

CHAPTER II

REVIEW OF RELATED LITERATURE

This chapter focuses on description of theoretical review. Some theories in this chapter are related to intelligence, IQ test, Multiple Intelligences Theory, Benefits of Multiple Intelligences in EFL, English learning achievement and Previous Studies.

2.1 Intelligences

Intelligence is the one of some factors which effects in learning process. It can be define by the ability to solve the problem, create a new product, etc. Intelligence was first created by Charles Spearman. Based on Gardner, intelligence has ability to devise solutions the problem, and create product (Gardner, 1993:63).

Intelligence is important thing in language learning. Houman et al (2015) claims that intelligence is one of the specific effective elements in language learning. They also states that intelligences have important roles during acquiring the language (Houman, Jafar, Parisa, & Alireza, 2015:288). It is the essential to know the intelligence of the student.

2.2 IQ Test

IQ test was created by Alfred Binet in the early 1990. IQ test consists of Stanford-Binet, the Weshsler range of test (WISC), and the British Ability Scales. (Fox, 2005:184). It is only measured linguistic and logical mathematical intelligence. As Christison and Kennedy 2001 cited in Ziyad (2010) state that some psychologist criticize IQ test because it only assess linguistic and logical-mathematical intelligence. They state that each person possesses eight intelligences, such as musical, naturalist, etc. Almost people think that the students who have high IQ, they also have high score in learning achievement, and vice versa. It is supported by Brown, he says students who have high IQ, and they are to be successful in learning second language (Brown, 2000:101). In

contrast, in real situation, the students who high IQ, they get low score in learning. This is a case found by Putri (2015) who conducted the research about the correlation between IQ score and English achievement. The result of her research shows that the student who high IQ scores, they obtain low score in English achievement.

The IQ test has strength and weakness. According to Fox (2005) there are some strength and weakness. The strength of IQ test is the test which can predict academic achievement well. However, the weakness of IQ test is it cannot facilitate the teacher to create the lesson plan because IQ test only show the average score is unclear.

2.3 Multiple Intelligences

2.3.1 History of Multiple Intelligences Theory

Multiple Intelligences is the reverse of IQ. Theory of Multiple Intelligences was developed by Howard Gardner, a Harvard Professor in the 1980. He was not satisfied about the pure intelligence or general factor which measured by using IQ (Intelligent Quotient) test since this test only measured the linguistic and mathematical intelligences. Based on that situation, Gardner claimed that each person not only posses linguistic and mathematical intelligences. In his book *"Frames of Mind"* in 1983 he was listed at least seven intelligences which everyone possess and can developed all of their intelligence based on their need.

There are several points of Multiple Intelligences Theory. Firstly, each person has all of eight intelligences. Secondly, intelligence does not work alone. It is interconnected with each other. Next, there are ways to be intelligent within each category. For example musical intelligence, the student who cannot play the music, yet they prefer listening to music while they studying. The last is the proficiency can develop through all eight intelligence. For instance, interpersonal intelligence can develop through cooperative learning (Amstrong, 2009:15-16).

Almost people think that people who are good playing music because they are talent in music. But, Gardner argues that who are good playing music, they have musical intelligence. Gardner states that intelligences are not only cognitive intelligence, but good playing music is also intelligences. In 1999, Gardner added one of intelligence became eight intelligences (Amstrong, 2009:6). They are

linguistic intelligence, logical-mathematical intelligence, visual-spatial intelligence, bodily-kinesthetic intelligence, musical intelligence, interpersonal intelligence, intrapersonal intelligence, and naturalist intelligence (Amstrong, 2000:2).

2.3.1.1 Linguistic Intelligence

Linguistic intelligence is the ability to use language, orally or written to convey the meaning. According to Gardner in the Amstrong's book, linguistic intelligence is the capacity to manipulate the word, to use the language appropriately in their life (Amstrong, 2000: 2). People who have this intelligence can be called smart word. People who have this intelligence can be a writer, journalist.

2.3.1.2 Logical-mathematical Intelligence

Logical-mathematical intelligence is the ability in using number and reason. Gardner states that this intelligence is the capacity to manipulate the number and use logical thinking to learn and solve the problem (Amstrong, 2000:2). Generally, the students who have this intelligence, they enjoy with calculation activities and have logical thinking to learn something and solve the problem. This skillful can be creating a mathematician, scientist.

2.3.1.3 Visual-Spatial Intelligence

Spatial Intelligence is the ability to learn with spatial-visual world, for example using images, or pictures. So, the student who posses this intelligence, they can learn and accept the knowledge with their sight. According to Gardner, spatial intelligence is the ability to create the products in their life with their visual. (Amstrong, 2000:2). Typically, the student who posses this intelligence enjoy drawing, plating puzzle, so on. Students are competent a painter, architect.

2.3.1.4 Bodily-Kinesthetic Intelligence

Bodily-kinesthetic intelligence is the ability to express their ideas using their body movements. The student who posses this intelligence, usually enjoy making things, movement, or the activities which concern with their body. People who have this intelligence can be a dancer.

