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STUDENTS' PARTICIPATION IN WASTE MANAGEMENT AT INTERNATIONAL SCHOOL OF TOURISM

Abstract:

This study was carried out at International School of Tourism of Suratthani Rajabhat University, Surat Thani province, Thailand. The study examined the level of awareness, attitude and behavior of students with regard to the environment and their practice in waste management with the development of the waste management activities by the participatory action research (PAR). This study used a combination of both quantitative and qualitative methodologies to research. One hundred and twenty-nine students were selected by purposive sampling. The instrument used in this research was self-administered close-ended questionnaire with a five-level rating scale and Pretest-Posttest. The percentage, mean, standard deviation and t-test were used to analyze the data. The findings revealed that students had good awareness and highly attitude towards the environment. They had good behavior towards the environment. Before and after the PAR process was implemented, awareness and attitude were determined. It was found that there were high statistically significant ($p < 0.01$ and $p < 0.01$) changes in awareness and attitude. Finally, the students proposed activities in sorting out of waste materials for implementation.

Keywords:

participation, waste, waste management, students

JEL Classification: Q56

Introduction

Developing countries are facing the unhealthy disposal of solid waste, which is one of the greatest problems (Ifegbesan, 2010; Adeolu et al., 2014). People tend to do not participate in protecting the natural resources and environment issues because they may lack the positive understanding, knowledge, awareness, attitude, behavior on that (Thathong, 2009; Thiengkamol, 2011e; Praneetham and Thathong, 2016). Therefore, it is needed to raise people's environmental awareness and foster their attitude to ensure the environmental improvement, protection, and conservation (Ifegbesan, 2010; Xu et al., 2012; Praneetham and Leekancha, 2015; Praneetham and Thathong, 2016).

Many educational institutions in Thailand are facing waste issues and lacking of the effective waste management system. Improper waste management, low participation and insufficient awareness of students cause the waste generation (Nateewattana, 2014). Students play an important role to promote and support environment conservation. The participation and involvement of students are very important driver in resolving the environmental crisis, sustainable environmental conservation and waste management (Praneetham et al., 2012 Praneetham and Thathong, 2012). Therefore, the researchers are interested in studying the awareness, attitude and behavior of students with regard to the environment and their practice in waste management.

The purpose of the research

The purpose of this research was to examine the level of awareness, attitude and behavior of students with regard to the environment and their practice in waste management.

Population and Sample

The population used was students from the International School of Tourism of Suratthani Rajabhat University, Surat Thani province, Thailand. The sample of this study was 129 students surveyed by purposive sampling target group in Semester II, Academic Year 2014.

Methodology

The participatory action research (PAR) was applied for the development of the waste management activities. The instrument used in this research was close-ended questionnaire with a five-level rating scale on the awareness, attitude and behaviors towards the environment. The Pretest-Posttest was used for determining and evaluating

the students' awareness and attitude towards the environment. The frequency, percentage, mean, standard deviation, and t-test were used to analyze the data.

Research Results

The research findings from the study of students' participation in waste management at the International School of Tourism are shown in Tables 1-3 below.

Table 1: Results of the awareness, attitude and behavior towards the environment of students.

Variable	\bar{x}	SD	Meaning
Awareness	4.44	0.50	good
Attitude	4.51	0.53	very good
Behavior	4.05	0.54	good
Total	4.33	0.52	good

From Table 1, the result showed that the overall awareness of the students towards the environment was at good level (Mean = 4.44, SD = 0.50), the overall attitude of the students towards the environment was at very good level (Mean = 4.51, SD = 0.53) and their overall behavior towards the environment was at good level (Mean = 4.05, SD = 0.54).

Table 2: Results of the students' behavior towards the environment.

Behavior towards the Environment	\bar{x}	SD	Meaning
Waste Management	4.06	0.67	good
Consumption Behavior	4.22	0.51	good
Energy	3.89	0.69	good
Total	4.05	0.54	good

From Table 2, the results showed that the behavior towards environment of students in three issues, which were waste management, consumption behavior, and energy were all at "good" levels.

Table 3: Awareness and attitude achievement of pre-test and post-test of students.

Experimental Group	Number	Mean	SD	t-value	p-value
Pre-test Awareness	129	4.44	.50	-2.455	.015**
Post-test Awareness	129	4.59	.44		
Pre-test Attitude	129	4.51	.53	-2.455	.002**
Post-test Attitude	129	4.68	.38		

* * Significant Level at .01

From Table 3, before and after the PAR process was implemented, awareness and attitude were determined. The results showed that students had the difference of environmental awareness and attitude with statistically significant at 0.01, post-test mean scores were statistically significantly higher than the pre-test mean scores. Finally, the students proposed activities in sorting out of waste materials for implementation.

Discussion and Conclusion

The result indicated that the students' awareness, attitude, and behavior towards environment were at "good" level. Students had good behavior in consumption behavior, energy and waste management. This is consistent with the research of Praneetham and Thathong (2012) that students' attitude towards the environment was at "good" level. However, Ifegbesan (2010)'s research stated that secondary school students from the sampled zones in Ogun State, Nigeria were aware of waste problems on their school compounds, but possessed poor waste management practices. While Adeolu et al. (2014) found that secondary schools students in Ibadan, Oyo State, Nigeria had knowledge, attitude and practice of waste management at moderate levels.

The findings from this study revealed that post-test mean scores of students were statistically significant higher than the pre-test mean scores in all aspects of awareness and attitude towards the environment ($p < .01$) as illustrated in table 3, which is accorded to the Sailabat et al. (2012)'s research who found that the sub-district administration organization members had knowledge and awareness on environment and resource management after training higher than before training, and which is accorded to the Sukwat and Thiengkamol (2012)'s research who found that the students had knowledge and attitude on soil and water conservation after training higher than before training with statistically significant difference at the level of 0.01. The pilot projects selected for implementation were sorting out of waste materials. Müderrisoglu and Altanlar (2011) found that students highly support the environmental attitudes and highly participate in consumption behaviors.

Many studies stated that if people have positive awareness and attitude, their behavior towards the environmental management will be also good. Environmental education processes could be an important driver in changing of human's awareness, attitude, and behavior towards the environment. Hence, all subjects and courses in schools and universities should increasingly apply the environmental education approach in order to modify everyone behaviors, conserve the environment by solving environmental problems, participate and involve more in environmental activities and environmental conservation for establishing the sustainability of the environmental conservation (Stapp and Dorothy, 1981; Ifegbesan, 2010; Thiengkamol, 2011e; Praneetham and Thathong, 2012; Xu et al., 2012; Praneetham and Thathong, 2016). Moreover, educational

institutions in collaboration with communities should promote and engage in environmental protection and environmental conservation activities. Especially, effective participation in waste management, waste reduction, reuse and recycling can reduce the generation of waste and waste issues for long term.

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