

The Environmental Public Mind Behavior of Undergraduate Students

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Abstract

This research aimed to study the environmental public mind behavior of undergraduate students and compare the environmental public mind behavior of undergraduate students of different gender and year level. The sample used in the research were 230 students of 1-4 years in the Environmental Education program, Faculty of Environment and Resource Studies, Maharakham University, being selected by voluntarily sampling. The research tools were questionnaires on environmental public mind behavior. The statistics used for data analysis were frequency, percentage, mean, standard deviation, and hypothesis testing using correlation and One-Way ANOVA. The result was found that; environmental public mind behavior was to: environmental public mind model ($\bar{x} = 3.93$), cultivating environmental responsibility ($\bar{x} = 3.83$), environmental conservation ($\bar{x} = 3.81$), environmental sacrifice ($\bar{x} = 3.80$), environmental sustainable development ($\bar{x} = 3.74$) and environmental participation respectively ($\bar{x} = 3.65$). The relationship level of environmental public mind behavior of students in all 6 aspects was positively correlated statistically significant at the .05 level. There was no difference in environmental public mind behavior of students of different gender and year level.

Keywords: Environmental public mind, Undergraduate students

1. Introduction

1.1 Introduce the Problem

Environmental issues are public issues that are currently receiving a great deal of attention. Due to public awareness that the environment is constantly being destroyed in many areas, and countries around the world. And such actions begin to influence the way of life and well-being of human beings concretely and combined with the current situation, environmental problems take parallel to economic growth and the continuous expansion of the world's population (Sinthago, 2017). Social and environmental change situations are considered a rapid change and as the day goes on, the impact becomes more widespread and severe. Environmental issues around the world are getting more and more attention now and then. But there has been no sign that past efforts to address environmental issues are likely to be successful. This is because the solutions to the problems in the past focused on solving the problem at the root cause rather than solving the problem at the root cause. Which is a human being which is vulnerable to beneficial stimuli convenience for yourself and likes to imitate the surrounding society. So over time the imitation for comfort has formed a chain looking back decades, attempts to address the root cause are both tricky and complex because most people lack social and environmental responsibility, especially the public mind. Which is a good conscience for things that are public, selfless ideas, desire to help, solving problems for others or society, trying to take advantage of the opportunity to actively help, and a realistic, optimistic view of the world (Charoenwongsak, 2000).

The development of public mind behavior is one way to develop the mind to keep up with the technology of the public mind. It is an expression of responsibility to the public (Warunpitikul, 1999). And ready to sacrifice and dedicate oneself for the common good (Manichot, 1987). The public mind is a responsibility that arises from within that is a feeling subconscious mind as well as morals and ethics which is in the mind and result in external actions. Therefore public consciousness is important in society. It is important for human beings to focus on and be aware of this which affects individuals, families, and organizations and also affects communities, nationally and globally (Wattanasiritham & Sanjhon, 2000). When everyone comes together as a society there must be a relationship in the form of dependent people in society who are different roles and duties (Phanthumnawin, 1995). The public mind is an individual's awareness of the problems that arise in society causes a feeling of desire to help society by recognizing their rights along with their duties and responsibilities that can jointly solve problems (Ajpru, 2001). Human behavior is another important factor that affects the behavior of the environment public mind.

Currently, the national educational standards build characteristics of Thai people that are desirable both as citizens and people of the world. Thai people must be smart, good, and happy people. The indicator is complete physical strength. Knowledge of necessary skills that are sufficient to sustain life and social development, learning skills and adaptation, social skills, morals, public mind, and awareness of being Thai citizens and the world aim to cultivate correct awareness in various fields to learners including knowing how to maintain the interests of the public and the nation (National Education Act, 1999). Article 7 states that

in the learning process, the correct consciousness must be cultivated about the politics and governance in a democratic system with the King as head of state, know how to maintain and promote rights, duties, liberties, respect for the law, equality and dignity human beings are proud of being Thai. As well as conserve natural resources and the environment can do career self-reliance be initiative creativity, curiosity, and continuous self-learning.

