

CHAPTER FIVE

CONCLUSIONS, DISCUSSIONS, AND RECOMMENDATIONS

The chapter presents (1) a summary of the study (2) a summary of the findings (3) discussions of the results (4) conclusions, and (5) recommendations for further research.

5.1 SUMMARY OF THE STUDY

5.1.1 Objectives of the Study

The study aimed to find the relationship between environmental awareness and environmentally friendly behavior by conducting the study on solid wastes management of the Department of Environmental Quality Promotion (DEQP)

5.1.2 Subjects, Materials, and Procedures

The populations of the study were 335 officials of the DEQP; however, only 246 were selected as the subjects of the study because they returned the questionnaires. The subjects comprised the governmental officials, permanent employees, and temporary employees coming from 5 main sections: Office of Secretary, Public Education and Extension, Environmental Information Center, Bureau of Public Participation Promotion, and Environmental Research and Technology Center.

The material used to obtain data for this study was a questionnaire which was consisted of 3 main parts. The first concerned the demographic data of the subjects. The second part focused on knowledge and understanding of solid wastes management. The third stressed on the frequency of environmentally friendly behavior.

The questionnaires were distributed to all subjects in every division of the DEQP during mid December 2008 and mid January 2009.

5.2 SUMMARY OF THE FINDINGS

5.2.1 Knowledge of the Subjects on Solid Wastes Management

The subjects had the mean score 20.37 out of 25 which showed that the subjects had a good sound knowledge on solid wastes because in this part of the test

the subjects showed their capabilities in scoring the questions concerning general knowledge of solid wastes. For example, the subjects had to identify the definition of solid wastes, garbage, and non compostable wastes. Moreover, the concepts of practicing the 3R (recycle, reduce, and reuse) and the environmental practices were raised to test the understanding of the wastes management.

5.2.2 Skills of the Subjects on Solid Wastes Management

The subjects earned their mean score 19.45 out of 30. Even though the scores of knowledge were high, the scores of skills were not too much. It can be assumed that the subjects' skills on classifying solid wastes were at the moderate level.

However, it is interesting that the Department of Environmental Quality Promotion is the main organization running campaigns strengthening public awareness, but half of the DEQP's officials had skills on classifying solid wastes at the medium level of skills.

5.2.3 Awareness on Solid Wastes Management of the Subjects

The awareness score of the subjects is 39.81 out of 55. The figure shows that the subjects were aware of the solid wastes issue because they made good scores of awareness which was resulted from the totality of knowledge and skills tests.

5.2.4 Frequency of Environmentally Friendly behavior on Solid Wastes Management

According to the questionnaires, the subjects showed that they practiced their environmentally friendly behaviors both at workplace and at home. The significant mode of frequency of the subjects' behavior fell on 3, that is, the behaviors that the subjects practiced every time they were able to afford to. For example, the subjects did not use plastic bags, they sorted out the wastes before disposing of them, and took baskets or cloth bags when they went shopping at markets. Another mode of frequency was 4 that comprised two characteristics of behaviors, and the other was 5 that was composed of four characteristics of behaviors.

5.2.5 The Relationship between Environmental Awareness and Environmentally Friendly Behavior on Solid Wastes Management

The results of the findings showed the relationship between two elements which were environmental awareness and environmentally friendly behavior. The

high knowledge score was related to the frequency of the behavior. In short, the more awareness the subjects had, the more often they practiced the behaviors.

5.3 DISCUSSIONS

5.3.1 Knowledge and Skills on Solid Wastes Management of the Subjects

Most of the subjects earned quite high scores on the knowledge and understanding test, but they got low scores on the skills test. It meant that the subjects understood the concepts and definitions quite well. They knew what kind of waste various materials were and were able to answer the question almost correctly. The subjects recognized the benefits of those practices or rules that were usually followed in general; on the other hands, the subjects were unable to apply their skills quite well when classifying wastes.

As the main environmental organization, the Department of Environmental Quality Promotion has been trying to promote and educate the authorities to have more knowledge on environmental issues. The organization has usually organized meetings and workshops to provide the officials the opportunity to build up their capacities on the environmental issues, so this was reflected in the high scores of the knowledge test. However, the subjects had troubles when classifying solid wastes. This phenomenon was because the subjects lacked the true understanding on solid wastes, they knew the concept or theory, but did not apply it accurately in real situations. For example, some subjects were unable to identify what kind of wastes that a pair of shoes was to. Because it was made of several materials, it caused confusion among the subjects. For instance, its laces were made from synthetic cloth, the bodies were made of leather, and the soles were made of rubber. The problem was what kind of wastes a pair of shoes was.

