a continuing basis, to maintain manageable levels of government and external debt, and to avoid extreme sectoral imbalances which damage agricultural or industrial production, 2) an environmentally sustainable system must maintain a stable resource base, avoiding over-exploitation of renewable resource systems or environmental sink functions, and depleting non-renewable resources only to the extent investment that is made in adequate substitutes. This includes maintenance of biodiversity, atmospheric stability, and other ecosystem functions not ordinarily classified as economic resources, and 3) a socially sustainable system must attain distributional equity, adequate provision of social services including health and education, gender equity, and political accountability and participation (WCED, 1987).

The environmental education concept refers to people share in narrow band of land, air, and water on the surface of the limited planet with included in that space is all the resources

that people will ever have. This is a closed system run by the radiant energy from the sun. The whole populations of living species on the planet, and the living things which live and consume resources, and die, but humans are unlike any other species, humans have developed an economic system using a technology which has consumed large amounts of resources, brought rapid environment changes, and overloaded the environment with waste. Additionally, humans have developed the potential to destroy themselves by their decisions and actions to determine the quality of environment. Global peoples have the responsibilities to our and future generations to preserve a quality of life for a healthful and productive existence for all people. Therefore, it needs crucial policy and plan to reach the goals of environmental education that are firstly, to foster clear awareness of, and concern about, economic, social, political and ecological interdependence in urban and rural areas; secondly, to provide every person with opportunities to obtain the knowledge, values, attitudes, commitment and skills needed to protect and improve the environment; and thirdly to create new patterns of behavior of individuals, groups and society as a whole toward the environment with public mind and responsibility (UNESCO 1977; Thiengkamol, 2011e; Thiengkamol, 2011j; Thiengkamol, 2012c; Thiengkamol, 2012d; Thiengkamol, 2012h; Thiengkamol, 2012i).

Thiengkamol proposed and proved on inspiration of public consciousness for natural resources and environmental conservations with diverse research were conducted by herself and her colleagues that inspiration is completely unrelated to motivation because peoples will perform their public consciousness with their desires from their inside to perform for natural resources and environmental conservations. Their inspiration might be taken place from the admiration of good role model of any person, impressive event, impressive environment and various media perception. They do with public consciousness for others without the requisite of rewards, money, nobleness or admiration but they are willing to do with appreciation or impression to do so (Thiengkamol, 2011e; Thiengkamol, 2011f) Concurrently, the various researches were implemented by her colleagues, these have also confirmed that inspiration of public consciousness or public mind are essential for environmental conservation in divers target groups about environmental management with integration of environmental education principle (Kyburz-Graber et al., 2003; Donkonchum, & Thiengkamol, 2012; Artwanichakul, et al., 2012a; Gonggool, et al, 2012b; Morrasri, et al, 2012b; Phinnarach, et al., 2012a; Pimdee, et al., 2012a; Ruboon, et al., 2012a; Mongkonsin, et al, 2013b; Sangsan-anan, et al, 2012a; Udonboon, 2012b).

Nevertheless, the investigation of the environmental education predicting green behavior via public mind. This was conducted with undergraduate students of Ubon Ratchathani Rajabhat University in Northeastern region of Thailand. The green behavior was judged on green consumption behavior for food consumption, green energy behavior, green traveling behavior, green knowledge transferring behavior, and green health behavior. However, the environmental education as exogenous variable to cause the green behavior would be include environmental knowledge and understanding, environmental awareness, environmental attitude and environmental participation via public mind regarding to appreciation of person as role model, event impression, environment impression, social expectation, social norm and different media receptions (Thiengkamol, 2011e; Thiengkamol, 2011f; Donkonchum et al., 2012a; Pimdee et al., 2012a; Tumpracha et al., 2012b; Phinnarach et al., 2012a; Sangsan-anan et al., 2012a; Kotchachote, 2013a; Petchang et al, 2013a; Saisunantharom et al., 2013a; Suebsing et al., 2013a). Proving the hypothesized model was implemented by using structural equation model analysis to verify with the empirical data.

## Objective

The objective of the research was to develop a model of environmental education predicting green behavior through public mind.

## Methodology

The research design was conducted steps by step as follows:

1. The populations were 11,460 undergraduate students of Ubon Ratchathani Rajabhat University of the first semester of 2022. The Multi-Stage Random Sampling technique was used to collect the sample of 400 undergraduate students from different faculties of Ubon Ratchathani Rajabhat University.

