CHAPTER THREE METHODOLOGY

This chapter describes the research methodology. It is divided into four sections as follows:

- 1.) Subjects
- 2.) Materials
- 3.) Procedures used in the collection and analysis of the data
- 4.) Data Analysis

3.1 SUBJECTS

The subjects of this survey were 223 government officials, the Operational staff 1 and 2 (O_1 and O_2) and the Knowledge Workers 1 and 2 (K_1 and K_2) classification, working in the Office of the Permanent Secretary for the Interior, Ministry of the Interior.

3.2 MATERIALS

3.2.1 Research Instrument

A questionnaire is a research instrument used in the assessment of government employee engagement and the management leadership aspect. It is divided into two parts. The details of each part are as follows. (See Appendix)

Part 1: Personal data of respondents

There were seven open-ended questions asking about age, gender, educational background, common level, position classification level, length of employment, and compensation.

Part 2: Respondents' opinion

This part of the questionnaire involved questions on the overall leadership styles that are used by middle-level administrators at OPSI and the engagement level of government officials. All eighteen questions (item 1-15) were closed-ended questions, which were measured by Likert scale (1967, cited in Arpakorn Tassanasangsoon, 2006) to assess leadership style. The respondents were asked to choose the answer closest to their opinion using a five-point Likert scale (1= strongly disagree to 5 = strongly

agree). The questions consist of three aspects of leader behavior which were directional leadership, motivational leadership and organizational leadership.

- Questions 1, 4, 7, 10, and 13 examined directional leadership used by middle-level administrators.
- Questions 2, 5, 8, 11, and 14 examined motivational leadership used by middle-level administrators.
- Questions 3, 6, 9, 12, and 15 examined organizational leadership used by middle-level administrators.

This part of the questionnaire was also adapted from Wikanya, 2006, and The Gallup Organization, Princeton, NJ, 1992-1999. The 25 questions (items 16-40) were closed-ended questions. The respondents chose the answer closest to their opinion using a five-point Likert scale. These questions were intended to measure the engagement level of government officials and were divided into three groups as follows:

- Questions 16, 17, 19, 29, 31, 35, and 40 examined the cognitive or "think," relating to government officials' logical evaluation of organizational goals and values.
- Questions 18, 20, 23, 30, 32, 34, 37, 38, and 39 examined the emotional (affective) or "feel," which tap into whether employees have a sense of belonging and pride in the organization.
- Questions 21, 22, 24, 25, 26, 27, 28, 33, and 36 examined the behavioral or "act," which lead to the outcomes that employers desire such as retention and willingness to "go the extra distance" for the organization when necessary.

Moreover, this part allowed respondents to give their opinions about what leadership styles of middle-level administrators they prefer.

3.3 PROCEDURES

3.3.1 Research Design

This study included the government officials working at the Office of the Permanent Secretary of the Interior. As the population was large, 504 government officials in the Operational staff 1 and 2 (O_1 and O_2) and the Knowledge Workers 1 and

2 (K_1 and K_2) classification, the sample population for study was calculated by the Yamane formula, 1973.

n =
$$\frac{N}{1+Ne^2}$$

n = Sample Size
N = Population
e = Acceptable Variant = 5% (e=.05)
n = $\frac{504}{1+1.26}$
= 223

Since there are 12 divisions at OPSI, the researcher used the *proportionate stratified sampling* method in calculating 44 percent of the total government officials in each division to obtain a representative sample for the division.

Table 1: Total government officials in each division and the number of participants from each division.

	Total government	Number of
Division	officials per	participants
	division	per division
	(people)	(people)
1. General Affairs Division	58	26
2. Personnel Division	47	21
3. Finance Division	44	19
4. Foreign Affairs Division	23	10
5. Inspection and Grievances Division	33	15
6. Information Division	31	14
7. Information Technology &		
Communication Center	93	41
8. Prince Damrongrajanubhab Institute of		
Research & Development	45	20
9. Legal Affairs Bureau	22	10
10. Office of the Commission on Local		
Government Personnel Standards	21	9
11. Policy and Planning Bureau	55	24
12. Bureau of Provincial Administration		
Development & Promotion	32	14
Total	504	223

3.3.2 Data Collection

The questionnaires were distributed to the 223 government officials, the Operational staff 1 and 2 (O_1 and O_2) and the Knowledge Workers 1 and 2 (K_1 and K_2) classification, working in the Office of the Permanent Secretary for the Interior, Ministry of Interior, and collected a week later by the researcher.

3.4 DATA ANALYSIS

The engagement level of government officials and middle-level administrators' leadership behaviors were examined as follows:

For the positive statements, the points were given as:

Strongly agree was given five points

Agree was given four points

Partly agree was given three points

Disagree was given two points

Strongly disagree was given one point

For the negative statements, the points were given as:

Strongly agree was given one point

Agree was given two points

Partly agree was given three points

Disagree was given four points

Strongly disagree was given five points

The researcher calculated the degree of government officials' engagement and middle-level administrators' leadership behaviors as follows:

$$\frac{\text{Highest score} - \text{Lowest score}}{\text{Total rating level}} = \frac{5 - 1}{5}$$

$$= 0.8$$

Therefore, the investigation of leadership behaviors, the directional, the motivational, and the organizational, used by middle-level administrators at OPSI can be assigned as:

 Score 1.00 - 1.80 means government officials' attitude towards each leadership style of their middle-level administrators is at a very low level.

- Score 1.81 2.60 means government officials' attitude towards each leadership style of their administrators is at a low level.
- Score 2.61 3.40 means government officials' attitude towards each leadership style of their administrators is at a moderate level.
- Score 3.41 4.20 means government officials' attitude towards each leadership style of their supervisors is at a high level.
- Score 4.21 5.00 means government officials' attitude towards each leadership style of their middle-level administrators is at a very high level.

The degree of engagement can be determined as:

- Score 1.00 1.80 means government officials engage in organization at a very low level.
- Score 1.81 2.60 means government officials engage in organization at a low level.
- Score 2.61 3.40 means government officials engage in organization at a moderate level.
- Score 3.41 4.20 means government officials engage in organization at a high level.
- Score 4.21 5.00 means government officials engage in organization at a very high level.

Statistic Package for Social Science (SPSS) was employed to process the data by using Multiple Regression Analysis to test the hypothesis.

The symbolism of this research is shown in the following table:

Table 2: The symbolism of the research.

Symbols	Meaning
ENC	Cognitive engagement of government officials at OPSI
ENF	Emotional engagement of government officials at OPSI
ENB	Behavioral engagement of government officials at OPSI
ENG_T	The sum of engagement of government officials at OPSI
F	F-test statistic
Sig.	Statistical significance
R	Multiple correlation coefficient
\mathbb{R}^2	Coefficient of determination
R^2_{adj}	Adjusted coefficient of determination
Beta	Regression coefficient of standard score data
F Overall	F-test statistic of coefficient of determination
b	Regression coefficient of raw score data
SE _b	Standard error of regression coefficient of raw score data

In summary, this chapter illustrated the methodology of this research concerning subjects, materials, procedures, and data analysis. In the next chapter, the research results are presented.