

## **CHAPTER II**

### **LITERATURE REVIEW**

This chapter discuss about the literatures related to the focus of the research study. This study, investigate on the differences of learning style between female and male students who takes English as Academic Purpose (EAP) lesson for Management students in Muhammadiyah Gresik University. Hence, this chapter will no longer discuss about the variety of learning styles which actually there are some expert define and explain about learning styles. But here the writer tries to focus one of them that is the six main types of learning styles which are visual, auditory, tactile, kinesthetic, individual and group. Those six main types can be assessed and included in PLSPQ created by Reid (1987). In addition of this, this chapter will discuss some differences of learning styles between female and male students in their learning styles. There have been some studies before discussed about learning styles and gender. Most of them revealed that there is significantly different between female and male students in the way how they prefer in learning.

#### **2.1 Theories of Learning Styles**

Due to learning environment is one of factors which can make the students comfort in learning process, teachers should know and understand about the way how students learn. The learning styles which the students prefer and enjoy with, will make them easily in obtaining the information of learning. Every student has their preferences in the way how they learn. It named as learning styles. According to Dunn and Griggs (1998) as stated by (Vaseghi, Ramezani, & Gholami, 2012) that learning styles is the favorites and attitude way of learners in their learning. In the same study, learning styles in a family are different. No matter what, experience and genetic could help students in developing their learning styles.

Based on (Vaseghi Reza, 2004) about learning style is the way when individual start to think concentrate, how to process information and retain new

information that is difficult to think in different perceptual. Brown, 2000 stated that styles can be the person styles individually that can differentiate that person from someone else. He defines learning styles as the way individuals receive and process the information in the learning situation. And the students have their own way in receiving and processing the information.

According to some definition from some experts above, here the writer discussed about some explanation about learning styles from some experts. They are:

### **1. Learning Styles model by R. Dunn 1983 and Reinert, 1976**

The other research from R. Dunn, 1983 and Reinert, 1976 as stated in (Reid, 1987) demonstrated four basic perceptual learning styles of the learners:

1. Visual learning: learners like reading and studying charts. It related with the view and sight of students. The learning process which involves eyes to easily understand the information.
2. Auditory learning: students enjoy the learning process through lecturing or listening the teachers or lectures. Students also easily process the information through audiotapes without any visual thing viewed. In the other words, auditory learning always involves hearing to catch the information easily.
3. Kinesthetic learning: students are active in moving their physical body in the way how they learn. This learning is total physical involvement. Students will be more focus in learning which needs touching or feeling to know and understand the object well.
4. Tactile learning: it is a hands-on learning such doing experiments in laboratory. They also more creative in creating or building some things.

### **2. Learning Styles model by Dunn and Dunn**

The other model of learning styles from experts is learning styles by Dunn and Dunn's (1978/1992). As stated by (Vaseghi et al., 2012) about Dunn and Dunn learning styles model, it is determined learning styles based on 21 elements that then can be organized into five stimuli groups. Those are:

1. Environmental. The students will enjoy in doing some assignment while listening to music, or perhaps they prefer and enjoy learning in quiet environment. It involves the environment around the students while they are learning. It includes the light, sounds, temperature even design. Here, the teacher should prepare well in managing the class especially the environment where they learn.
2. Emotional. This stimuli includes motivation, persistence, responsibility, and structure elements. It stated that every student have their own way level of motivation. The writer also agrees that there are different students who have high and low motivation in learning. And for teachers, they should capable in giving their students good motivation in learning. Because, students do not always have low motivation in learning. It can be built and arouse by giving good motivation.
3. Sociological. It is human being, which students need the other students to be able take a good learning process. This stimuli includes social learning which needs learning in pair, peers, or even team and group. In this case, the teacher should know whether the material given will be doing in group, or pair, or even doing by themselves.
4. Physical. This stimuli includes perception, intake, time and mobility. For instance, the students prefer learn through auditory, visual, tactile or even kinesthetic. In this case, teacher should capable in identifying what students prefer in the way they learn.
5. Psychological stimuli groups. The last stimuli is consist of analytic vs. global, right vs. left brain, and also reflective vs. impulsive elements. For instance students needs learn step by step as analytic learners meanwhile for global learners only need seeing the overall images before they learn.

### **3. Learning Styles model by Neil Fleming**

The other theory is from Neil Fleming that was demonstrated the VARK model. Based on web of [vark-learn.com](http://vark-learn.com) which totally discussed about VARK

model by Fleming, it deals with perceptual modes those are Visual, Aural, Read/Write and Kinesthetic.