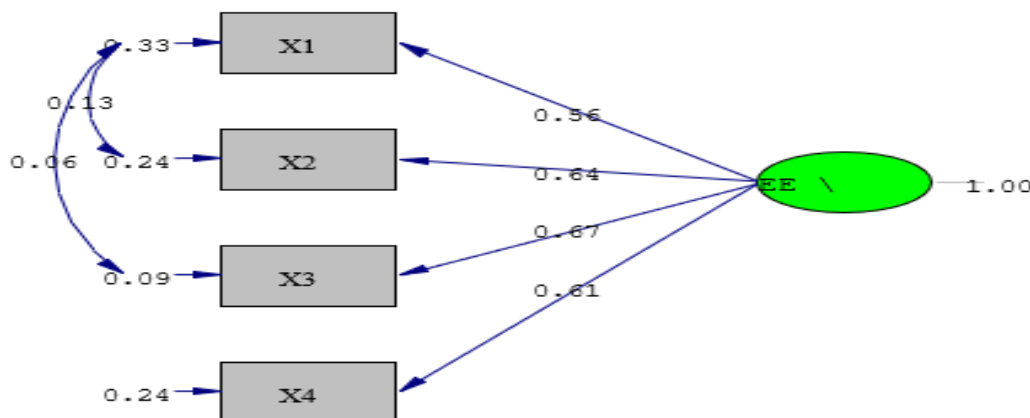
2. The research tool was the questionnaire with 95 items, and it was used for data collection. The content and structural validity were determined by Item Objective Congruent (IOC) with 5 experts in the aspects of environmental education, psychology, social science, and social research methodology. The reliability was conducted by collecting the sample group from 50 undergraduate students of Ubon Ratchathani University which is comparable characteristics to Ubon Ratchathani Rajabhat University. The reliability was determined by Cronbach's Alpha. The reliability of environmental education, public mind, green behavior, and the whole questionnaire were 0.954, 0.963, 0.974 and 0.977 respectively.

3. The descriptive statistics were frequency, percentage, mean and standard deviation. The inferential statistics used was Structural Equation Model (SEM) and analyzed with LISREL version 8.30 by considering on Chi-Square value differs from zero with no statistical significant at 0.05 level or Chi-Square/df value with lesser or equal to 5, RMSEA (Root Mean Square Error Approximation) value and RMR (Root Mean Square Residual) with lesser than 0.05 including index level of model congruent value, GFI (Goodness of Fit Index) and critical number, and index level of model congruent value, AGFI (Adjust Goodness of Fit Index) between 0.90-1.00.

## Results

### 1. The result of confirmatory factor analysis (CFA) of exogenous factor

#### 1.1 CFA of exogenous factors of Environmental Education (EE)



Chi-Square=2.61, df=4, P-value=1.00000, RMSEA=0.005

**Picture 1: EE Model**

EE had Bartlett's test of Sphericity of 1004.583 statistically significant level ( $p < 0.01$ ) and Kaiser–Mayer–Olkin Measure of Sampling Adequacy(MSA) of 0.794. This showed that component of EE aspect had proper relationship at good level, and it can be used for analysis of confirmatory factors as shown in Picture 1 and Table 1.

**Table 1 Results CFA of EE**

CFA of EE		Weight	SE	t	R <sup>2</sup>
X1	Knowledge and Understanding in Environment	0.56	0.041	14.12**	0.50
X2	Awareness in Environment	0.64	0.036	17.88**	0.68
X3	Attitude in Environment	0.67	0.037	20.56**	0.64
X4	Participation in Environment	0.61	0.036	18.11**	0.61
Chi-square = 2.61 df = 4 P = 1.0000					
GFI = 1.00 AGFI = 0.99 RMSEA = 0.005 RMR = 0.000					

