

## **CHAPTER III**

### **RESEARCH METHODOLOGY**

This chapter introduces the research design and methodology. It consists of four sections:

- (1) Development of Research Instruments
- (2) Participants
- (3) Data Collection
- (4) Data Analysis

#### **3.1 Research Instruments**

The present study utilized two main research instruments for data collection: (1) an email for the participants to read; and (2) a questionnaire with multiple-choice selections for time reference and aspectual property. The development of the instruments is described in the following section.

##### **3.1.1 An Email**

To investigate conceptualizations of tense and aspect, which requires semantic and pragmatic considerations of time and aspectual references of the context in question, it was decided that the test instrument should be constructed in such a way that language in discourse was provided. Thus, a reading passage was developed as one task for the participants to interpret tense meanings in terms of time reference and aspectual property from given contexts.

### a) Construction of the Test

The test construction followed the procedures described below.

(1) A text in the form of an email was initially designed as a reading task. The content of the email was devised so that the potential items would cover the following tense-aspect forms to be investigated:

Present time: (1) Present Simple, (2) Present Perfect, (3) Present Progressive, and (4) Present Perfect Progressive

Past time: (1) Past Simple, (2) Past Perfect, (3) Past Progressive, and (4) Past Perfect Progressive.

Because some tense-aspect combinations (e.g. the past perfect progressive) are used less frequently than others in connected discourse, it was difficult to provide the number of items that was equally distributed across the 8 tense-aspect forms. In the first draft of the email, there were 23 potential items. The distribution of these items was as follows:

<i>Tense-Aspect</i>	<i>No. of items</i>	<i>Tense-Aspect</i>	<i>No. of items</i>
Present Simple	4	Past Simple	5
Present Progressive	4	Past Progressive	2
Present Perfect	3	Past Perfect	2
Present Perfect Progressive	2	Past Perfect Progressive	1

(2) To check language for grammaticality and acceptability, the first draft was initially read by a native English speaking teacher (NEST). Adjustments were made based on comments made by the NEST.

(3) The text was then prepared for a reliability check by deleting all the verb forms in the 23 potential test items. Each item was replaced by a blank, with the base form of the verb given in parentheses.

(4) Three native English speaking teachers (NESTs) were then asked to supply the tense-aspect form for each item and give comments and suggestions (if any).

(5) Upon completion of the first task, the three NESTs were also asked to select time reference and aspectual property for each item. This was done by means of a questionnaire which was developed as another tool to elicit conceptualizations of time and aspect markers in given contexts. This instrument will be discussed in the following section.

(4) Based on the responses and comments obtained from the “Supply-the-Verb Form” test and the time and aspect elicitation questionnaire, disagreements over variations among the 3 NESTs were considered and resolved through discussions. The text was correspondingly modified, whereby it was decided that one more item in the past perfect progressive form should be added to increase the reliability of this tense-aspect marker. Therefore, the number of items distributed across the 8 tense-aspect forms was as follows:

<i>Tense-Aspect</i>	<i>No. of items</i>	<i>Tense-Aspect</i>	<i>No. of items</i>
Present Simple	4	Past Simple	5
Present Progressive	4	Past Progressive	2
Present Perfect	3	Past Perfect	2
Present Perfect Progressive	2	Past Perfect Progressive	2

### **3.1.2 A Questionnaire for Time Reference and Aspectual Property**

To elicit conceptualizations of time reference and aspectual property in the tense-aspect markers provided in the email, a questionnaire was designed for the participants to choose one answer from the multiple-choice selections that best described their conceptualizations of time and aspect for each of the potential items. The terminology used to describe the meaning of time reference and aspectual properties were chosen from intermediate to advanced ESL/EFL grammar texts. The multiple choice selections for time and aspect selections were uniform for all contexts in the reading task.

