

Chapter 3

Methodology

3.1 Introduction

The study collected quantitative data through a questionnaire to determine the motivation types and reported self-identity changes of university students majoring in English at a private northern Thai university and to determine if there are any correlations between the two. Follow-up interviews were also conducted in order to gather further information from some of the participants. This chapter describes the methodology including the participants, research instruments, data collection procedure, and data analysis.

3.2 Participants

This study focused on undergraduate university English language learners who had chosen English as their major at a private university located in northern Thailand. The participating students were studying in a regular Thai university program as opposed to an international program because this study focused on Thai students and not the various nationalities that are represented in international programs. The Thai program has general education courses that are instructed in Thai in addition to their English courses while English is the language of instruction for all classes in the international program. The population of the English-major students who were Thai native speakers was 328. All of them were included in the current study; however, only 248 surveys were completed, giving a response rate of 75.6%. According to Wiersma and Jurs (2009), the accepted response rate for educational researchers is less than 50 %; therefore, the response rate of the current study was acceptable.

The participants included 60 males and 188 females. There were 103 freshmen, 47 sophomores, 61 juniors, and 37 seniors who completed surveys. The starting age for ELL also varied among the participants. Sixty-four students reported they started ELL before the age of four while 46 students started at age five. One hundred twenty-five students started studying during their elementary school years, and nine students started in secondary school. Four participants did not respond to this item. Forty-seven students reported they did not have any foreign friends while two hundred students reported having at least one foreign friend. One student did not respond.

3.3 Research Instruments

During this research two instruments were used to collect data. First, the participants responded to a three-part questionnaire. After the data were analyzed

informal interviews were conducted to follow-up and to clarify answers from the questionnaire.

3.3.1 Questionnaire

The main instrument for the current research was a questionnaire (Appendix A). The questionnaire was divided into three sections including demographic information, motivation types, and self-identity changes. The individual questionnaires were numbered so that individual student responses could be analyzed and relationships between variables could be analyzed.

The questionnaire was administered to the learners to gather personal information, to evaluate their ELL motivation types, and to allow them to report any self-identity changes they have experienced. The personal information section included fill-in-the-blank items while the motivation and self-identity changes sections contained Likert items and were measured by a five-point scale (1 = strongly disagree; 2 = disagree; 3 = uncertain; 4 = agree; 5 = strongly agree). The personal information requested included: length of English study, gender, starting age of ELL, and whether one has foreign friends or not.

The motivation portion of the questionnaire was taken from the questionnaire developed by Noels and colleagues (2000) in their study. One of the purposes of their study was to develop an instrument useful for determining L2 learners' motivation types from a perspective based upon SDT. The results from their study validated the intrinsic and extrinsic subtypes as proposed by Deci and Ryan (1985) and Vallerand and his associates (cited in Noels et al., 2000). Because there were a large number of variables, exploratory factor analysis was carried out independently for the subscales of intrinsic and extrinsic motivation until there were three questionnaire items remaining to define the subscales of intrinsic motivation (stimulation, accomplishment, and knowledge), identified regulation, introjected regulation, and external regulation. Once there were three items for each subscale, one factor analysis was performed which yielded seven factors that accounted for 67.2% of the variance. The results supported the distinctiveness of the subscales, and their results found correlations that suggested amotivation, less self-determined forms of motivation, and more self-determined forms of motivation could be distinguished as illustrated in the SDT continuum. In addition, the Cronbach alpha index of internal consistency had a range of .67 to .88 which was acceptable for all of the subscales.

The motivation section of the questionnaire consisted of 20 randomly ordered statements with three statements each referring to the following motivation types: intrinsic motivation (stimulation, accomplishment, and knowledge), identified regulation, external regulation, and non-regulation (amotivation). Two statements referred to introjected regulation as the third item in the original questionnaire did not fit the Thai setting.

Dörnyei (2001) writes that the questionnaire used in a research project must be appropriate for the environment and the sample. For this reason one item from the original Noels and colleagues' (2000) survey was deleted. This item referred to students learning a second language in order to show that they are good citizens. Since English is not an official second language in Thailand, ELL does not pertain to being a good citizen. In addition to deleting this item, the questionnaire was translated into Thai to provide students with an option according to which language they felt the

most comfortable with. The questionnaire was translated by a bilingual speaker and then read by an EFL expert to ensure its validity (Appendix B).

The self-identity changes section included the following six categories: self-confidence, additive, subtractive, productive, split, and zero change. A total of 26 statements were provided. There were five statements referring to productive and attitude changes and four statements referring to confidence, zero, subtractive, and split changes.