In a detail, the writer tries to explain one by one about VARK model.

1. Visual learning style: this learning style includes some information which represents what could have been presented in words. Students in this style prefer in obtaining the information through maps, spider diagrams, charts, graphs, flow charts, labeled diagram, and all the symbolic arrows, circles, hierarchies.
2. Aural learning style: this kind of learning style describes information that is “heard or spoken”. Students are easily get the information when they are learning through lecturing, group discussion, radio, email, using mobile phones, web-chat, speaking, and talking things through.
3. Read/Write learning style: the third kind of Neil Fleming style is talking about students who prefer studying through reading or writing. Students with this preference tend to enjoy and have a more power when they give assignment such essay and report. They also interested to learn through PowerPoint, reading the internet, using dictionary and write some diaries.
4. Kinesthetic learning style: in this learning style, students are very interested and easily catch the information through something natural or reality. They use some experience and practice just like simulation of something to make. The key of this learning style is students always connected with reality.

#### **4. Learning Styles model by Reid**

The other learning style which the readers should know is learning styles from Reid 1995. In this theory, the expert defined learning styles as an individual natural, habit, and what individual prefer way of absorbing, dominating, and processing the information and skills. She determined the learning styles into six styles, those are:

1. Visual major. This style makes students learn well from reading some words in books, in a digital book, or even on the board. They will be easily remember and understand information by reading the information. Even

when lecturing in a class, they are able to take some notes while teacher or lecturer explains the information. This style always involved see-sight in some words.

2. Auditory major. In this style, the students prefer listens the teacher or lecturer teaches in a class. They are learning from listening words from spoken. Students in this style, also capable and enjoy learning by reading aloud. It is very useful in learning process through listening audiotapes, class discussion and conversing by teacher.
3. Kinesthetic major. The students with this style are easily understand and remember while they are active in moving their body or physically involved. They are best by learning through experience just like active in participating in activities, participate in role play classroom, or even field-trips.
4. Tactile major. The students with this style have the opportunity to do you hands-on experiences with materials. That is, working on experiments in a laboratory, handling and building models, and touching and working with materials to provide you with the most successful learning situation. Writing notes or instructions can help you remember information, and physical involvement in class related activities may help you understand new information.
5. Group major. Just like with the name, it is group major and it involves more than one student to obtain the information. The students are best in completing their assignment by doing it with one to three students. They also easily remember the information better when they work with group.
6. Individual major. Students who prefer in this learning style are always doing their assignment alone. They will process and understand the information when they are doing it alone. And they get progress when they learn by their self.

For this study, the writer only focuses on the six main types of learning styles which are visual, auditory, tactile, kinesthetic, individual and group. It included in PLSPQ by Reid (1987). According to (Cheng, 2017) that the study wanted to

identify the perceptual learning styles through PLSPQ in Chinese Foreign Language (CFL) that studying Mandarin Chinese language at University Tun Hussein Onn Malaysia. The researcher also wanted to know the relationship between preferences learning styles and individual attributes such as gender and faculty.

The other research from (Jamulia, 2018) which also identified the perceptual learning style through PLSPQ in English Department students in Ternate. The result showed that the major preference learning style is visual learning style, followed by kinesthetic and tactile.

The other two previous study above, there were some other research using PLSPQ by Reid such (Jamulia, 2018) that assess perceptual learning styles to Shariah Department in IAIN Ternate. It revealed that mostly students preferred at visual learning styles (mean=40.2). The other study from (Şener & Çokçalışkan, 2018) described about gender differences and the relationship between learning styles and multiple intelligences of students through PLSPQ and Multiple Intelligence Inventory. The result showed that mostly students prefer in tactile learning style. Meanwhile there was a significantly different in different gender group in secondary school students in Turkey.

According to Ehrman, 1990 as cited in (Cheng, 2017) stated that individual differences have the important role in second or foreign language. It also stated that individual differences included age, gender, culture, motivation, learning style, learning strategy, and learning aptitude.