Therefore, the researcher is interested in studying the environmental public mind behavior of undergraduate students and comparing the environmental public mind behavior of undergraduate students of different gender and year level. To know the level of environmental public mind behavior of undergraduate students in environmental studies, Faculty of Environment and Resources Studies, Mahasarakham University and it is expected that the research results can be used in further development in promoting environmental public mind behavior for students.

1.2 Research Objectives

- (1) To study environmental public mind behavior of undergraduate students.
- (2) To compare environmental public mind behavior of undergraduate students with different gender and year level.

2. Method

2.1 Population and Sample

The population used in this research was 329 undergraduate students in 1-4 years in Environmental Education program, Faculty of Environment and Resource Studies, Mahasarakham University, at the beginning of the academic year 2021.

The sample used in the study were 230 undergraduate students in 1-4 years in the Environmental Education program, Faculty of Environment and Resource Studies, Mahasarakham University be obtained voluntarily as shown in Table 1.

Table 1. Number of sample students

Undergraduate students	Total (person)
1 st year	49
2 nd year	72
3 rd year	54
4 th Year	55
Total	230

2.2 Variables Studied

The independent variables were environmental public mind consisting of 6 items: environmental participation, environmental sacrifice, environmentally sustainable development, cultivating environmental responsibility, environmental conservation, environmental public mind model, and individual factors including gender and year level.

The dependent variables were the behaviors of the environmental public mind of undergraduate students.

2.3 Tools Used in Research

The research tools were a questionnaire on environmental public mind behavior.

2.4 The Research Tools and Quality of Tools

(1) The questionnaire on environmental public mind behavior is created and assessed the quality of the tools as follows:

(a) Study the basic information about the construction of a questionnaire on environmental public mind behavior by studying the concepts, theories, documents, and related research as a guideline for creating an environmental public mind behavior scale.

(b) Determining the scope and content structure of the questionnaire on environmental public mind behavior of undergraduate students. The researcher completed a questionnaire to study the presence of the environmental public mind in 6 aspects, 5 items each, totaling 30 items. It was a 5 levels multiple choice with scoring criteria (Kitpreedasudrit, 1991) as follows: in level 1 the average score was 1.00-1.50, for those with the least level of the environmental public mind, in level 2 the average score was 1.51-2.50, those with a low level of the environmental public mind, level 3 the average score was 2.51-3.50 those with a moderate level of the environmental public mind, level 4 the average score was 3.51-4.50 those with a high level of the environmental public mind, level 5 the average score was 4.51-5.00 those with the highest level of the environmental public mind.

(2) Using the tools created and take to 5 experts to consider the consistency of the research tools with the research objectives of environmental public mind behaviors of undergraduate students. It was found that the questionnaire on environmental public mind behaviors was an IOC value of 0.94, showing that all questions are relevant to the subject matter and the purpose can be used for data collection.

(3) Bring the tools used in the research to try out with 30 bachelor's degree students in the Environmental Education program, Faculty of Environment and Resource Studies, Mahasarakham University that is not the sample for the power to classify each item and the confidence in the whole issue. It was found that the questionnaire on environmental public mind behaviors was a discriminative power of 0.20 or more, which found that all items of the environmental public mind behavior were a usability level of discrimination power between 0.263-0.789. And it funded the whole version of confidence by using Cronbach's alpha

coefficient method and found that the confidence value was 0.917, indicating that it is, therefore, acceptable that an acceptable value of 0.70 or higher can be used for data collection.

2.4 Data Collection

The data were collected environmental public mind behavior of undergraduate students as follows:

- (1) Explain the details in responding to the questionnaire on environmental public mind behavior before collecting data to obtain complete information through online systems.
- (2) Prepare the questionnaires on the environmental public mind behavior of undergraduate students. It is divided into 6 areas as follows: environmental participation, environmental sacrifice, environmentally sustainable development, cultivating environmental responsibility, environmental conservation, and the environmental public mind model.
- (3) The questionnaire on environmental public mind was taken to collect data through an online system using the data collection period of 1 month with a sample of 230 students who are undergraduate students in the Environmental Education program, Faculty of Environment and Resource Studies, Mahasarakham University by voluntarily in responding to the questionnaire environmental public mind behavior of undergraduate students via online system (Google form).
- (4) The analysis of the questionnaire on environmental public mind behavior of undergraduate students was conducted by statistical methods to test the hypothesis.