In checking the reliability of the multiple choice selections, 3 NESTs who were asked to supply the tense-aspect form of the verb given in the email, as described in the previous section, were also asked to choose the time reference and aspectual property from the questionnaire based on their conceptualizations. In so doing, they were encouraged to give comments, add other descriptors as they deemed appropriate and/or write in their own words how they conceptualize time and aspect in a certain context. Based on the participants' responses, comments and suggestions, adjustments were made to the terminology used as descriptors in the questionnaire.

#### **a) Test-Run of the Instrument**

A test-run of the instrument was carried out with 3 native English speaking teachers, 1 Thai teacher and 2 undergraduate students to test the validity and reliability of the modified version of the instruments prior to actual administration on participants. The aims of the test-run were three-fold. Firstly, it aimed to examine the participants' perceptions of time reference and aspectual property of the tense-aspect

markers in terms of consistencies and variations among the three native English speakers. Secondly, appropriateness of the multiple-choice selections would be evaluated based on comments made by the participants. Thirdly, the administration of the test-run would allow the researcher to approximate the time to complete the task and anticipate whether there would be any potential problems in the actual administration. Based on the responses, comments, suggestions and disagreements over the multiple choice selections obtained from the participants, the final modifications were correspondingly made to the research instruments as follows:

(1) To sound authentic, a few sentences in the email were rewritten. As a result, the final version of the email contained 24 tense-aspect items. (Please refer to the reading task in Appendix A.)

(2) The terminology used for the multiple choice selections in the questionnaire was adjusted (please see Appendix B). The descriptors used in the questionnaire were as follows:

- |   |                              |
|---|------------------------------|
| (I) The time reference of the event is: | (II) The event is viewed as: |
| a. Future                               | a. Started but continuing    |
| b. Present                              | b. Completed                 |
| c. Past relevant to present             | c. Duration finished         |
| d. Past                                 | d. Repeated intermittently   |
| e. Before another past event            | e. State or fact             |
| f. Other (please specify)               | f. Other (please specify)    |

Once the terminology for the descriptors was finalized, Thai translation to the questionnaire was prepared for participants in the intermediate and low proficiency

groups so that they would understand the instructions as well as the terminology clearly. (Please refer to Appendix C.)

### **3.1.3 Background Questionnaire**

In addition to the two main instruments described above, a background questionnaire was also used to obtain the participants' contact information (e.g. their names, ages, email addresses and telephone numbers). Other purposes for utilizing this questionnaire were as follows:

- (1) For native English speakers, this questionnaire aimed to verify that English was actually their first language. (Please see Appendix D.)
- (2) For Thai teachers of English, referred to as Thai learners with high English proficiency, the objective of the questionnaire was to obtain general background information such as educational levels, the amount of exposure to the English language. This questionnaire was prepared in English. (Please refer to Appendix E.)
- (3) For Thai undergraduate students, classified as learners with intermediate and low English proficiency levels, the purpose of the questionnaire was to obtain information on the learners' histories of learning English. The questionnaire was prepared in Thai. (See Appendix F.)

## **3.2 Participants**

The participants included 99 Thai learners of English, referred to as non-native speakers of English (NNSs). Fifteen native speakers of English (NSs) participated in the study as NS controls. The recruitment of these participants is described below.

### **3.2.1 Native English Speakers (NS)**

The research instruments were distributed to 20 native English speaking teachers from 3 universities in Bangkok, Thailand. Upon receipt of the test instruments, each NS was asked to individually complete the tasks in his/her own time. Eighteen test papers were returned to the researcher. Based on the information provided in the background questionnaire, 3 participants indicated that, apart from English, they also spoke another language natively. To avoid conceptual transfer from another language into English, the test papers of these 3 participants were excluded from the data analysis. Therefore, only 15 NS participants were selected for the purpose of this study. These participants comprised 7 NESTs from Chulalongkorn University, 3 from Thammasat University and 5 from Dhurakij Pundit University. All the three universities are located in Bangkok, Thailand.

