# **CHAPTER I**

## INTRODUCTION

This chapter discusses the background of the problem, statement of the problem, the study's objective, scope and limitation of the study, the study's significance, the rationale of the study, the hypothesis of the study, and relevance of the research.

### A. BACKGROUND

this research aims at finding the correlation between EFL Students Listening Effort and their Fatigue. It is essential to conduct this research, for listening is one of the fundamental skills to be mastered due to its significant contribution to improving other English skills. Besides, people are said to do measurably more listening than speaking (Brown, 2004). The student listening effort is the subject which juxtaposed as a model of attention to hearing and proposed a heuristically practical Framework for Understanding Effortful Listening (FUEL); according to this research, I tend to investigate the quantity of EFL students' listening.

Among the four primary language skills, listening plays the most significant role in communication (Afsharrad & Nafchi, 2015). Listening takes up 40-50 %; speaking 25-30 %; reading 11-16 %. And writing about 9 % of time spent communicating. It is in line with the logic that acquisition is made only, and learners perform enough comprehensible input absorption. Therefore, sufficient listening skills contribute to the positive development of spoken language proficiency (Gilakjani & Ahmadi, 2011).

Literacy success is co-determined by skill and motivation, with early school success predicting long-term achievement. Despite numerous assessments for early literacy skills, few validated, and efficient measures are available for initial literacy motivation. To assess the viability of measuring students' literacy motivation before any formal instruction, The writer developed and validated the Survey of Early Literacy Motivation (McTigue et al., 2019). The researcher's observation toward SMP 8 Bandung students shows that listening skills are challenging language skills to master. All the students admitted that lack of ability to recognize utterances uttered by English speakers is why they are suffering from listening. Therefore, intensive listening is identified as their fundamental problem that needs severe treatment. In this situation, the teachers need to find an appropriate technique in listening to teaching to help them overcome the addressed problem.

The problem as foreign learners (EFL) are dealing with the listening course subject, precisely, methodologies of listening course sometimes do not reflect what student capability needs and the level of cognitive students, the student effort concept propose the technique of individual level of listening course, besides the theories, said that transit of hearing-impaired

individuals caused fatigue, the listening effort needs a more extra approach man by teachers in implementation, despite its importance, numerous studies, one of which is (Hamouda, 2013). The author has received a report that EFL learners have severe deficiencies in listening comprehension. Listening gets less attention than other skills from both teachers and learners because they pay much more attention to English Grammar, reading, and vocabulary (Osada, 2004). Further research also indicated that improper technique of teaching listening draws learners into a severe problem with their listening progress (Afsharrad & Nafchi, 2015).

To this extent, the current study is different from the previous studies on one central point. The previous studies focused on improving the advanced EFL students' macro skills of listening and beginning EFL learners' phonemic perception. Listening Effort is a modal skill to determine language results. According to the theory of Effort, the deliberate allocation of resources to overcome obstacles in goal pursuit when carrying out a task, this definition of Effort is consistent with (Kahneman, 1973). Attention and effort as the capacity supplied to meet the ability demanded when a person performs a task, synchronizing to the theories, to trigger the reaction of students junior high school, the cognitive ability would attract to compose extracting meaning from the sound.

The schematic representation of the integrative model of effortful control is divided into several aspects. The construct of the effort involves the following three factors:

- 1. The effort mechanism is a neural network, including a finite number of processing units (PU).
- 2. These processing units generate an effort signal.
- 3. A feeling of effort raising consciousness once the signal of action is generated.

The effort's mechanism fulfills the primary function of making decisions regarding the intensity and the direction of the engagement in ongoing or future tasks. Decisions are determined by the integration of various input signals related to the task constraints (e.g., number of alternatives), immediate and delayed rewards (e.g., financial gain, social approval, or satisfaction of biological urge), or punishments (e.g., financial loss, social disapproval, or painful experience), and the current state of the organism (e.g., level of arousal or group of blood glucose). The mechanism of effort produces two main outputs: the effort signal and the autonomic signal. The strength of the effort signal depends on the number of processing units recruited to achieve the task's goal. As the task difficulty (TD) and time on task (TOT) increases, the number of processing units recruited increases proportionally. The effort signal exerts control over task-related brain regions, helping them select relevant task features and inhibit irrelevant ones. The autonomic password is sent to the sympathetic system to mobilize energy. The feelings of effort would correspond to the awareness of the costs required to achieve the task's goal. The feeling of fatigue would compare to the high intrinsic costs that could prevent the organism from coping with a future threat. (André et al., 2019)