2.5 Statistics Used in Research

The statistics used for data analysis in this research, the details are as follows:

- (1) Basic Statistics were Frequency, Percentage, Mean and Standard Deviation
- (2) Determining the appropriateness of the questionnaire on the environmental public mind, Conformity Index Value, the power to discriminate each item of the questionnaire and confidence.
- (3) Statistics used to test the hypothesis at the statistical significance level of .05 were correlation and One-Way ANOVA.

2.6 Conceptual Framework for Research

Environmental public mind behavior of undergraduate students, there is a study process consisting of 6 aspects as follows: environmental participation, environmental sacrifice, environmentally sustainable development, cultivating environmental responsibility, environmental conservation, environmental public mind model of students with different gender and year levels which resulted in the students' behavior in the environmental public mind of the undergraduate students as shown in Figure 1

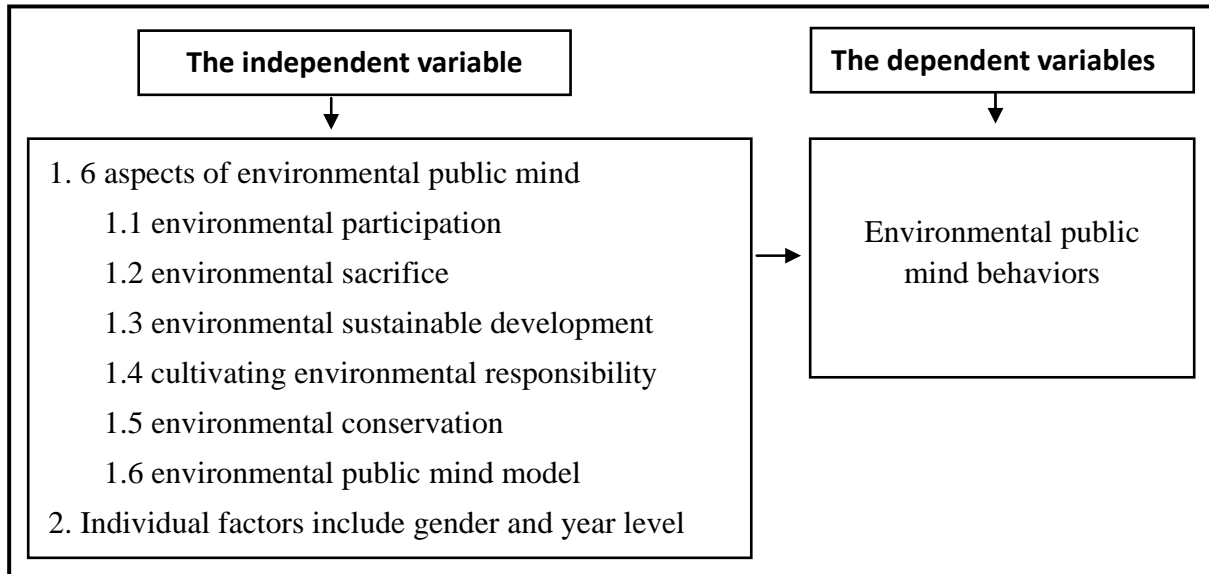


Figure 1. Research conceptual framework

3. Results

The result of environmental public mind behavior of undergraduate students can be summarized as follows:

(1) The results of the analysis of the level of environmental public mind behavior was found that (as in Tables 2-3),

(a) Environmental public mind behavior of undergraduate students classified by aspects, was found that the environmental public mind model was the most average at a high level ($\bar{x} = 3.93$), cultivating environmental responsibility was at a high level ($\bar{x} = 3.83$), environmental conservation was at a high level ($\bar{x} = 3.81$), environmental sacrifice was at a high level ($\bar{x} = 3.80$), environmentally sustainable development was at a high level ($\bar{x} = 3.74$) and the aspect with the least mean was environmental participation at a high level ($\bar{x} = 3.65$), respectively, as shown in Table 2 and Figure 2.

