CHAPTER THREE
METHODOLOGY

This chapter describes: (1) the subjects, (2) the materials, (3) the procedures used in the collection and analysis of the data, and (4) the data analysis.

3.1   SUBJECTS

Two hundred-fifty undergraduate students (male and female students) in the Department of Foreign Languages, Buriram Rajabhat University, enrolling in both compulsory and elective English courses, were asked to voluntarily participate in the study. The samples were selected by means of quota sampling from each of the four following majors: Business English (Bachelor of Arts); English (Bachelor of Education); English, major in Japanese (Bachelor of Arts); and English (Bachelor of Arts).

3.2   MATERIALS

3.2.1   Questionnaire

The research instrument in the study was a self-reported questionnaire divided into two parts. The first part aimed to obtain basic demographic information including sex, age, major, level of education, and total number of years in English language learning. The second part aimed to examine the degree of self-determinations, intrinsic and extrinsic motivation, towards the learning of English language. In order for valid results, the questionnaire was translated into a Thai version in order to eliminate any ambiguity and to avoid any misinterpretation (Appendix C).

Prior to the distribution of the questionnaires, a pilot study was conducted with 30 undergraduate students drawn from the studied population in order for reliability and ambiguity elimination. The pilot study revealed that this instrument was sufficiently reliable to be administered in the present study. Only one part confused the respondents, causing the questionnaire to obtain wrong data. However, that problematic flaw was recomposed to eliminate misunderstanding and misinterpretation. The researcher attempted to avoid questioning the same people when distributing questionnaires to the samples during the real survey.

3.2.2   Measuring Instruments

To measure intrinsic and extrinsic motivation, the measuring instrument modified from a number of previous researchers to fit into the present study is designed as follows.

Intrinsic Motivation: To measure intrinsic motivation, a modified 20-item version was employed in this study. The measure "Intrinsic Motivation Inventory (IMI)" was developed by Ryan (1982) and his colleagues. It is a flexible assessment tool on intrinsic motivation. Reliabilities of these measures are determined by Cronbach's Alpha. Internal consistency for the four subscales internalized under each of the intrinsic dimensions is quite sufficient with the alpha coefficient shown in parentheses: interest/enjoyment (α = .70), perceived competence (α = .65), perceived choice (α =.64), value/usefulness (α = .84), and effort/importance (α = .76). The overall scales for intrinsic motivation also appear to be internally consistent with an alpha coefficient of .89. The dimensions of intrinsic motivation can be referred to in Appendix A.

Extrinsic Motivation: Deci and Ryan's (1985, p. 70) original extrinsic motivation research was modified to fit into the current study by incorporating the previously-investigated motivational factors from other researchers. For the present objectives, some additional factors were generated by the researcher. This measure aimed to assess extrinsic motivation. Reliabilities of these measures are determined by Cronbach's Alpha. Internal consistency for the four subscales internalized under each of the extrinsic dimensions is considered satisfactory with the alpha coefficient shown in parentheses: teacher (α = .46), performance goal (α = .17), classmate (α = .29), parental involvement (α = .87), and learning material (α = .67). The scales with an alpha coefficient of less than .70 (standard value) were resolved by converting the negative statements to the positive ones. Although some individual dimensions appear not to be reliable, the overall alpha values for extrinsic motivation scales are adequately reliable with an alpha coefficient of .73. The dimensions of extrinsic motivation can be referred to in Appendix A.

In sum, the measure for intrinsic and extrinsic motivation is reliable for the present population with an alpha coefficient of .87. Therefore, it can be reliably used to collect information from the studied samples who were asked to respond on a five-

point Likert scale adapted from the original seven-point Likert scale, ranging from 1 (not very true) to 5 (very true) as shown in the below table, and the obtained scores can be interpreted in terms of means in order to determine a level of motivation.

Rating score	Interpretation of the score
5	Very true
4	True
3	Neutral
2	Not true
1	Not very true

Mean	Level of motivation
4.21-5.00	Very high
3.41-4.20	High
2.61-3.40	Neutral
1.81-2.60	Low
1.00-1.80	Very low

3.3 PROCEDURES

3.3.1 Research Design

In this study, the major focus is on the theory of "self-determination" proposed by Deci and Ryan (1985, p. 78), but the distinction is that factors or dimensions internalized under intrinsic motivation and extrinsic motivation are based on the studies of other former researchers, and some were created by the present researcher attempting to construct items in compliance with the contexts or components that are likely to affect motivation.

3.3.2 Data Collection

The researcher distributed 250 copies of the questionnaires in person to the sampled undergraduate students at the Department of Foreign Languages, Buriram

Rajabhat University. The researcher spent two days during the regular class sessions, asking permission from instructors, and cooperation from each classroom monitor to help give out the questionnaires to his/her roommates. During the completion process of the questionnaire, the researcher was present to monitor and help the respondents understand some certain parts. The respondents were informed that the questionnaire would be collected on the same day and that the information they gave would be kept confidential and be used for research purposes only.

3.4   DATA ANALYSIS

The obtained data was processed using the Statistical Package for Social Sciences (SPSS) version 12.0 for data analysis. Descriptive statistics (Percentage, Mean, Frequency, and Standard Deviation) was analyzed for all measures involved in the study.