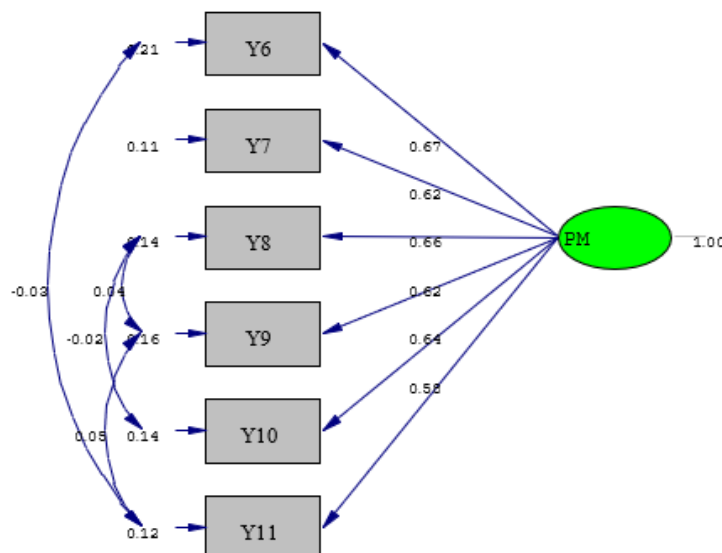
\*\* Statistically significant level of 0.01

From Picture 1 and Table 1, the findings of CFA of EE covering 4 observed factors showed that the model was congruent to empirical data by considering from 1) Goodness of Fit Index (GFI) = 1.00 and Adjust Goodness of Fit Index (AGFI) = 1.00 2) Root Mean Square Error of Approximation (RMSEA) = 0.000 (RMSEA < 0.05) and 3) Chi- Square value with no statistically significant at level of 0.01 and divided by degree of freedom was lesser than or = 5 ( $\chi^2/df \leq 5.00$ ).

The load weight of 4 observed factors in model, it illustrated that observed factors had load weight between 0.56 to 0.67 and had covariate to model of EE with 50.00 to 68.00 percent.

**2. Confirmatory Factors Analysis (CFA) of Endogenous Variables**

**2.1 CFA of Endogenous Factor of Public Mind (PM)**



Chi-Square=5.23, df=5, P-value=0.34521, RMSEA=0.017

**Picture 2: PM Model**

PM had Bartlett’s test of Sphericity of 2056.494 level of statistical significance ( $p < 0.01$ ) and Kaiser–Mayer–Olkin Measure of Sampling Adequacy/MSA) of 0.915. This showed that component of PM aspect had proper relationship at good level and it can be used for analysis of confirmatory factors as shown in Picture 2 and Table 2.

**Table 2 Results of CFA of PM**

Components of PM	Weight	SE	t	R <sup>2</sup>
Y6 Role Model	0.67	0.032	21.66**	0.81
Y7 Impressive Event	0.62	0.029	22.14**	0.76
Y8 Impressive Environment	0.66	0.030	21.36**	0.75
Y9 Social Expectation	0.62	0.030	17.89**	0.69
Y10 Social Norm	0.64	0.032	18.26**	0.68
Y11 Numerous Media Receptions	0.58	0.029	18.23**	0.66

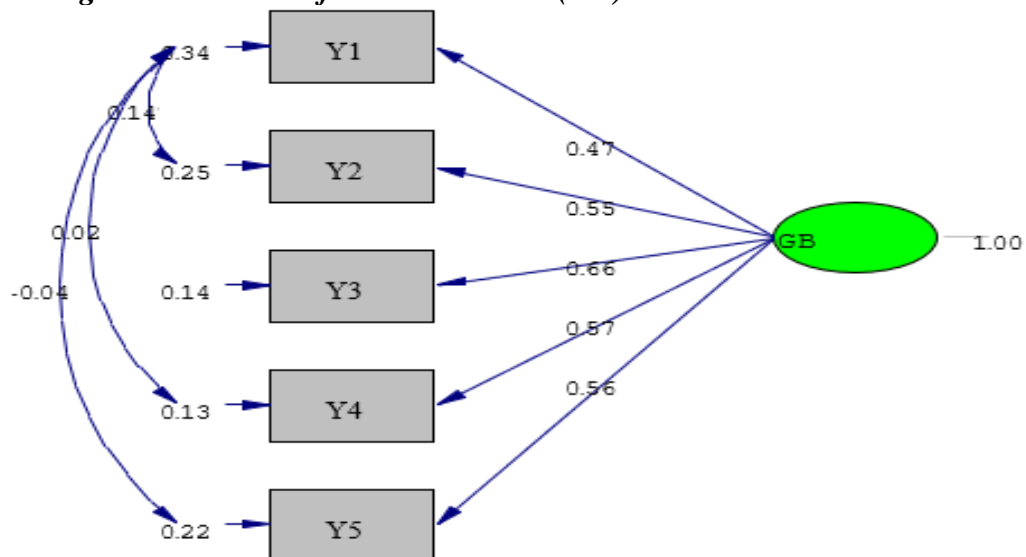
Chi-square = 5.23 df = 5 P = 0.34521  
GFI = 1.00 AGFI = 0.97 RMSEA = 0.017 RMR = .0048