Table 2. The result of the level analysis of environmental public mind behavior of undergraduate students (n = 230)

Environmental public mind	\bar{x}	S.D.	Level of environmental public mind behavior
1. Environmental participation	3.65	0.69	high
2. Environmental sacrifice	3.80	0.58	high
3. Environmental sustainable development	3.74	0.78	high
4. Cultivating environmental responsibility	3.83	0.65	high
5. Environmental conservation	3.81	0.69	high
6. Environmental public mind model	3.93	0.85	high
Total	3.79	0.70	high

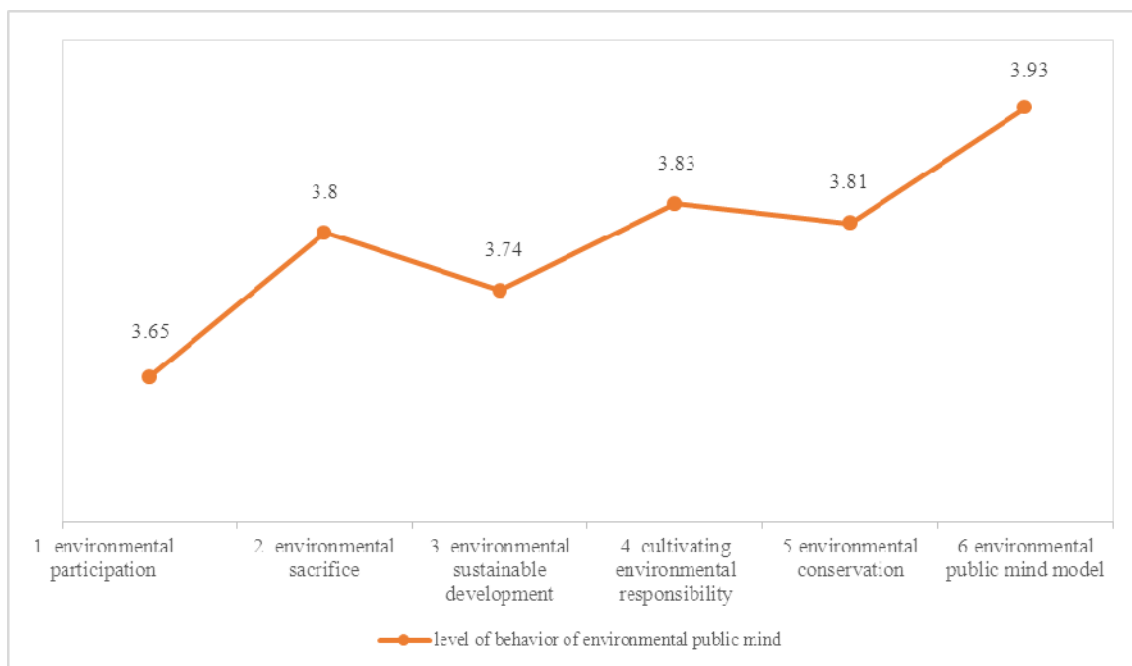


Figure 2. Environmental public mind behavior

(b) The result of the relationship analysis at the level of environmental public mind behavior of undergraduate students was found that environmental participation, environmental sacrifice, environmentally sustainable development, cultivating environmental responsibility, environmental conservation, and environmental public mind model correlated in a positive direction with statistical significance at the .05 level as shown in Table 3.

Table 3. The result of the relationship analysis at the level of environmental public mind behavior of undergraduate students

Items	b	SE _b	β	t	Sig
1. Environmental participation	0.167	.000	.194	84880146.576	.000
2. Environmental sacrifice	0.167	.000	.161	69587216.311	.000
3. Environmental sustainable development	0.167	.000	.218	118359841.028	.000
4. Cultivating environmental responsibility	0.167	.000	.181	73059265.589	.000
5. Environmental conservation	0.167	.000	.193	102125705.724	.000
6. Environmental public mind model	0.167	.000	.237	140199917.778	.000

Note. * Statistically significance .05.

