CHAPTER FOUR
RESULTS

This chapter reports the findings of the study which will be divided into 3 parts as follows:

4.1 Demographic information of the subjects

4.2 The awareness on solid wastes management

4.2.1 The test results of degree of the subjects' knowledge and understanding on solid wastes management

4.2.2 The test results of degree of the subjects' skills on solid wastes classification

4.3 The frequency of environmentally friendly behavior from both workplace and home of the subjects

4.4 Relationship between environmental awareness and environmentally friendly behavior

4.1 DEMOGRAPHIC INFORMATION OF THE SUBJECTS

Table 1. Gender of the Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	81	32.9	32.9	32.9
	Female	165	67.1	67.1	100.0
	Total	246	100.0	100.0	

The table 1 shows that 81 out of 246 respondents (32.9%) were male, and 165 respondents (67.1%) were female.

The populations of the study were 335 officials of the Department of Environmental Quality Promotion; however, the subjects of the study were 246 who returned the questionnaires.

Table 2. Ages of the Respondents

Range of Age		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	21-30	110	44.7	44.7	44.7
	31-40	89	36.2	36.2	80.9
	41-50	34	13.8	13.8	94.7
	51-60	13	5.3	5.3	100.0
	Total	246	100.0	100.0	

According to table 2, most of the subjects' ages were in the range 21-30 (44.7%) and followed by those at age of 31-40 (36.2%), while the subjects in the range age of 41-50 were of small number. The smallest age group was the subjects in the range age 51-60 (11%).

Table 3. Education of the Subjects.

Level of Education		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Junior high school	3	1.2	1.2	1.2
	Senior high school	7	2.8	2.8	4.1
	Undergraduate	19	7.7	7.7	11.8
	Bachelor degree	169	68.7	68.7	80.5
	Master degree	45	18.3	18.3	98.8
	Higher than Master degree	3	1.2	1.2	100.0
	Total	246	100.0	100.0	

Most of respondents held Bachelor degree (68.7%), the smaller group held Master degree (18.3%), followed by those who held Undergraduate degree (7.7%). The respondents with senior high school were of the small number (2.8%). The smallest group carried the higher degree than the Master degree (1.2%)

4.2 THE AWARENESS ON SOLID WASTES MANAGEMENT

4.2.1 Knowledge and Understanding on Solid Wastes Management

To measure the knowledge and understanding of solid wastes management, the questionnaire was subdivided into two parts: knowledge and skills measurement. The first part was designed to measure general knowledge on solid wastes. Secondly, this part was to test the skills of the subjects on classifying solid wastes before discarding

Table 4. the Test Results of Knowledge and Understanding on Solid Wastes of the Subjects

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	6-10 points	1	.4	.4	.4
	11-15 points	11	4.5	4.5	4.9
	16-20 points	104	42.3	42.3	47.2
	21-25 points	130	52.8	52.8	100.0
	Total	246	100.0	100.0	

As shown in Table 4, the results reveal that 52.8% of respondents got the highest range of score (21-25 points). 42.3% earned the score ranging 16-20 points, the minority having poor knowledge and understanding scored ranging 11-15 and 6-11 points (4.5 %and 0.4%).

4.2.2 Skills on Classifying Solid Wastes

Table 5. the Test Results of Skills on Classifying Solid Wastes

Range of Score		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	6-10	3	1.2	1.2	1.2
	11-15	30	12.2	12.2	13.4
	16-20	122	49.6	49.6	63.0
	21-25	84	34.1	34.1	97.2
	26-30	7	2.8	2.8	100.0
	Total	246	100.0	100.0	

From Table 5, the result of scores shows that nearly half of the subjects earned 16-20 points (49.6%). The smaller group scored on the test classifying solid wastes ranging 21-25 (34.1%). The declining number of respondents got the score average ranging 11-50 (12.2%), whereas the subjects earning the highest points were of 26-30 (2.8%). The smallest number were able to get scores ranging 6-10 (1.2%)

Table 6 the Total Scores of Knowledge and Skills on Solid Wastes Management

Range of Score	level	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 0-20	Poor	0	0	0	0
21-40	Moderate	128	52	52	2.8
41-50	High	116	47.2	47.2	52.0
More than 50	Highest	2	.8	.8	99.2
Total		246	100.0	100.0	100.0

According to Table 6, the tests of knowledge and understanding, and the test of skills on solid wastes management were both designed to find the degree of awareness of the subjects because knowledge and skills are the important elements that motivate the subjects' attitude toward environmentally friendly behavior. The totality of score of knowledge and skills on solid wastes management inferred the results of awareness score. 52% of the subjects had the awareness at the moderate level. 0.8% of the subjects had the highest level of environmental awareness on solid wastes management. 47.2% of the subjects had the environmental awareness at the high level. However, no subjects were found at poor level.

Table 7 the Findings of Awareness

		Knowledge	Skill	Awareness
N	Valid	246	246	246
	Missing	0	0	0
Mean		20.37	19.45	39.81
Std. Deviation		2.616	3.371	5.045
Minimum		10	10	23
Maximum		25	29	51

Regarding Table 7, the mean of knowledge and skills on solid wastes management is 20.37, and that of skills is 19.45 with the standard deviation 2.61 and 3.37 respectively. The mean of awareness is 39.81 out of 55 with the standard deviation 5.04.

