

CHAPTER III  
RESEARCH METHODOLOGY

The purpose of this research was to evaluate the achievement tests used in BARS program, Myanmar Institute of Theology. This chapter presents how the study was conducted under the following headings:

- Research procedure and data collection
- Participants
- Research instruments
- Data analysis
- Ethical considerations

PAYYAP UNIVERSITY

## Research Procedure and Data Collection

The procedure for collecting data is presented in figure 1.

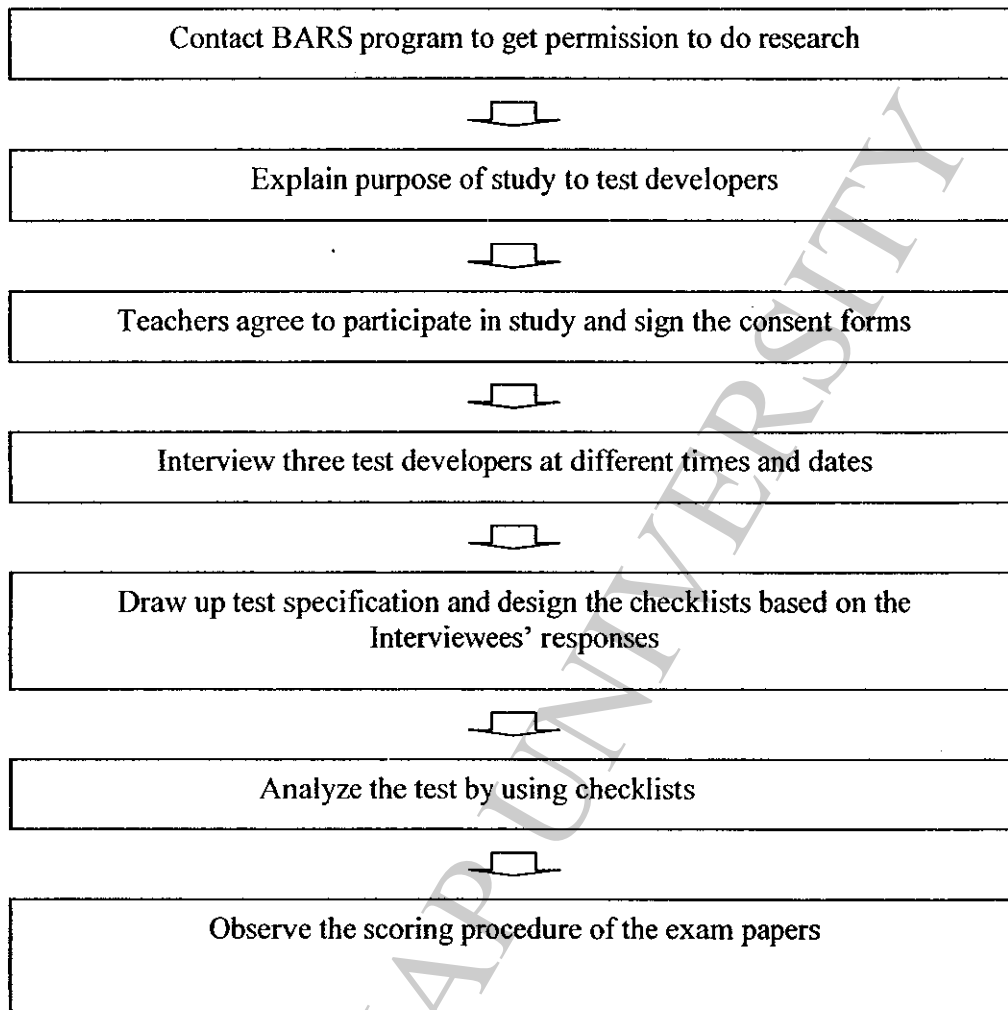


Figure 1: Overview of research procedure and data collection

From the flow chart, contacting the Dean of BARS program to get permission to do the research at their school was the first stage. Then, the purpose of the study was explained to the test developers and the interview dates were set. The test developers signed ethical consent forms before being interviewed. After that, the three test developers were interviewed individually on different dates. Then, the checklists were designed according to the test specifications based on the interviewees' responses on test construction. Afterward, the first year BARS English exam took place. The scoring procedure for the test was observed. These stages are described in more detail below.

### Setting and Participants

#### First year English course

This is a course offered in the BARS (Bachelor of Arts in Religious Studies) program. The pre-intermediate level of *New Headway* English course book (Soars & Soars, 2000) is used as core material for the first year students. There are six teachers for this first year course and all the teachers have at least two years experience in teaching English. Among these six teachers, three teachers teach speaking, reading and writing skills from *New Headway* while the other three teach grammar, vocabulary and listening skills from *New Headway*. Apart from *New Headway*, the teachers use an in-house vocabulary supplementary book too. There are 6 classes and a total of 146 students in this first year. These students had to take an entrance exam which is set in English before they entered into this program. They had to get at least 70 % to be able to attend the first year of the

program. Before the research was conducted, they had attended the first semester of their first year from October 2006 to February 2007. Among the students, half come from the capital city and the rest are from different parts of the country. The English proficiency levels of the capital city inhabitants are higher than those from the countryside.

#### First year achievement test

This is a test that first year BARS students have to take at the end of the semester. The test usually takes place at the end of each semester. As the program offers two semesters a year, the students have to take two achievement tests per year. The test is developed by some experienced teachers. The test usually includes assessment of language skills: writing, reading and speaking as well as grammar and vocabulary. The test results are the deciding factor for the students determining whether they are able to attend the next year or not. If students fail the test, they need to re-take the exam later. Hence, this test is a high stakes test as the results of the test are used to assess whether the students have achieved what they should have and whether they qualify for the next level or not.