(2) The result of the comparison of environmental public mind behavior of undergraduate students with different gender and year level was found that there was no difference in the level of environmental public mind behavior as shown in Table 4.

Table 4. Comparison of the levels of environmental public mind behavior of undergraduate students with different gender and year level using One-way ANOVA

The primary variable	The dependent variables	SS	df	MS	F	p
Gender	Environmental public mind behavior of undergraduate students	14.034	1	0.216	1.059	0.380
Year level		80.447	3	1.238	1.097	0.316

4. Discussion

(1) The result of the study environmental public mind behavior of undergraduate students sorted in descending order as follows:

(a) Environmental public mind model behavior was at a high level and the relationship with the level of the students' environmental public mind behavior was positively correlated. Because the students follow the role models in environmental conservation, they follow the organization in environmental conservation activities. As a result, students are encouraged to love and cherish natural resources and the environment and are interested in participating in environmental activities for sustainable environmental development which is based on the concept of Wirachchai and Tangchitchareonkul (2008). It is said that the model behavior is the behavior that one person acts and results in the other person taking it as a guideline for action and the use of intellect to keep in mind, then combine new knowledge with previous experiences and formulate

expectations and act according to their own expectations. And Kerdpitak (1987) said that an example is something that is an example that is considered a norm or an example to be seen as a guideline for comparison and an example of imitation. This is consistent with the study result of Ketsil and Rodsoodthi (2018) found that family factors, school factors, and community factors affect attitudes and behaviors about environmental conservation. And Cordano, Welcomer, Scherer, Pradenas, and Parada (2011) found that conforming attitudes and beliefs that one can show behaviors that are socially important thus affecting the students' environmental conservation behavior. And Nakasenee, Panchapalinkul, Mo-on, and Faculty of Liberal Arts (2015) found that internal factors of ethical reasoning and motivation and external factors of family support University support community support and support from friends were positive correlation with the students' public mind behavior. It was shown that the environmental public mind model resulted in the students' behaviors of the environmental public mind.

(b) Cultivating environmental responsibility was at a high level and the relationship with the level of environmental public mind behavior was positively correlated. Because students' families supported students to do activities related to the environment to see the importance of natural resources and the environment. And students are always appreciated by the people around them when they participate in environmental conservation activities in the community which is based on the concept of Seeha (2008) has been said that public psychic behavior is an expression of feelings and practices related to the performance of one's responsibilities, helping to maintain things that are publicly available through non-reward action. And Ajpru (2001) said that mention of the public mind is a person's awareness of the problems that arise in society causes a feeling of desire to help society along with duties and responsibilities. And Phothisita (1997) has been said that public domain consciousness was a behavioral definition that public domain responsibility was two implications: taking responsibility for the public domain and not obstructing the opportunity to use the public property of others. This is consistent with the study result of Chantakit, Rodjam, and Arsingsamanan (2020) who found that there were five elements of the public mind, namely responsibility morality, and ethics Participation in activities that are beneficial to society public mind and good citizenship. And Kanjanavisut (2021) found that the students' opinions are on the public mind's social responsibility for the public domain self-responsibility. And Nakasaneey (2013) found that the sample was overall public psychic behavior at a high level. It showed that cultivating environmental responsibility resulted in the student's behavior in the environmental public mind.