\*\* Statistically significant level of 0.01

From Picture 2 and Table 2, results of CFA of PM comprising of 6 observed factors showed that the model was matching to empirical data by considering from 1) Goodness of Fit Index (GFI) = 1.00 and Adjust Goodness of Fit Index (AGFI) = 0.97, 2) Root Mean Square Error of Approximation (RMSEA) = 0.015 (RMSEA < 0.05), and 3) Chi- Square value had no statistical significance at level of 0.01 and divided by degree of freedom was  $\leq 5$  ( $\chi^2/df \leq 5.00$ ).

The load weight of 6 observed factors in model, it showed that observed factors had load weight between 0.58 to 0.67 and had covariate to model of PM with 66.00 to 81.00 percent.

**2.2 CFA of Endogenous Variable of Green Behavior (GB)**



Chi-Square=4.12, df=3, P-value=0.17201, RMSEA=0.045

**Picture 3: GB Model**

GB had Bartlett’s test of Sphericity of 1225.414 level of statistical significance ( $p < 0.01$ ) and Kaiser–Mayer–Olkin Measure of Sampling Adequacy/MSA) of 0.892. This showed that the

component of GB aspect had proper relation at good level and it can be used for CFA as shown in Picture 3 and Table 3.

**Table 3 Results of CFA of GB**

Components of GB	Weight	SE	t	R <sup>2</sup>
Y1 Behavior of Green Consumption	0.47	0.038	12.56**	0.39
Y2 Behavior of Green Energy Conservation	0.55	0.034	16.94**	0.54
Y3 Behavior of Green Traveling	0.66	0.031	2033**	0.78
Y4 Transferring Behavior of Green Knowledge	0.57	0.030	19.15**	0.65
Y5 Behavior of Green Health	0.56	0.031	17.98**	0.62
Chi-square = 4.12 df = 3 P = 0.17201				
GFI = 1.00 AGFI = 0.98 RMSEA = 0.045 RMR = 0.0057				

\*\* Statistically significant level of 0.01

From Picture 3 and Table 3, results of CFA of GB covering of 5 observed factors showed that the model was compatible to empirical data by considering from 1) Goodness of Fit Index (GFI) = 1.00 and Adjust Goodness of Fit Index (AGFI) = 0.98, 2) Root Mean Square Error of Approximation (RMSEA) = 0.045 (RMSEA < 0.05) and 3) Chi-Square value had no at statistical significant level of 0.01 and divided by degree of freedom was  $\leq 5$  ( $\chi^2/df \leq 5.00$ ).

The load weight of 5 observed factors in model, it showed that observed factors had load weight between 0.47 to 0.66 and had covariate to model of GB with 39.00 to 78.00 percent.

**4. Results of Effect among Factors in Terms of Direct Effect and Indirect Effect**

1) CFA of EE had direct predicting effect to PM and GB with statistical significance level of 0.01 with effect of 0.78 and 0.25. Additionally, CFA of EE had indirect effect to GB at statistically significant level of 0.01 with effect of 0.60.

2) CFA of PM had direct effect to GB at statistically significant level of 0.01 with effect of 0.78.

3) The structural equation model of CFA of EE can clarify the variation of endogenous factor of PM to cause GB with 88.00 percent as the following equation (1).

$$GB = 0.78*PM + 0.25*EE \dots\dots\dots(1)$$

$$(R^2 = 0.88)$$

Equation (1) factor that had the most effect to GB was PM with effect of 0.78, and subsequence was EE with effect of 0.25. These can describe the variation of GB with 88.00 percent.