5.3.2 Environmentally Friendly Behavior on Solid Wastes Management of the Subjects

The characteristic of behaviors that most subjects practiced was the behaviors that the subjects were able to afford both at workplace and at home. Obviously, place and time were important factors affecting the frequency of their behaviors. For example, they were unable to dispose of hazardous and compostable wastes where no

trash cans were provided. Also, they used solar power calculators because at the office the material was available. The subjects repaired ruined objects or made the recovery of them when they were home. So, they were able to do that because at home the instruments for fixing were available. The subjects followed these practices whenever they wanted and felt it convenient to do so, and also they did not want to bring themselves into difficulties if those behaviors were hard to follow. However, the subjects were pleased to follow the environmentally friendly behavior because they recognize the benefits and advantages that might occur.

Thanks to the relevant research on the Construction of Environmental Education Training Curriculum of Household Solid Wastes Management, the researcher constructed the environmental education model to increase the degree of knowledge and awareness of target groups. The study stressed on education because the researcher was strongly confident that education was a crucial element creating impacts on behavior of the target groups of the study.

The test results showed that degree of knowledge affected the behavior of a person. If a person was well-educated, he or she would practice their environmentally friendly behaviors habitually. According to the research of Ms. Umadee Tanaponpadunkul, her findings emphasized that knowledge was a factor affecting the acceptance of condominium residents in Bangkok. Also, degree of knowledge of the residents reflected their practices on separating solid wastes. It revealed that well-educated persons will have more frequent performance in separating solid wastes than the poorly educated persons.

In summary, results of both research project showed that knowledge was a significant factor affecting behavior adjustment of persons. Likewise, the findings of Relationship between Environmental Awareness and Environmentally Friendly Behavior showed the results resembled the results of relevant research in that knowledge of the subjects reflected their awareness and behavior to perform environmentally friendly behavior in life. To strengthen concern, care and protection of the environment, adequate environmental education will develop knowledge and awareness of persons to generate their sustainable use of environmental and natural resources.

5.4 CONCLUSIONS

5.4.1 To raise environmental public awareness by building up only knowledge is not enough because only understanding can not help solve the environmental problems. Skills are another factor that is very important since critical thinking skill will elaborate the perception and comprehension on environmental issues. To sum up, Skills need to be developed and strengthened together with knowledge and understanding.

5.4.2 To achieve the goal of reducing the amount of solid wastes, the concerned parties in the organization should raise awareness by educating the officials to realize the severity of solid wastes and trying to encourage them to take actions to help reduce their consuming behaviors that strengthen the distribution of solid wastes.

5.4.3 The findings of the study showed that the awareness significantly affected the behavior. Therefore, to help reduce the distribution of solid wastes, the concerned parties should pay deeper attention to education. If people get more knowledge and comprehension to realize the seriousness of environmental problems, they may help reduce its severity or may adjust their behavior to help protect the environment.

5.4.4 To create more effective ways to reduce solid wastes, the DEQP has to provide the opportunity to the staffs by offering them the 4 types of trash cans: the recycle; the compostable; the non compostable; and the hazardous wastes. Also, the cans should be placed where everyone can access and practice wastes classifying skills in real life.

5.4.5 It's very important for the DEQP's officials to set themselves as the environmental model because the subjects who have been working at the environmental organization like DEQP should have deep knowledge and understanding, and awareness of environmental issues and be able to motivate knowledge and understanding into actions that make positive impact on the environment.

5.5 RECOMMENDATIONS FOR FURTHER RESEARCH

Based on the findings and conclusions of the study, the following recommendations are made for future research.

5.5.1 Studies on the factors affecting the behavior of the subjects who have a good sound environmental knowledge and awareness, but scarcely practice their environmentally friendly behavior.

5.5.2 Studies on the effective strategy that can increase the environmental awareness and is able to motivate it in to action

5.3.3 Studies on another environmental issues and study with another group of subjects