

CHAPTER FIVE

CONCLUSIONS, DISCUSSIONS, AND RECOMMENDATIONS

This chapter is divided into 5 parts: 1) a summary of the study, 2) a summary of the findings, 3) discussions of students' knowledge of electricity energy saving, 4) conclusions, and 5) recommendations for further research.

5.1 SUMMARY OF THE STUDY

The use of electricity in Thailand has a tendency to increase year by year because electricity is vital to the country's development. If Thai people use electricity efficiently, electrical demand could decrease. As the researcher is an employee of EGAT, the measurement of knowledge of electrical energy saving of Thammasat University students is very crucial for the management of EGAT since it will reveal how effective EGAT's performance is perceived to be by students. In addition, it can help EGAT to have a clearer view of what areas should be improved.

5.1.1 Objectives of the Study

The investigation of the knowledge of electrical energy saving of Thammasat University students was aimed to find out the knowledge level of the students concerning electrical energy saving. In addition, it was aimed to identify the demographic factors contributing to students' knowledge of electrical energy saving, and to explore their suggestions for further DSM program improvement.

5.1.2 Subjects, Materials, and Procedures

The subjects used in this study consisted of 186 males and 212 females who are students studying at Thammasat University in the year 2007. There are two types of data in this study. The secondary data were collected from textbooks, company literature, journals, and websites. The primary data were collected from the responses to the questionnaires. All primary data were analyzed by using the SPSS program.

5.2 SUMMARY OF THE FINDINGS

The results of the study can be summarized as follows:

5.2.1 General Information

From the study, it was found that the respondents' ages ranged from 15 to 54. Most were under 25 years old. Moreover, 53.3% of the respondents were women and 46.7% of them were men. The majority of students (75.4%) responding to the survey hold a Bachelor's degree.

5.2.2 Students' knowledge

It was found that the students have a moderate knowledge level of electricity energy saving in 6 aspects. The results show that differences in age, gender, and education levels are significantly related to differences in knowledge of electricity energy saving.

5.2.3 Comparison of Knowledge

After comparing the students' knowledge, it was revealed that the knowledge about the situation of electricity in Thailand was the first priority for improvement as it had the lowest score.

5.2.4 Hypothesis Testing

After testing hypotheses, it was revealed that there were some statistically significant differences in student's knowledge of electricity energy saving. Female students have more knowledge of electricity energy saving than male students. Students of different ages and education levels have different levels of knowledge of electricity energy saving.

5.3 DISCUSSIONS

This section was derived from the findings of the study on the relationship between personal background of respondents and their knowledge about electricity conservation. Also, the findings on respondents' knowledge on various aspects of electricity saving are discussed.

Gender

The results show that female students have more knowledge of electricity energy saving than male students which supports the hypothesis on different levels of knowledge between the two genders. The finding is quite similar to that of Podjanard Boonyapattarapong (1999: abstract) who found that the difference of gender is linked to the difference of employees' knowledge of office safety.

Age

The results show that there is a relationship between students' knowledge of electricity energy saving and their age which supports the hypothesis that students of different ages have different knowledge levels of electricity energy saving. The finding supports Pisit Arrayanurak (1997: abstract) who found that age has a relationship with knowledge of agricultural area analysis.

Education level

The results support the hypothesis that students of different education levels have different knowledge levels of electricity energy saving. The finding supports Onyanee Suntarat, 2003, pp.154 who found that employees who have different levels of education do not know to the same degree of knowledge about the method of GMP milk.

The situation of electricity in Thailand

The results show that the students' knowledge level of the electricity situation in Thailand was low. According to Onyanee Suntarat, 2003, pp.33 cited in Thean Vivitsiri, adults could learn from nature around them and from their daily life such as reading newspaper and watching television. It can probably be concluded that students have little interest in learning about the electricity situation from their environmental or social setting.

Demand Side Management Program (DSM)

The results show that the students have moderate knowledge of the Demand Side Management program (DSM) which is probably due to the fact that EGAT has provided information on electricity energy saving via many media such as television, radio, and newspapers. Therefore, EGAT management should support the DSM program in order to enhance people's awareness of electricity energy saving in order to support the concept of energy efficient attitudes (A3). This fits with what Malenee Jutarob, 1994, pp. 57-59, stated: that knowledge is the process that changes attitudes and behavior and builds experiences which lead to life improvement.

Units of electricity and electrical equipment

The results show that the students have moderate knowledge of Units of electricity and electrical equipment. According to Saisunee Pavuttinun, 1998, pp.28, knowledge is facts and information perceived by humans and knowledge is the ability to remember and understand the information in many aspects. The technical information of electrical equipment (for example that a 2-door refrigerator consumes more electricity than a 1-door refrigerator) was rarely presented on television though it was presented in newspapers and brochures which are the media that the targets might be least interested in. If the students received more technical information via appropriate channels, they would probably have better knowledge of electrical equipment.

How to choose, use, and maintain electrical equipment

The results show that the students have moderate knowledge of how to choose and maintain electrical equipment, and high knowledge of how to use the electrical equipment. This supports the concept of energy efficient appliances (A1) that focuses on promoting the use of highly efficient appliances. Overall, it could be concluded that the students can well understand and apply their knowledge in real life in line with what Sumalee Chunchalaw, 1999, pp.54-69 cited in Anun Srisopa, 1977, pp. 13-14 said about methods of applying knowledge.

5.4 CONCLUSIONS

The following conclusions can be drawn from the discussion above.

5.4.1 Based on the results of the study, it has been confirmed that female students seem to know more about electricity saving than male students.

5.4.2 Students' age, gender, and education levels affect the different levels of knowledge of respondents.

5.4.3 The students have low knowledge level of the situation of electricity in Thailand.

5.4.4 The students have moderate knowledge level of the Demand Side Management program (DSM).

5.4.5 The students have moderate knowledge level of units of electricity and electrical equipment.

5.4.6 The students have moderate knowledge levels on how to choose electrical equipment.

5.4.7 The students have high knowledge levels on how to use electrical equipment.

5.4.8 The students have moderate knowledge levels on how to maintain electrical equipment.

5.4.9 The students have moderate overall knowledge of electricity energy saving.

5.5 RECOMMENDATIONS FOR FURTHER RESEARCH

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

1. Future research should be done to study other factors that affect the knowledge of electricity energy saving such as job position, income, family status, and information perception. The results from the findings should help EGAT to improve the DSM campaign.

2. Future research on the results of advertising media of the DSM programs should be conducted to verify the effectiveness and efficiency of the media to improve DSM advertising media in the future.