## **B. THE RESEARCH QUESTION**

Based on the background of the study, the problem of the study is formulated as follow:

- 1. What is student listening effort?
- 2. What is student fatigue?
- 3. How significant is the correlation between EFL students' listening effort and their fatigue of the VIII SMP 8 Bandung students?

### C. THE RESEARCH OBJECTIVES

Related to the questions formulated above, the purposes of this research are as follows:

- 1. To find out the students' listening effort.
- 2. To find out the student's listening fatigue.
- 3. To find out the correlation between students' listening effort and their fatigue.

The study investigates the correlation between students listening to Effort and their Fatigue of VIII SMP 8 Bandung students based on the research problems.

### D. SIGNIFICANCE OF STUDY

Based on the research problem, the study is intended to investigate the correlation between students listening Effort and their Fatigue of students of VIII SMP 8 Bandung

1. Theoretically

The researcher hopes that the result of the study will prove that there is a correlation between students listening Effort and their Fatigue.

2. Practically

The writer also expects that the result of this study will give some contributions to:

- a. For the students of the English Education Department in UIN SGD.

  This research can enrich the students' knowledge that they can use the method to adapt to teaching listening with proper steps. Also, they know the advantages of listening Effort as a motivation for them to improve their listening skills.
- b. The English teachers
  - The teachers know the level of the students' listening skills. Furthermore, the result can become a foundation and inspiration for the teacher in determining the strategy of teaching English, especially teaching listening skills in English courses. It can also be valuable information that song as one of the authentic materials can also improve the students' listening skills.
- c. The writer

The writer can enrich his method of teaching listening because it will give some knowledge about the Effort as a medium of instruction listening to the writer. Therefore, the researcher knows the benefit of listening to English skills to improve listening effort, and it can be applied in future teaching.

This study focuses on the study correlation between listening effort and their fatigue of the students of SMP 8 Bandung. In this research, the writer cannot take all of the students in SMP 8 Bandung because we have limited time to do research. Besides, it is impossible to take all the population in that school because those are not the researcher's class, so we feel reluctant to research all of the students there. Finally, the researcher decides to take one class, SMP 8 Bandung.

### E. RATIONALE

In the process of determining the chapter topic and realm subject skill, listening skill has most played a role in learning a language, because in basic human learn from imitating other humans, after that, we thinking about "hat is made peoples goes wanted to do something and learn it" "absolutely it was just "interest" then after designing theories of interest, the author decides to remove interest because there are no theories about learning the subject with interest, commonly people used "effort" "on research to replace interest became more visible to research.

An effort is familiar in researches, often used effort in the study of listening, to measure and assessed listening there is three ways have to do, first using single task paradigm, second using behavioral measurement, and the last scanning FMRI, for a bachelor it was out of capability skill and subject they have, so the author made a boundary to explore the topic, with using study correlation to comparing subject than not to examine it deeply, the primary research of study correlation is a comparison between two variable. The measurement that is applied in this research is the single-task paradigm. Before talking single task paradigm to used the study correlation, we should have two variables. Here the listening effort is placed as the first variable. We put it on fatigue for the other variable, according to (Hornsby et al., 2016). Thus the utility of sAA as a biomarker for fatigue in individuals with hearing loss remains unclear. Finally, melatonin is another hormone that has been examined in fatigue research. The hearing loss caused by fatigue and hearing loss is a subject that listening effort tried to extract with competing for the gap. Fatigue may distract directly from the listening effort.

The cognitive domain is a data extractor, which deals with speech and sound and then processes it to listen. Listeners are forced to rely greatly on cognitive systems to successfully extract meaning from an acoustically degraded speech signal compared with a clear signal (Peelle, 2018). The process of effort here is analyzed to compose all possibilities results. The fatigue is affecting the listening the same as hearing loss or losing concentration, etc. This distraction is less observed than practice and listening theories, especially the research taken an example from English Foreign Learners.