4.3 ENVIRONMENTALLY FRIENDLY BEHAVIOR ON SOLID WASTES MANAGEMENT

Table 8 Frequency of the Environmentally Friendly Behavior on Solid Wastes Management

Environmentally friendly behavior on solid wastes management at workplace	5	4	3	2	1	**Mode**
	%	%	%	%	%	
1. I use the compostable materials instead of plastic bags such as paper bags or banana leaves	8.5	17.5	52.8	15.9	5.3	3
2. I reuse plastic bags and bottles to reduce the distribution of wastes	10.6	30.1	45.9	11.4	2.0	3
3. I classify solid wastes before discarding	21.1	37.7	36.6	4.9	3.7	3
4. I use a solar power calculator instead of using the battery powered one	14.6	24.4	25.6	19.1	16.3	3
5. I make effective use of materials; for example, I use a handkerchief instead of tissue paper	16.7	22.8	34.1	16.3	10.2	3
6. I use the office accessories effectively	48.4	34.1	12.6	3.3	1.6	5

Table 8 (continued)

Environmentally friendly behavior on solid wastes management at workplace	5	4	3	2	1	**Mode**
	%	%	%	%	%	
7. I unplug the electrical appliance every time when I finish using them	43.1	28.0	19.9	6.5	2.3	5
8. I try to make use of the material before disposing of it	15.0	22.4	37.4	19.9	15.3	3
9. I make the recovery of used materials such as creating a trash bin from the carton of milk	22.4	31.1	37.4	6.9	2.0	3
10. I support the concepts of waste reduction by buying recycled materials	22.4	31.1	37.4	6.9	2.0	3
Environmentally friendly behavior on solid wastes management at home	5	4	3	2	1	**Mode**
	%	%	%	%	%	
1. I repair the ruined objects such as a broken chair leg to be in use again	27.2	39.0	26.0	5.7	2.0	4
2. I avoid using hazardous product like pesticide, but instead using bio-products for eradicating insects and weeds	19.9	29.7	35.8	11.4	3.3	3
3. I sort out the liquid before discarding scraps of food	32.5	37.8	19.1	6.9	3.7	4

Table 8 (continued)

Environmentally friendly behavior on solid wastes management at home	5	4	3	2	1	**Mode**
	%	%	%	%	%	
4. I bring a water container when buying beverages	7.7	21.1	30.7	22.8	11.4	3
5. I reuse Plastic bags	41.1	35.0	41,9	12,6	5.7	5
6. I use plastic and cloth bag when shopping at market.	16.7	23.2	41.9	12.6	5.7	3
7. I reuse the drinking bottle or bowls by using it as a plant's container	26.0	29.7	32.1	7.3	3.3	3
8. I reject plastic bags when buying a small number of goods at convenient store	40.2	30.5	24.0	2.0	3.3	5
9. I reduce the use of non compostable materials like foam and plastic	22.8	25.6	42.7	8.1	0.8	3
10. I reject plastic bag when buying goods at convenient store	22.4	31.1	37.4	6.9	2.0	3

Regarding Table 8, from the findings of Mode of the subjects' environmentally friendly behaviors, it was found that the subjects' behavior both at workplace and at home ranged 3-5 which can be seen reported as follows.

Firstly, the behavior that the subjects were able to practice every time they could afford. Secondly, the behavior that subject usually practice, and lastly the behavior that the subjects always practiced.

The behaviors that the subjects practiced every time they were able to were the following.

At workplace, the subjects used the compostable materials instead of the non compostable (52.8%). The subjects reused plastic bags and bottles to reduce the distribution of solid wastes (45.9%).The subjects discarded solid wastes into the right trash bin (36.3%). The subjects used solar energy calculators (25.6%). Also, they made effective use of materials; for example, the subjects used handkerchiefs instead of tissue paper. The subjects wrapped up the expired batteries with plastic bags (30.1%). The subjects supported the thought of using green products (37.4%), and the subjects repaired broken objects to be in use again (37.4%).

At home, the subjects avoided using hazardous wastes like pesticides for eradicating insects and weeds (35.8%). Moreover, the subjects brought their own containers to venders when buying beverages (37%). The subjects used baskets or cloth bags when they went shopping at markets (41.9%). The subjects reused drinking water bottles and bowls; for instance, they created the flowerpots from those (40.7%). The subject rejected to use plastic bag at the convenient store when buying a few stuffs (32.1%). The subjects reduced using the non compostable materials such as foam and plastic (42.7%)

The behaviors that the subjects usually practiced

The subjects repaired ruined objects to be in use again (39.2%) The subjects separated liquid from discarded food before discarding (37.8%)

The behaviors that the subjects always practiced

The behavior that the subjects always practiced both at workplace and at home are listed as follows: the subjects used both side of a piece of paper (48.4%), and also they sorted out liquid from discarded food when they were home (43.1%). The subjects reused plastic bags (41.1%). The subject rejected plastic bags when buying a small number of goods at convenient stores (40.2%).

4.4 RELATIONSHIP BETWEEN ENVIRONMENTAL AWARENESS AND ENVIRONMENTALLY FRIENDLY BEHAVIOR ON SOLID WASTES MANAGEMENT

Table 9 the Test Results of Awareness

		Awareness	Behavior score
Awareness	Pearson Correlation	1.000	.315**
	Sig. (2-tailed)	.	.000
	N	246	246
Behavior score	Pearson Correlation	.315**	1.000
	Sig. (2-tailed)	.000	.
	N	246	246

**. Correlation is significant at the 0.01 level

=

Regarding Table 9, to find the relationship between environmental awareness and environmentally friendly behavior, the researcher employed the Pearson Correlation. The correlation between awareness and behavior is 0.315, with the significance at 0.01. Regarding Table 8, the mean of knowledge and skills on solid wastes management is 20.37, and that of skills is 19.45 with the standard deviations 2.61 and 3.37 respectively. The mean of awareness is 39.81 out of 55 with the standard deviation 5.04.

To sum up, this chapter reveals the findings of the knowledge and understanding and skills on solid wastes management and the relationship between environmental awareness and environmentally friendly behavior of the subjects. The findings of the study will be summarized and discussed in the next chapter.