From some previous studies and due to the Reid classification of learning styles into six main types, Brown (1994) as cited in (Cheng, 2017) stated that it is something prominent or salient in a formal classroom setting. Reid (1987) also studied the perceptual learning styles toward NNS or Non-Native Speakers which the result revealed that among Arabic, Spanish, Japanese, Malay, Chinese, Korean, Thai, and Indonesian students have the different preferences in learning styles. She also stated that Indonesian chose auditory and kinesthetic as major learning styles. Here the writer used Reid learning styles model which also used PLSPQ by Reid to assess and identify the perceptual learning styles at

Management students that appropriate in identifying the learning styles into learning process in EFL students.

## **2.2 Previous Studies using PLSPQ to determine the perceptual learning styles**

From previous studies which discussed about gender and learning styles, revealed that between female and male students have different ways in learning. It also strengthen in the book of Michael Gurian with the title is *Boys and Girls Learn Differently* which stated that between female and male students have a different brain development. In addition of this, they felt a little bit afraid that finally due to the difference of brain could make girls and boys learn differently. It also stated that most of teachers who attended in a workshop admitted that they felt observing their students by how the actual development of students' brain, not how the brain boys and girls work.

Michael Gurian also stated in his book that in a brain has some areas which have different functions but interact each other. In general, there are three layers of the brain are known for distinct functions. For the top to the bottom, there are four lobes, limbic system and brain stem. One of area which links toward human thinking is four lobes which includes left and right hemisphere. It stated that left hemisphere is associated with verbal skills or speaking, reading and writing. Meanwhile in the right side, it is associated with spatial skills or measuring or perceiving directions (Gurian & Steven, n.d., pp. 17–25)

Still in Gurian book, it discussed that in part of brain actually there are brain gender differences. This part of brain has their own functions which impact female and male differently in thinking and learning. It revealed that in one of brain's part which called as Limbic System has the function which can make females tend to have more access to emotively descriptive language in written assignment. It can be said that females are easier in Writing while they are learning language. In addition of this, in the Parietal Lobe of brain's part, that females prefers learning in tactile. Also, in Wernicke's area, it has the function which can make females easily in improving verbal communication skills. Meanwhile, in Brain stem, it has the function which can make male students

easily in respond with physical response when they are emotionally charged. It can be said that males prefer to kinesthetic learning style when they are learning language. Instead of that, in Corpus callosum, it has the function which can impact the female students to process information quickly between two hemispheres and also they will be more efficiently in connecting language and emotion processing centers. (Gurian & Steven, n.d., pp. 17–25)

The article from (Isemonger & Sheppard, 2003) investigated about perceptual learning styles of Korean students. The preferences of perceptual learning were also examined by age, gender, year of study, major field, time spent overseas, and attendance at private language institutes. This study conducted survey and distributed PLSPQ by Reid to determine the students learning styles preferences. The questionnaire was administered to Korean students from a university in Korea itself. Because the participants were from Korea itself, the researchers customized the questionnaire into Korean version with careful attention to the translation. The study revealed that in every factor examined for instance age, gender, year of study, major field, time spent overseas, and attendance at private language institutes have different perceptual learning styles preferences. Such in different gender, female students preferred to kinesthetic and followed by tactile than group learning styles. It showed that female students had 14.11% than male students 13.08%. Meanwhile group in female students had 12.79% than male students had 11.95%

The other study using PLSPQ was the article from (Peacock, 2001) investigating the mismatch between teaching and learning styles could cause learning failure, demotivation and frustration. This study obtained the data from Reid's questionnaire, interview and test. The participants used from 206 EFL students and 46 EFL teachers at Hong Kong university. Using correlation design, the result showed that EFL learners preferred to kinesthetic followed by auditory learning styles with individual and group learning style were the minor favorable. Meanwhile EFL teacher favored kinesthetic followed by group and auditory learning styles. They disfavored tactile and individual styles. Here we can make the underline as the point that EFL learners preferred in kinesthetic style.



Continuing the study from (Isemonger & Sheppard, 2003), the study from (Naserieh et al., 2013) also used Reid's questionnaire to identify perceptual learning styles. The participants in their study were 138 graduate students at Shahid Beheshti University, Tehran, Iran. The questionnaire was customized and translated into Persian to make the participants easier to answer the questionnaire. The result showed that gender affect in choosing the preferences of learning styles. In contrary, there was a difference preference in perceptual learning styles. (Isemonger & Sheppard, 2003) revealed that female preferred in kinesthetic followed by tactile then auditory styles. Group learning style was the disfavor in female students. Not much different, male students also preferred in kinesthetic, tactile then auditory styles. Even female and male students had the same preferences, it had significantly different in every different preference of learning styles.