2.3.1.5 Musical Intelligence

Musical intelligence is the ability to express their idea in musical forms. The people who possess this intelligence are musical, composer, etc. People who have this intelligence can be a singer, composer of the song. Commonly, the people who possess this intelligence, they can study or work with music in the background. So, in this intelligence, the student can study or learn while listening to the music.

2.3.1.6 Interpersonal Intelligence

Gardner claims that interpersonal intelligence is the ability to understand and appreciate the feelings of other people (Armstrong, 2000:2). Generally, people who have this intelligence are able to communicate very well, they are capable of understanding about other's feeling and have many friends in their life. People have a talent to a teacher, consultant.

2.3.1.7 Intrapersonal Intelligence

Intrapersonal intelligence is the ability to understand his/her feeling, strengths and weakness. This intelligence also can manage their feel themselves. The students include self learners because they prefer to learn by self than in groups.

2.3.1.8 Naturalist Intelligence

Naturalist intelligence is the capacity to sensitivity with nature, such flora and fauna. The activities for this intelligence are creating observation, outdoor activities, background music in the form of sounds created in the natural world, and window onto learning. (Armstrong, 2009: 63).

2.4 Benefits of Multiple Intelligences in EFL

Multiple Intelligences have some benefits in EFL such as it can help the teacher to plan the English material with various way based on their student's intelligence. Derakhsan & Faribi (2015:69) identifies student's Multiple Intelligences profile, it as a tool for teacher to create various methods for teach their student based on their student's intelligence. Haboush (2010:48) also states that the benefit of Multiple Intelligences can develop lesson plan which use during the teaching and learning process. It is also supported by Arnold & Fonseca, they

state that Multiple Intelligence can guide the student to success in language. (Arnold & Fonseca, 2004:130).

2.5 English Learning Achievement

English learning achievement is the result of English learning process and can apply this knowledge after following the learning process. According to Husnia (2014:18) states that achievement is the way to identify the success during learning process. Generally, every school has the target score which the students have to achieve. The students who obtain more than the target score, they are categorized as high achiever. On the other hand, the student who achieves low than the target score, they are categorized as low achiever.

2.6 Previous Studies

There are some previous studies that are done by using multiple intelligences. First, Hajhashemi Karim, Universiti Putra Malaysia (2010) who conducted the research with entitled "Relationship between Multiple Intelligences and Reading Proficiency of Iranian EFL Students". His thesis discussed about the relationship between multiple intelligences and reading proficiency of Iranian EFL pre-university students and to know whether is there any significant differences between male and female students in their reading proficiency scores. The data were gathered by questionnaire, and TOEFL test. The result of his research showed that there is no significant difference between their multiple intelligences and their reading proficiency scores and there is no significant gender difference in their multiple intelligences except their bodily-kinesthetic intelligences. The similarity between his research and this research is using multiple intelligences. Meanwhile, the differences between his research and this research are the aim of the research and the participants of the research. Firstly, the aim of his research are to observe the relationship between multiple intelligences and reading proficiency of Iranian students and to know is there any significant gender in their multiple intelligences and their reading proficiency scores. The aim of this research is to analyze the multiple intelligences profile and their English language score. The second difference is the participants. The participants of previous research are 128 pre-university students who studying in

Tehran in the academic year 2008-2009. The participants in this research are eight grade students of SMP Muhammadiyah 15 Surabaya.

Second, Busari, University of Ibadan, Nigeria (2014) who conducted the research with entitled “Enhancing Academic Performance of Disabled Students through Multiple Intelligences Based Programmes”. His research discussed about the effectiveness of multiple intelligences based programme in enhancing academic performance of disable student learners in elementary of Omoyeni special school in Nigeria. The research design is pre-post quasi experimental design. The instruments of this research are demographic data such as age, parents’, educational background, etc and multiple intelligences questionnaires. The result of his research showed that multiple intelligence based programme was effective to improve their academic performance. The similarity between his research and recent research is using multiple intelligences. Meanwhile, the differences between his research and this research are the aim of the research and the participants of the research. Firstly, the purpose of his research is to find out the effectiveness of multiple intelligences based programme in enhancing academic performance of disable student learners. The purpose of the recent research is to analyze the multiple intelligences profile in English class. The second difference is the research design. The research design of previous research is pre-post quasi experimental design. The current research is descriptive qualitative research.

Third, Rayesh, Emir Eka Putra, Universitas Islam Negeri Islam Maulana Malik Ibrahim Malang (2016) who conducted the research with entitled “Hubungan Gaya Belajar dengan Multiple Intelligences Siswa Berprestasi Kelas IV dan V SD/MI di Kota Malang”. The purpose of his research is to discuss kind of the learning styles and multiple intelligences by student achievement in fourth and fifth grade student in Malang. The research design was correlation design. The instruments of this research are survey, report book in odd semester, and the student achievement data of each school. The similarity between his research and recent research is the research instrument, such as questionnaire. Meanwhile, the differences between his research and this research are the aim of the research and the participants of the research. First is the purpose of the recent research is to

analyze the multiple intelligences profile in English class. Second is the participant of the previous research is all of fourth and fifth grade student achievement in Malang while the current research is only eight grade student especially grade 8A in SMP Muhammadiyah 15 Surabaya.