Additionally, EE can explain the variation of PM with 70.00 percent. Thus, the equation can be written as the following equation (2).

$$PM = 0.78*EE \dots\dots\dots (2)$$

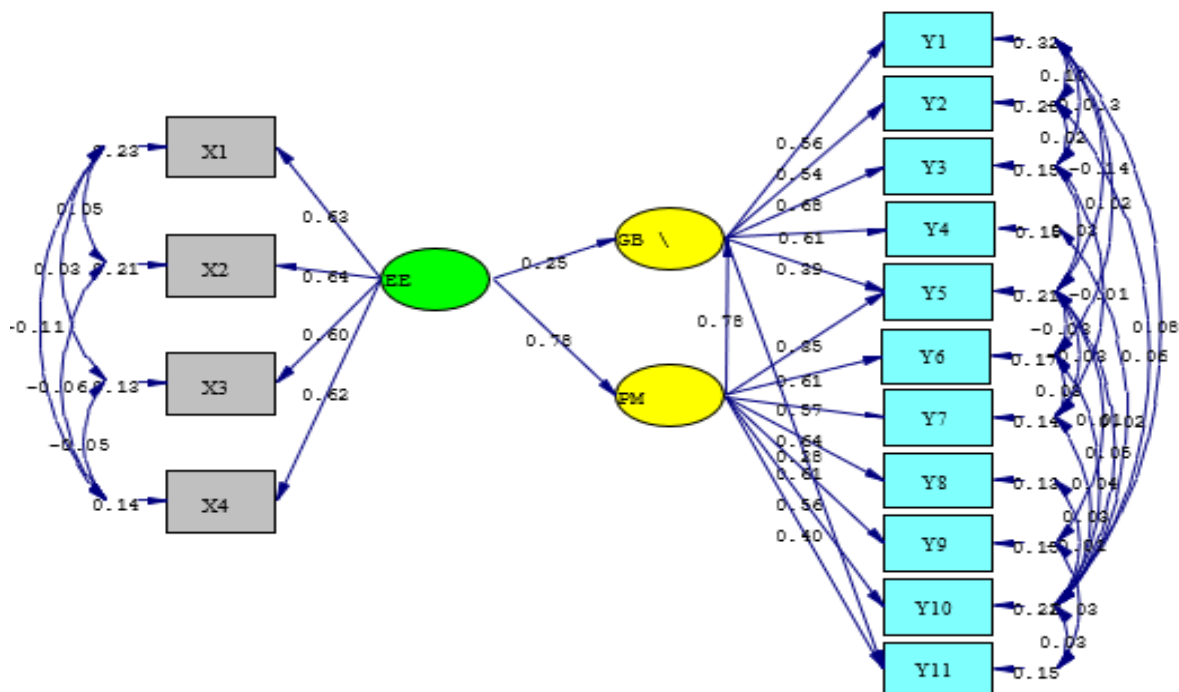
$$(R^2 = 0.70)$$

4) Chi-Square value/df is 1.791 and lesser than 5, thus, it approves that hypothetical model of research is consistent to empirical data. Furthermore, it should take into consideration on other statistic values to validate the consistence that are Goodness of Fit Index (GFI) and Adjust Goodness of Fit Index (AGFI) are 0.97 and 0.95 respectively. (GFI > 0.90 and AGFI > 0.90). RMSEA < 0.05 (0.044), RMR < 0.05 (0.015), and critical number = 300.33 is more than



200. It proves that the hypothesized model is compatible with empirical data.

The findings of analysis of structural equation model and analysis of path effect as showed in Picture 4.



Chi-Square=109.25, df=61, P-value=0.00014, RMSEA=0.044

**Picture 4. Model of EE Predicting GB through PM**

## 5. Discussions

The findings suggested that EE had direct effect to GB with statistically significant level of 0.01 with effect of 0.25. The observed factor of Awareness in Environment (X2) was the most association to GB with 0.68. It is noticeably that the sample groups who are undergraduate students have positive awareness in environment because the university has launched various plans and actions to build the conservation behavior to accomplish the quality of environment by introducing the diverse issues of air, soil, water and waste reduction. For instance, waste bank holding, recycling programs and air quality control. These are promoted about the environment projects. Especially, they have regularly used IT to search for various learning information to arrange their learning articles for several learning topics. Furthermore, Attitude in Environment (X3), Participation in Environment (X4), and Knowledge and Understanding in Environment (X1), had moderate relationship to EE with 0.64, 0.61 and 0.50 respectively. Nevertheless, EE was taught in Thailand longer than three decades. Thus, EE has been combined in distinct subjects. However, the governmental sector had established the 5 main goals cover 1) work sectors, organizations and dissimilar target groups to realize and recognize the importance of EE, 2) organized institute to support the development of environmental education sustainably, 3) collaboration and cooperation among diverse sectors to backing development of environmental education, and 4) develop and exchange knowledge, awareness, and participation in environmental education educational in institute both inside

and outside institutes, and introducing environmental education to support the policy, action, and strategy both locality and nation by accepting United Nations' vision for holistically managerial association to inspire the way of people livings and lifestyles of all aspects by delivering media communication for formal and informal and lifelong education channel to protect the earth worldwide (United Nations, 1993; The Social Research Institute, 2008).