According to (Obralic & Akbarov, 2012) with the title is Students Preference on Perceptual Learning Style determined the learning styles of students at International University of Sarajevo. The study used qualitative and quantitative design by distributing PLSPQ as the instruments. The factors that affect in perceptual learning styles such nationality, ethnic and also gender were also analyzed in their study. The participants in that study included English Language School at International University of Sarajevo attending level 2. There were 18 males and 16 female participants, 21 Turkey students and 13 students from Bosnia and Herzegovina. Those participants took English teaching program by the English Language School. The result showed that commonly students preferred in Visual style (40.08) as the major, meanwhile group style was the minor (34). In different gender, the major of female students was Visual style (42%) and the minor was Group (12%). Meanwhile the major style of male students was also Visual (39%) and the minor was Group (16%). In Reid's questionnaire, she classified the answer of the respondents in questionnaire to be Major learning style preferences, Minor learning style preference, and Negligible. She divided Major if the result had 40-50 scores, then Minor had 25-39 scores and Negligible had 0-24 scores after multiply the score by two.

The other study from (Cheng, 2017) with the title *Investigation of Perceptual Learning Style of CFL Learners: The Case of Mandarin Classes at University Tun Hussein Onn Malaysia*. She conducted the study to identify the predominant learning style preferences of Chinese as Foreign Language (CFL) learners. She also want to identify the relationship between learning style and individual attributes such gender and faculty. The PLSPQ administered to collect the data. The subject of that study included 148 students from some faculties that took Mandarin Chinese as foreign language. She took 8 faculties which are Faculty of Civil and Environmental Engineering (FKAAS), Faculty of Electrical and Electronic Engineering (FKEE), Faculty of Mechanical and Manufacturing Engineering (FKMP), Faculty of Technology Management and Business (FPTP), Faculty of Technical and Vocational Education (FPTV), Faculty of Computer Science and Information Technology (FSKTM), Faculty of Science, Technology and Human Development (FSTPi) and Faculty of Technical Engineering (FTK). The result showed that Kinesthetic was the first ranked among all learning styles. It followed by Group and Auditory styles. The minor style was Individual style. The differences of gender showed that female students were more prefer in kinesthetic than male students. Meanwhile male students were more prefer in group and auditory learning styles. The differences in faculties, FKAAS and FSKTM preferred in kinesthetic learning styles.

According to (Jamulia, 2018) with the title *Identifying Students Learning Style Preferences at IAIN Ternate* stated that the success in learning can be affected by the students' learning styles. The researcher conducted the research through PLSPQ by Reid at IAIN Ternate toward 116 Shariah Department students. The design of that study was using survey and descriptive design and analyzed with descriptive statistic using Microsoft Excel 2007. The study conducted to determine the major learning style and the minor learning style in Shariah Department students. The result showed that the major learning style was Visual with the mean was 40.2, while the minor learning style was group (33.9).

The study from (Khmakhien, 2007) investigated about Thai EFL learner's perceptual learning style preferences. The study conducted to identify Thai learners' English learning style preferences and to determine the impact of three

variables, those are gender, field of study and learning experiences. Through PLSPQ, the researcher determined that Thai EFL learners preferred in auditory and followed by kinesthetic then group. The minor preference of learning style was individual style. The three variables which has the most impact was field of study, meanwhile learning experience and gender was not really give the significantly different in choosing learning styles.

From the discussion in previous study, the writer tries to identify the preferences students learning style at Management students who took English as Academic Purpose in the academic year 2018-2019 and 2019-2020 to obtain the major and the minor preference learning styles. Due to there were some factors affect the preference of learning styles such as age, gender, ethnic and the other, the writer conduct to determine the differences of learning styles between male and female students in Management. This study uses PLSPQ by Reid (1987) which designed for ESL/EFL students and also designed to research in language learning process.

In PLSPQ by Reid, after the participants give their answer to the questionnaire, Reid classified into major, minor and negligible learning style preferences. According to (Obralic & Akbarov, 2012) that students who have negligible scores (0-24) indicates that they may get difficulty in the way how they learn. If the students have minor scores (25-39) means that students can do well when they are learning. While for major scores (40-50) means that the students have no difficulty in the way how they learn. To get the three classification of Reid, the participants may classify and get the score in every item questions by the scale in the questionnaire. After they give the score in every item question, multiply it by two and sum it to get those three classifications.