CHAPTER III

RESEARCH METHODOLOGY

3.1 Research design

This survey research is the cross-sectional type of study which investigates the correlation between several factors in order to measure the level of job satisfaction of public health staff at the sub-district level. A questionnaire was designed and used to collect data from 222 public health staff in Krabi province.

3.2 Scope of the study

The sample cases of this research are 222 public health staff at the sub-district level.

3.3 Research population and sample

The research population is the public health staff at the sub-district level in Krabi province working in the health center for at least 1 year. The total number of the sample cases for the research is 222 public health staff working in 72 health centers in Krabi province.

3.4 Expected outcome

To learn about the correlation between transformational leadership of the district health officer and job satisfaction of public health staff in Krabi province.

Thiswill be useful in improving health services and understanding the influence of the leadership of the district health officer over the job satisfaction of the public health staff and ultimately it should help the health centers to successfully accomplish results as planned.

3.5 Research instruments

The questionnaire be used as the research instrument and it is designed based on literature reviews of academic papers and related studies to cover the objective and scope of this research. The questionnaire is comprised of 3 sections as follows;

- Section 1 – Demographic characteristics of the respondents of the questionnaire; namely, age, sex, marital status, duration of employment, education and job post. This section includes multiple choices and fill-in-the-blank questions.

- Section 2 – Transformational leadership of the district health officer, based on Bass leadership theory. Twenty questions in this section cover the following topics;

Charisma	5 questions
Individualized consideration	5 questions
Intellectual stimulation	5 questions
Inspirational	5 questions

The 5-level rating scale is used in this section, with the following scoring criteria;

Level 5 means the district health officer always performs.

Level 4 means the district health officer frequently performs.

Level 3 means the district health officer sometimes performs.

Level 2 means the district health officer rarely performs.

Level 1 means the district health officer never performs.

Analysis of the scores of the leadership of the district health officer and criteria: the scores of each aspect of the leadership, which are rated by the public health staff and reflect their perception, will be ranked to determine the level of the leadership. Ranges will be divided by three which is the number of levels (high, moderate and low) and then determine the means of the scores to identify the three levels of the leadership which are high, moderate and low level of the leadership. This follows the concept of Daneil (1995) to explain the leadership of the district health officer in the perception of the public health staff.

The scores are used to rank the leadership based on the perception of the public health staff.

Formula for the score range =

$$\frac{\text{The highest score of the questionnaire} - \text{The lowest score of the questionnaire}}{3}$$

Table 1: The scores are used to rank the leadership based on the perception of the public health staff.

Type of leadership	No. of question	Score		
		Low range	Medium range	High range
Transformational leadership	20	20-46.66	46.67-73.32	73.33-100
Charisma	5	5-11.65	11.66-18.32	18.33-25
Individualized consideration	5	5-11.65	11.66-18.32	18.33-25
Intellectual stimulation	5	5-11.65	11.66-18.32	18.33-25
Inspiration	5	5-11.65	11.66-18.32	18.33-25

- Section 3 – Measurement of job satisfaction of public health staff at the sub-district level. The researcher develops questions and designs the questionnaire, based on data and relevant studies. Twenty questions in this section measure the level of job satisfaction in the following five issues; namely, supervision, work itself, pay, promotions and co-workers;

Supervision	4	questions
Job Position	4	questions
Pay	4	questions
Promotions	4	questions
Co-workers	4	questions

The 3-level rating scale is used in this section to make it easy for respondents and statements were designed to be positive. The followings are the scoring criteria;

Very satisfied	3	points
Moderately satisfied	2	points

Rarely satisfied   1 point

Score analysis: the criteria of measuring the job satisfaction of the public health staff can be classified into three levels. These levels are determined by subtracting the lowest out of the full score and then divide the balance by three which is the number of levels. Means are calculated and used against the range of the score to learn the job satisfaction of the public health staff in each of the three levels; low, medium and high as follows;

Table 2: The criteria of measuring the job satisfaction of the public health staff

Type of leadership	No. of question	Score		
		Low range	Medium range	High range
Job satisfaction	20	20-33.33	33.34-46.66	46.67-60
Supervision	4	4-6.66	6.67-9.32	9.33-12
Work it self	4	4-6.66	6.67-9.32	9.33-12
Pay	4	4-6.66	6.67-9.32	9.33-12
Promotions	4	4-6.66	6.67-9.32	9.33-12
Co-workers	4	4-6.66	6.67-9.32	9.33-12

3.6 Data collection

Step 1: Search and obtain information of health centers in Krabi province from the administration division of provincial health office and develop a list of the health centers.

Step 2: Request for a letter from the Graduate School of Chulalongkorn University addressed to Krabi provincial public health officer with details about objectives of this research and asking for permission to collect data.

Step 3: Meet with the district technical public health officer or the officer in charge of academic issues or staff who would be appropriate to collect the questionnaire. The purposes of the meeting are to explain the objective of the research and methodologies of data collection and also to ask for cooperation from public health staff in the sub-district level to fill in the self-administered questionnaire.

Step 4: Contact the coordinator in the selected districts to help collect the questionnaires and check for the data completeness. The questionnaires must be returned within 2 weeks and if it fails to meet this timeframe, staff at the district health office must be contacted by phone to help follow-up and collect the questionnaires.

Step 5: The researcher checks for the accuracy and completeness of the data.

3.7 Data analysis

The data are analyzed with SPSS for Window.

3.8 Statistical data analysis

1. Descriptive statistic is used to determine the frequency, percentage, means and standard deviation to explain basic information and personal data of individuals; such as, sex, age, marital status, duration of employment, education, leadership of the district health officer and ob satisfaction level of the public health staff.

2. Analytical statistics is applied to explore the correlation between the leadership of the district health officer and the job satisfaction of the head of health center. Pearson product moment correlation coefficient is used to investigate the correlation between 1) the leadership of the district health officer and the job satisfaction of the public health staff at the sub-district level and 2) demographic characteristics of the staff and their job satisfaction.

Criteria of the correlation coefficient: given that r ranges from +1 to -1, if r is equal to 0, it means there is no correlation. But if r is equal to a negative value, it implies a reversal correlation.

0.80-1.00	High correlation
0.50-0.79	Moderate degree of correlation
0.20-0.49	Low degree of correlation
0.00-0.20	No correlation

Chi-square test is used to determine the correlation of the demographic characteristics; such as, sex, marital status, job post, education and the job satisfaction of the public health staff at the sub-district level.