(c) Environmental conservation was at a high level and the relationship with the level of the students' environmental public mind behavior was positively correlated. Because students have chosen to use green products that come from nature to help conserve the environment. They support products made from paper to reduce the use of plastic to reduce environmental problems, students support and choose products that are free of chemicals to prevent environmental problems, and students choose products made from materials that can be easily degraded to reduce the problem of global warming. And

students encourage friends to use products that can be recycled to conserve the environment which is based on the concept of Wongchantra (2012) has said that the environment, which is everything that humans need to know and understand for access and consideration of the balance of the natural environment, to prevent environmental problems. And correct and appropriate environmental solutions are in the context of various environmental problems that arise and are the main problems of the world that need to cultivate by human consciousness every day forever. And Wattanasiritham and Sanjhon (2000) said that social consciousness is under the influence of both internal and external environmental factors related to the relational state of human beings the social state is a profound state that affects the human consciousness. This is consistent with the study results of Konphatphonsakul and Nonthanathorn (2016) who found that green consumers had a very high positive correlation with public mind and purchase intention, and green consumers have a very high direct influence on the public mind. And Phiothong-on, Thiengkamol, and Thiengkamol (2019) found that the aspirations to have a public mind and overall, environmentally friendly shopping behaviors were high overall and the inspiration for having a public mind affects the environmentally friendly shopping behavior. It can be seen that people will change their behavior by choosing to buy environmentally friendly products, must-have role models, or have advertisements in various media for the public to receive those media. It was shown that environmental conservation factors resulted in the students' behaviors in the environmental public mind.

(d) Environmental sacrifice was at a high level and the relationship with the level of the students' environmental public mind behavior was positively correlated. Because students have behaviors that are selfless to the environment expressed through practice such as after school students will turn off the lights every time after leaving the classroom to save the university energy. They have to always look after the public property of the school. And students often walk in the community forest to survey the forest population and prevent illegal deforestation which is based on the concept of Sangaroon (2008) has been said that having a public mind is something that happens in an individual's way of life environmental factors, both internal factors of the person themselves, which affect behavior and conduct, especially mental actions, and external factors are social conditions, which is depth and affect various aspects of human consciousness that cause consciousness that has many forms this condition starts from the family level, community level to the big society level. And Takonthong (2014) said that the public mind manifests itself in the form of voluntary behavior for the public by expressing himself by volunteering no one forced. This is consistent with the study results of Wongaree (2019) who found that public psychic behavior was at a high level and psychosocial factors which were predictors of the students' public mental behavior were self-efficacy and social support affecting students' public mental behavior. And Boonchan (2020) found that the minds of students were social support, self-awareness, and attitudes towards the public mind. It showed that environmental sacrifice resulted in the students' behaviors of the environmental public mind.

(e) Environmental sustainability development was at a high level and the relationship

with the level of the student's environmental public mind behavior was positively correlated. Because the students participated in the environmental development project with their friends in the field to brainstorm ideas for sustainable solutions to environmental problems and jointly propose environmental conservation policies at the faculty level and cooperate with the university in developing the environment and monitoring environmental problems with the communities around the university. In addition, students participated in expressing their opinions on sustainable environmental conservation with the community which is based on the concept of the Department of Academic Affairs, Ministry of Education (1996) describe that the development of the environment to be sustainable must be carried out in the field of environmental education to lead to the most efficient environmental management and to bring about a change in human behavior in the environment. And Para (2007) said that human ingenuity creates the transformation of nature and the environment around it to be what it wants, whether it is a factor of four or something else. And Kamsrichan (2001) said that the public mind is the thought process and character of a person which is practiced by having a process at the level of the person to the public with love and a feeling of public ownership wanting to benefit rather than receive from the public. This is consistent with the study results of Cordano, Welcomer, Scherer, Pradenas, and Parada (2011) who found that the attitudes of people around them and the belief that they can show behaviors that are important to society thus affecting the students' environmental conservation behavior. And Boonthawee and Homsombat (2021) found that the overall level of the students' public mental conduct was at a high level. And Kanjanavisut (2021) found that the students' opinions toward the public mind regarding environmental conservation were at a high level. It was shown that environmental sustainability factors resulted in students' behaviors toward the environment public mind.