### **3.2.2 Non-native Speakers of English (NNS)**

Ninety-nine non-native speakers of English (NNSs) were classified into 3 English proficiency groups: high, intermediate and low, with 33 in each group, as described below.

#### **3.2.2.1 Non-native Speakers with High English Proficiency (NNS-H)**

The high-proficiency group (NNS-H) consisted of 33 Thai teachers of English from Dhurakij Pundit University and Thammasat University in Bangkok, Thailand. In recruiting the participants, 45 sets of the test instruments were distributed to Thai teachers of English in two universities. The participants were asked to individually complete the tasks in their own time. Thirty-three completed papers—24 from

Dhurakij Pundit University and 9 from Thammasat University—were returned to the researcher. The data obtained from these 33 participants were collected for analysis.

### **3.2.2.2 Non-native Speakers with Intermediate Proficiency (NNS-I) and Low Proficiency (NNS-L)**

One hundred and eighty-nine (189) undergraduate students (93 freshmen and 96 seniors) in the English Major program at Dhurakij Pundit University were asked to take the DPU Test of English Proficiency (DPU-TEP). Although it cannot be claimed that the DPU-TEP is a standardized test, the reliability of this instrument has been reported at the Cronbach's alpha of .901. This should serve well for the purpose of this study.

In order to equalize the number of participants with high English proficiency (NNS-H), 33 students with the highest scores and 33 students with the lowest scores were selected to represent the intermediate (NNS-I) English proficiency group and low (NNS-L) English proficiency group, respectively. Out of the total DPU-TEP score of 120 (100%), the scores of the NNS-I ranged from 72 (60%) to 93 (77.5%), whereas the scores of the 33 NNS-L ranged from 33 (27.5%) to 43 (36%).

## **3.3 Data Collection**

The data-gathering process was conducted in two phases.

(1) The first phase was conducted with native English-speaking teachers (the NS group) and Thai teachers of English (the NNS-H group). The test instruments were distributed by the researcher to a representative at each of the three institutions described in 3.2.1 and 3.2.2.1. The instruments were accordingly distributed by the representative to the participants who were asked to fill in the background



questionnaire and complete the tasks individually. The participants completed the tasks in the same manner that the instruments were carried out in the test-run. That is, the participants were asked to read the email and choose one answer from the choices that best described their conceptualizations of time and aspect of each given verb form. In the case that no choice actually described their conceptualizations, the participants were asked to supply an answer in their own words. Upon completion of the tasks, the papers were collected by the representative of each institution and subsequently returned to the researcher.

(2) The second phase of data collection was conducted with the English Major undergraduate students at Dhurakij Pundit University, recruited under the process as described in Section 3.2.2.2. The sixty-six students, classified into the intermediate and low English proficiency (NNS-I and NNS-L) groups, performed the test in two separate classrooms. The students were asked to complete the background questionnaire in Thai. Then, the test tasks were administered to the students in both groups. In order to avoid misunderstanding of the instructions and the terminology used as descriptors for time reference and aspectual property, the students were also given a Thai translation attached to the English version of the time and aspect elicitation questionnaire.

There was no time limit for the participants to complete the tasks. However, based on the test-run of the instrument, the time for the actual test administration was approximated to be 20 to 30 minutes.

### 3.4 Data Analysis

As native English speakers were classified as NS controls, the NS responses were used as a baseline for data analysis. However, native English speakers exhibited variations in their responses. Thus, in identifying the choice that represented the NS ‘acceptable’ response, the time reference and aspectual conceptualization for each tense-aspect item chosen by the highest number of NSs were selected as the ‘acceptable’ time reference and aspectual property against which all those of the NNSs were compared. After the results were tabulated, the data were converted to percentages due to the unequal size of the NS group ( $N = 15$ ) as opposed to the size of the 3 NNS groups ( $N = 33$ ). The following descriptive statistics were used:

- (1) frequency distribution
- (2) percentages
- (3) mean values