Self-confidence change is a change in the perception of one's own ability. When talking with foreigners the participant is confident and comfortable and can express opinions in public with ease and confidence. In addition there is an increase in the ability to do things and make decisions without the help of others.

Additive change occurs when two sets of languages, behavioral patterns and values co-exist with each functioning in particular contexts. With additive change the participant can easily switch between the Thai and English languages and the cultures of both. The participant retains the confidence and assertiveness associated with English and the moderation and modesty of Thai. Other examples include using an English nickname in English contexts and a Thai nickname in Thai context and preferring English audio for English movies and Thai audio for Thai movies.

The target language and culture replaces the native language and culture in subtractive change. The increase and ease of using the English language causes a diminishment of the Thai language. In fact there could be a repugnancy felt for some traditional Thai ways. There is more comfort in greeting in the English way rather than using the traditional "wai."

In productive change both the target language and the native language positively reinforce each other. With an improvement in English proficiency, there is a greater appreciation for Thai and awareness of the outside world. An increase in the appreciation of English literature and art creates an increase in appreciation of Thai literature and art.

Split change occurs when identity conflicts result from the struggle between the languages and cultures. As ELL progresses, there is a subconscious mixing of English and Thai words. The contexts are mixed where English might be spoken when Thai would be appropriate, and Thai might be spoken when English would be appropriate. There is often confusion as to how to greet or take leave of friends whether to hug, shake hands, kiss, or "wai." The values and beliefs of Thai contradict with those of English.

Zero change is the absence of a change in self-identity. It is considered futile to discuss self-identity changes after learning English. The participant remains the same no matter what language is used; learning languages is an event separated from personal change.

The original questionnaire was developed by Gao and colleagues for their 2004 study in China and was later adapted for the Thai setting by Boonchum in 2009. Five pilot studies were carried out, and the resulting version of the Chinese questionnaire had 24 statements with four statements referring to each self-identity change. After the questionnaire was formally administered, Cronbach's alpha for the self-identity questionnaire was 0.65 (Gao et al., 2004).

Boonchum (2009b) adapted the questionnaire by adding examples that fit the Thai setting. She also changed the references to the Chinese language to references to the Thai language. The original statements concerning additive, subtractive, productive, split, and zero changes were used in Boonchum's questionnaire with the

addition of one statement each in the additive and productive groups. For the additive changes, she added an item referencing an English language context in which the learner can accept someone's suggestion or comment without feeling sad because there is a clear separation between self and others in the western culture. Individuals in the western culture increase their self-esteem through self-appreciation and self-satisfaction not necessarily through the opinions of others. In reference to productive changes, Boonchum added the importance of punctuality and as a result of ELL, the participant is now punctual in keeping appointments with other people. This change is a move from the passivity of Thai culture which values waiting to western culture which values taking action.

In addition to adding the statements to the additive and productive items, Boonchum (2009b) also changed the wording of the items referring to self-confidence changes. The changes in the wording reflect the differences between the EFL settings of Thailand and China; even though they are both EFL settings Gao (2001) noted a lack of interaction with the L2 community outside of the classroom in China. However, Boonchum (2009b) research includes the possibility of interaction with the L2 community through friendship and reflects that possibility in the statements. For example, she provides the statement: "English learning makes me speak English with foreigners confidently and comfortable" instead of the Chinese version which said, "English learning has a great impact on my self-confidence." After the revisions were completed a pilot study was carried out to confirm the reliability of the questionnaire at 0.76.

The questionnaire from the Thai context was chosen for this research because of its specificity to the ELL situation of Thailand. Dörnyei (2001) writes that a standardized assessment tool cannot be used arbitrarily in contexts outside of the one where it was developed without it being adjusted. For this reason the questionnaire that has already been adjusted to the Thai context was chosen. It includes examples that a context-specific and that Thai participants will be able to relate to.

3.3.2 Interviews

Informal interviews were conducted with ten students after the data from the questionnaires had been collected and analyzed. After an analysis of the questionnaire, groups emerged from the results according to reported types of self-identity changes, and representative students from each group were randomly chosen for interviews. The data were used to form follow-up questions to ask the students (see Appendix C). These questions included asking about any areas that needed clarification, for more background information of the students, or for more of their thoughts and point of view.

The interview questions centered around both motivation types and self-identity changes. The data analysis revealed that many students identified with more than one motivation type; therefore, they were asked if they had one reason for ELL that was more important than the others. The temporal, changing aspect of motivation was addressed as well by asking whether their motivation was different in the primary or secondary school years and now and since they started the English major program. Furthermore, the researcher wanted to know examples of how they had changed because of ELL or why they didn't change. Finally, the participants were asked if they thought they could successfully learn English and not change.