(f) Environmental participation was at a high level and the relationship with the level of the students' environmental public mind behavior was positively correlated. Because students have a willingness to consider volunteering as the leaders in environmental development, help publicize how to conserve the environment within the university, and use their free time to attend a lecture on environmental conservation to apply in daily life. In addition, students also participate in environmental activities to bring knowledge to develop their community. which is based on the concept of Warunpitikul (1999) said that public consciousness is an expression of public responsibility. Nations (1981) said that participation is active participation in decision-making to set social goals and resource allocation to achieve them and follow plans or projects willingly. And Mettkarujit (2010) said that participation is an opportunity for individuals or groups to participate in an activity whether directly or indirectly in the form of sharing awareness, sharing ideas, sharing decisions, and sharing results. This is consistent with the study results of Pipatmongkolchay and Nonthanathorn (2017) who found that the correlation coefficient of public mind consciousness and participation in cultural resource conservation as a whole is a positive relationship. It was concluded that the public-minded factor had a statistically significant influence on the people's participation in cultural resource conservation .01. And Jankeaw (2015) found that the factors that could predict the public

mind of undergraduate students were the factors of self-learning and learning with others and socialization factors. And Lekvilai and Srithong (2020) found that in creating a public mind in the minds of Thai children and youth through upbringing to be a giver, sacrifice, and help to the society as a whole the important factors contributing to the promotion of public mind consciousness include the organization of activities that emphasize participation. Action is a learning resource that is conducive to the development of public psychic attributes. It has been practiced continuously until it becomes a habit. It was shown that the participation factor related to the environment resulted in the students' behavior in the environment public mind.

(2) The result of the study of environmental public mind behavior of undergraduate students of a different gender was found that there was no difference in the level of environmental public mind the behavior. This is a result of students of different genders, having the behavior of participation, sacrifice, and instilling responsibility, environment conservation, environmental development, and the environmental public mind being at the same level. Therefore, there was no different level of environmental public mind behavior among students which is based on the concept of the Ministry of Education (2010) has identified indicators as desirable characteristics of the public mind including helping others with willingness and satisfaction without expecting anything in return and participating in activities that benefit the school, community, and society. And Warunpitikul (1999) said that a person with a public mind must-have attributes that are more concerned with the common good and for the sake of morality. And Onlamai (2008) has given the importance of the public mind that the public mind is the responsibility that arises from within where wills, subconscious as well as morality, moral that resides in the mind and affects outside action. This is consistent with the study results of Nakasenee, Panchapalinkul, Mo-on, and Faculty of Liberal Arts (2015) found that influencing factors behavior public mind of students of different gender has behavior public mind overall is no different. And Khamadi and Phasunon (2016) found that there was no difference in the public mind of students of a different gender. And Junkaew, Wongchantra, and Bunnaen (2021) found that there was no difference in the environment public mind of undergraduate students of a different gender. And Ongon, Wongchantra, and Bunnaen (2021) found that there was no different environmental public mind of undergraduate students of different genders. Therefore, there was no effect environmental public mind behavior of students of a different gender.

(3) The result of the study of environmental public mind behavior of undergraduate students with different year levels was found that there was no difference in the level of environmental public mind behavior. This is a result of students with different year levels but they are of similar age which is why they act to show responsibility for the public domain with care including participating in activities that are mutually beneficial in society who are of the same age will have similar behaviors and focus on the common good in activities related to the environment which is based on the concept of Singhapol (1999) had discussed that there are 3 main components of public consciousness, namely self-consciousness, consciousness about others and social consciousness or public consciousness. And Wattanasiritham and Sanjhon (2000) said that the public mind or social consciousness is under the influence of both

internal and external environmental factors which are related to the relational state of human beings. The social state is the profound state which affects the human consciousness. And Saikaew (2003) has said that a person's consciousness is a mental state before the physical behavioral manifestation of a person which is the result of attitude social norms, habits, and expected outcomes after the behavior. This is consistent with the study results of Patthum (2009) who found that there was no difference in public mind behavior of the students with different year levels. And Pratoomthai, Turathum, and Phumyoo (2018) found that there was no difference in the mean scores of the public mind of the medical students. And Kaewngam and Wonchantra (2009) found that there was no difference in possessing skills to be an environmental volunteer leader for students with different year levels. And Kanjanavisit (2021) found that there was no difference of opinions in the public mind of students with different year levels. Therefore, students with different year levels don't affect environmental public mind behavior.

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