#### Participants

The participants were three English teachers who developed the English test for the first semester exam. The three teachers who developed the test are not chosen by the head of the department but by their colleagues among the teachers of the first year English class.

These teachers have teaching experience of at least 4 years. They are university graduates majoring in English. The age of the teachers ranged between 26 and 40.

### Research Instruments

There are three kinds of instruments used in this study. They are interviews, checklists and observation.

#### Interview

The first instrument used was interviews. The purpose of using this instrument was to find out the basic factors in constructing this achievement test, and to obtain information by actually talking to the test developers. The interviewer asked questions and the subjects answered in a face-to-face situation which allowed free and open response, and flexibility. The interviews helped the researcher gain open and direct responses from the subjects.

Participants were free to ask any questions concerning the study and the role they had to play, before being interviewed. The researcher encouraged them to respond openly and freely to each questions and assured them in the consent form that their responses would be anonymous.

In this study, the researcher used a structured interview to get responses from these three participants (see APPENDIX-A). The total time of interviews was 30 minutes. The interview questions consisted of 14 items. All of them were open questions. The

interview questions were concerned with test construction process and the scoring procedure. The interviews were conducted in Burmese. The responses were recorded by using Multiplayer-3 (mp3) recorder and the responses were transcribed for data analysis.

### Development of Checklists

Checklists (see APPENDIX-C) were used in this study to analyze test content for content validity and reliability. The checklists contained the entries to check for content validity of the test of the test factors. The checklists were designed according to the test specifications. The test specification for this achievement test was written by the researcher based on New Headway contents and the responses of the interviewees (see APPENDIX-B). The test specification has three main parts as the test is divided into three main sections: reading, grammar and vocabulary, and writing.

Three checklists were developed to assess the three different sections of the test, reading, grammar and vocabulary, and writing. These checklists consisted of 3 different categories: 1. skills and structures tested, 2. texts and tasks, and 3. scoring system (see APPENDIX-C). The first category was developed in order to see what language skills and structures are intended to be tested and what was in the real test. The checklist items for each section are based on the *New Headway* textbook contents and the interviewees' responses.

The second checklist, texts and tasks inquires about the type of text, the techniques that are used in this test, the tasks that students are required to perform and the clarity of tasks. In this part, the checklist items were written by using interviewees' responses.

Finally, the scoring system was analysed to assess what type of rating scale was provided for the test. This category was also based on the interviewees' responses.

For investigating the reliability of the test, the researcher originally planned to use the split half method for estimating the reliability of the test. It is one of the internal consistency methods. In this method, the subjects take the test in the usual way, but each subject is given two scores. One score is for one half of the test and the second score is for the other half. The two sets of scores are then used to obtain the reliability coefficient as if the whole test had been taken twice. This method could be appropriate method for estimating reliability of the whole test. However, the achievement test of BARS program consisted of 5 items each in most of the sections and the writing section contained only one test item. Therefore, it was not possible to split the test items into two parts, which are equivalent, through the careful matching of items. Assessment of reliability therefore had to rely on the judgment of the researcher with the aid of the checklists described above.

#### Observation

The scoring procedure of the test was observed in order to collect data for assessment of the reliability on the scoring of the test papers. The focus of the observation was to investigate what kind of scoring procedure took place, how the examiners scored the test papers, and to inquire into the experiences and quality of the examiners. Notes were taken while observation of the scoring of the test papers. The data was then analysed later.

## Data Analysis

Data analysis is described below.

### Analysing interview data

The transcriptions of interviewees' responses were translated into English. Then, the data was analyzed by using the 7 stages of test construction process discussed in chapter II.

### Use of checklists

The test contents were checked for content validity by using the checklists. Checklists are used for various purposes in different studies. Weir and Wu (2006), for example, used checklists in their case study for comparing the tasks in different forms qualitatively in terms of content. In this study, three main checklists were used as there are three main parts in this test. The first checklist was for reading section and three test formats in the reading section were evaluated. The second checklist was for grammar and vocabulary section and eight test formats included in this section were analyzed. The checklist for writing section investigated the item of testing writing. The contents in the real test were compared to the checklists. The results of the checklist analysis for content validity are discussed in the following chapter.

In addition, the checklists were also used for assessing the reliability of the test factors such as the testing type (whether it is subjective or objective), the responses



required in the test item (whether there are one or more than possible responses), the instructions for the test items (whether they are clear or not) and the language of test items (whether it is ambiguous or appropriate). The results of the checklist analysis for the reliability of the test factors are discussed in following chapter.

### Observation

During the observation of the scoring of the test papers, notes were taken by the researcher to create a record of the scoring procedure. The experience of the scorers and the scoring procedures for each section of the test were also noted. The notes and record of the scoring procedure were then analyzed for the reliability of the scoring factor. The results of the observation were discussed in the following chapter.

### Ethical Consideration

A consent form for the test developers (see APPENDIX-D) is provided in this research to let the person know clearly the terms of understanding concerning protection of anonymity. The teachers' name and position is not revealed in any public source in order to make sure that their anonymity is maintained.

## Summary of the Chapter

This chapter has presented the research methodology consisting of research procedure and data collection, participants and settings, research instruments, data analysis, and ethical considerations. The research results are provided in the following chapter.

PAYYAP UNIVERSITY