#### **Scheme of Research**

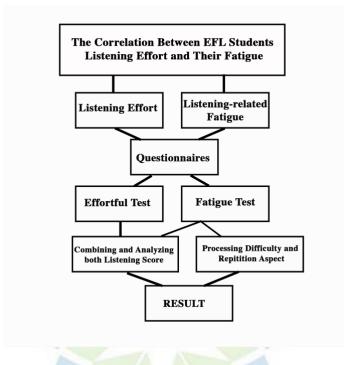


Figure 1.1

#### F. HYPOTHESIS

From the problem the writer has stated above, the writer submits the hypothesis as follow:

- Alternative hypothesis (H<sub>a</sub>)
   There is a correlation between students listening Effort and their Fatigue in the VIII SMP 8 Bandung in academic 2019/20120
- Null hypothesis (H<sub>0</sub>)
   There is no correlation between students listening Effort and their Fatigue in the VIII SMP 8 Bandung in academic 2019/2020

# G. THE PREVIOUS STUDIES

Following a recent interest in cognitive involvement in hearing, the British Society of Audiology (BSA) established a Special Interest Group on Cognition in Hearing in May 2013. In an exploratory group meeting, the ambiguity surrounding listening effort and fatigue was discussed. The group decided to develop a "white paper "on listening effort and fatigue to address this problem. This is a discussion document followed by an international set of commentaries from leading researchers in the field. An approach was made to the International Journal of Audiology editor, who agreed to this suggestion. This paper, and the associated commentaries that follow, are the result. (McGarrigle et al., 2014)

Thirty subjects, divided into two groups, participated in the experiments, which took place in February and March 2015. The first group consisted of 15 listeners with NH aged between 21 and 31 years (mean age = 24.6, SD = 3.2; male/female = 9/6) recruited from different faculties of Carl von Ossietzky University in Oldenburg. They had no experience with rating listening effort. The mean pure-tone average (PTA4; an average of 500 Hz, 1 kHz, 2 kHz, and 4 kHz of the better ear) was 1.9 dB for the left (SD = 4.5 dB) and 2.3 dB for the right ear (SD = 3.1 dB). For the second group, 15 listeners with HI aged between 50 and 78 years (mean age = 67.93, SD = 7.79; male/ female = 9/6) took part. The mean PTA4 was 41.2 dB HL for the left (SD = 10.6 dB) and 42.0 dB HL for the right ear (SD = 12.7 dB). The hearing loss of the listeners is shown in Figure 1. These subjects were experienced HA users and wore their own HAs (receiver-in-the-canal HAs) with their traditional settings. The year of purchase of the HAs was, on average, 2012 (SD = 1.65 years), and all HAs had an automatic program, which was used in this study. No special speech-in-noise program was used. (Krueger et al., 2017)

Our consensus resulted in a proposed FUEL. Our FUEL interprets score concepts from (Kahneman's, 1973) seminal Capacity Model of Attention concerning listening effort and fatigue studies. The 3D plot in Figure 2 based on our FUEL provides a way to visualize how the demands and motivation dimensions could independently or interactively modulate effort. Although the scales for the measurements remain unknown, by visualizing the combined effects of demands and motivation on effort, the 3D figure offers a tool that may inspire a new era of research on listening effort and fatigue that will yield knowledge that can be translated into practice. Areas of practice that could benefit from measures of effort include assessing candidacy for particular technical and therapeutic interventions and evaluating outcomes. Another important area of practice is cognitive screening for dementia; this area involves assessing cognitive ability but is distinct from the measurement of listening effort or fatigue. (Pichora-Fuller et al., 2016)

In the development of research in this field, there is a gap to continue data collection and development. The first is that reviews and reviews on listening effort are still rarely discussed by local research because the keywords in the search for data are based on previous is limited, so based on the last, this research is taken and modified regularly. Periodically, the part that experiences the most gaps is in the data collection and processing method section, because in adjusting the target to be taken and the method to be used, it cannot be carried out as usual research, or it can be said that there is additional treatment so that the results of this research are maximized supported by all The form of consideration and analysis obtained from this research gap, is a good thing for this research process.