3.4 Data Collection Procedure

The questionnaires were administered to the students during the final week of regularly scheduled classes during the first semester at the teachers' convenience. The majority of the teachers chose to administer the surveys themselves so that they could administer the questionnaires when time was available. Attempt had been made to explain the procedure for questionnaire administration to all instructors to increase internal validity. Whether the teachers or the researcher administered the survey, the students were reminded that their answers would remain confidential and would not affect their grades.

After the questionnaire data were analyzed, the students who were randomly selected for interviews were contacted by phone. A brief introduction was given in Thai, and the students were given the opportunity to schedule an interview; if the students were not available to meet with the researcher, they were given the option to conduct the interview over the phone. All ten of the students stated that the phone interview would be more convenient for them as they did not have free time during the day to meet with the researcher. The researcher conducted the interviews herself in English. A request was made and granted for permission to record the interview, and the students were reminded that even though it was being recorded, they would remain anonymous.

3.5 Data Analysis

Statistical analysis of the received questionnaire data was done using the Statistical Package for the Social Sciences (SPSS). For the first two research questions determining the motivation types of the learners and the reported self-identity changes, descriptive statistics were used. Responses were coded using the numerical values assigned to the questionnaire responses, keyed into the computer, and then checked for accuracy in order to receive a data file so analysis could proceed. The codes were assigned according to the following scale: strongly agree, 5; agree, 4; uncertain, 3; disagree, 2; strongly disagree, 1 (see Table 1).

Table 1 Rating Scale

Scale	Participant's response
5	Strongly agree
4	Agree
3	Uncertain
2	Disagree
1	Strongly disagree

The statements from the questionnaire were grouped according to the type of motivation or self-identity change it describes. Tables 2 and 3 show the item numbers in groups and their corresponding motivation type or self-identity change type. The student responses for each motivation type and each type of self-identity change were

analyzed by using descriptive statistics namely percentages, mean scores, and standard deviation.

Table 2 Questionnaire Items and Corresponding Motivation Type

Items	Label
1, 5, 17	Amotivation
3, 6, 16	External Regulation
11, 18	Introjected Regulation
2, 7, 13	Identified Regulation
4, 12, 15	Intrinsic Motivation - Stimulation
9, 10, 19	Intrinsic Motivation - Knowledge
8, 14, 20	Intrinsic Motivation - Accomplishment

Table 3 Questionnaire Items and Corresponding Self-Identity Changes

Items	Label
3, 5, 7, 17	Confidence
2, 10, 13, 20, 25	Productive
8, 16, 18, 21, 24	Additive
4, 11, 14, 22	Zero
1, 9, 23, 26	Subtractive
6, 12, 15, 19	Split

In order to interpret the mean scores, the class interval was calculated using the following formula.

$$\text{Class interval} = \frac{\text{Highest data value} - \text{Lowest data value}}{\text{Number of class intervals}}$$

The class interval obtained from the calculation was 0.8 so the following intervals were created: highest, 4.21 – 5.00; high, 3.41 – 4.20; moderate, 2.61 – 3.40; low, 1.81 – 2.60; and lowest, 1.00 – 1.80 (see Table 4).

Table 4 Interpretation of Mean Scores

Range of Mean Score	Degree of Motivation
4.21 – 5.00	Highest
3.41 – 4.20	High
2.61 – 3.40	Moderate
1.81 – 2.60	Low
1.00 – 1.80	Lowest

After the descriptive statistics were calculated, a Kruskal-Wallis H test was run to determine if there were differences in motivation types or self-identity changes between university level groups. If there was a statistically significant difference ($p < .05$) in any of the categories, then pairwise comparisons were carried out using Mann-Whitney U tests with Bonferroni correction for multiple comparisons.

For the third research question, the interest is in how the two variables, motivation type and self-identity change, relate to each other. The scores of the motivation types and the self-identity changes were analyzed together to determine how they covary. A Spearman's Rank Order correlation was run to determine the correlation between the motivation types and the self-identity changes of the participants.

In reference to the interviews, after the interviews were transcribed (see Appendix D), the data were then sorted, categorized, and grouped according to the major themes that emerged. The responses were categorized by motivation type, type of self-identity change, and positive or negative responses. Then the answers were sorted and similar answers were grouped together for reporting purposes.

3.6 Chapter Summary

This chapter detailed the data collection and organization process for this study. The instruments used to collect data included a three-part questionnaire and informal interviews. Descriptive statistics were generated from the questionnaire data using the SPSS program and were used to generate questions for the follow-up interviews. The interview data were sorted, categorized, and grouped. After the data collection and evaluation was concluded, the results were compiled and are presented in the next chapter.