Consequently, these five main goals are positively used in the across all academic institutes with integration in various subjects. The environmental education principle can improve and expand young generations' knowledge and participation in environmental contents and problems. Additionally, it will raise environmental awareness by adjusting the positive attitude and skill to have appropriately practice with concern with correctly perform till it transforms to permanent environmentally friendly behavior. Thus, the truly sustainable development will be accomplished because they constantly participate to the environmental projects and activities in ecological and environmental protection by reducing the environment problems. Simultaneously, environmental degradation is happened due to human activities and the natural resource damages is occurred for several decades. Thus, it is urgently to maintain it for next generations with the goal of increment of human life quality (WCED, 1987; Palmer & Birch, 2003; Summers, 2003; UNESCO, 2003; Lundegard & Wickman, 2007; Watkinson, 2009). Thus, green, the symbol of life of good health, and strength are the color that remind undergraduate student to understand and recognize the green behavior for environment conservation for current generation and future generation too.

At the same time, PM was discovered as very vital endogenous latent variable to affect the result variable of GB with the highest estimation power with 0.78, for the meantime the observed variables of Person as Role Model (Y6), Event Impression (Y7), Environment Impression (Y8), Social Expectation (Y9), Social Norm (Y10), and Different Media Receptions (Y11) are rather similar prediction power to exogenous latent variable Public Mind (PM) with 0.81, 0.76, 0.75, 0.69, 0.68, and 0.66.

Additionally, observed variables of Green Consumption Behavior (Y1), Green Energy Conservation Behavior (Y2), Green Traveling Behavior (Y3), Green Knowledge Transferring Behavior (Y4), and Green Health Behavior (Y5) are able to predict Green Behavior (GB) with 0.39, 0.54, 0.78, 0.65 and 0.62. It showed that the Green Traveling Behavior (Y3), was the highest prediction power with 0.78. Subsequences were Green Knowledge Transferring Behavior (Y4) with 0.65, Green Energy Behavior (Y2) with 0.62, and Green Consumption Behavior (Y1) with 0.39. It might explain that most of undergraduate students will practice the better traveling behavior but they are still have poor practice for the green consumption behavior on food consumption since it might due to the surplus food of country and they are easy to reach the food in every place of university including everywhere around the university.

The results are go along with Thiengkamol studies (Thiengkamol, 2011e; Thiengkamol, 2011f, Thiengkamol, 2011i; and Thiengkamol, 2012g) and different studies of her colleagues (Jongwutiwes et al, 2012b; Pimdee, et al, 2012b; Chomputawat et al., 2013b; Suebsing et al., 2013a; Mongkonsin et al., 2013b). Thus, the results demonstrated that environmental education predicting through public mind for environmental protection. It implied that the people who had public mind will express and perform the better environmental and ecological behaviors with covering consumption behavior, energy conservation behavior, waste management behavior, traveling behavior and knowledge transferring and supporting for environmental conservation and protection when they had actual exercise over green behavior with public mind.

Consequently, the research findings can be used in the teaching and learning process for all level education including school, college, and university students who are our future hope to lead the sustainable development (Artwanichakul et al., 2012a; Donkonchum et al, 2012a; Morrasri et al, 2012b; Phinnarach et al, 2012a; Sangsan-anan et al, 2012b; Waewthaisong et al, 2012a; Chomputawat, et al., 2013b; Thiengkamol, 2011e; Thiengkamol, 2011f; Prasertsri, et al., 2013b).

Nevertheless, the EE and PM latent variables can be used to play noteworthy roles to transform their behavior to be green behavior of green energy utility behavior, green traveling behavior, green knowledge transferring behavior, and green health behavior through PM. Hence, the model of EE predicting via PM to GB, it was established the the developed model was fitted with all observed factors by meeting the succeeding criteria of Chi-Square value differs from zero with no statistical significant at 0.01 level or Chi-Square/df value with  $\leq 5$ , RMSEA (Root Mean Square Error Approximation) value with  $< 0.05$ , index level of model congruent value, GFI (Goodness of Fit Index) and AGFI (Adjust Goodness of Fit Index) between 0.90-1.00.

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