CHAPTER II

REVIEW OF RELATED LITERATURE

This chapter discuss about review of the concept of vocabulary, the concept of mnemonic keyword method, and the previous study.

A. The Nature of Vocabulary

1. Definition of Vocabulary

Vocabulary is an important aspect in language learning. To understand a language, it is needed to master the vocabulary. Without mastering it, the learners will get some difficulties in developing the four language skills. According to Oxford Advanced Learner's Dictionary, vocabulary is the total number of words in a language. However, vocabulary should be taught in specific context so that is becomes easier for the learners to remember the words and they can use those in their communication. According to Harmer (2007: 123) states vocabulary is the art of the language teacher themselves. Students need to know the words in context to see how they are used in the process of communication.

Vocabulary is the knowing of words which individual adult or child can attach one or more meanings (Harmer, 2007: 229). It means that vocabulary is important to know, learn, and use. Without having a good vocabulary, the learners cannot meaningful sentences in communication. A person's vocabulary is the set of words which he/she

is familiar with a language. A vocabulary usually grows and evolves with age, and serves as useful and fundamental tool for communication and acquiring knowledge.

Based on the definitions above, it can be concluded that vocabulary is the total number of words, a list or set of words in a particular language that used by the people to communicate with other people. It is also used by the people to express their feelings. Without vocabulary, we cannot say anything or we feel difficult to do it. Vocabulary is very important to encourage students' ability in English.

2. The Importance of Vocabulary

Vocabulary must be important factor in the language teaching and learning especially in English because words are essential for communication. Someone who has limited vocabularies will find difficulties to communicate with others. Actually. Vocabulary can help someone in learning for language skills that are listening, speaking, reading and writing. Vocabulary is a core component of language proficiency, it provides much of the basis for how well learners listen, speak, read, and write (Richards and Renandya, 2002: 255). If learners have enough vocabulary, it makes them easier to know the meaning what they listen and read. Beside that, they can improve their ability in English since a great number of words are needed for the real language use if they have an extensive vocabulary.

An extensive vocabulary aids expression and communication. If

learners mastered vocabulary, it makes learners easier to understand English. It is not far from teachers' responsibility in language teaching. Based on the curriculum of English Indonesia, vocabulary should be integrated in the process of learning which is based on curriculum-based competence. It shows that many ways to achieve students' vocabulary mastery should given by language teaching.

An extensive vocabulary helps learners share their thoughts and feelings with others more effectively. An extensive vocabulary is also central to reading comprehension. The larger a reader's vocabulary, the easier it is for him or her to understand the meaning of a text. It shows that vocabulary is important to understand what they read or feel inderctly through reading, hearing, or feeling.

Wilkins summed up the importance of vocabulary "without grammar very little can be conveyed, without vocabulary nothing can be conveyed (Thornbury, 2002: 13). It means that a language will not be formed without vocabulary. Vocabulary is the core of knowledge which must be belonged by each of English learners. It is success key and important role in learning language, especially for English Foreign Language (EFL) learners. By having vocabulary mastery, they can express their feeling. Without it, communication is very impossible can occur either written or orally. Yet, the communication still can be managed without grammar.

It can be concluded, vocabulary is central element of foreign

language especially English that must be mastered by learners, because without sufficient vocabulary and extensive vocabulary, learners will have the difficulties to learn English. On the contrary, if learners understand the meaning of a text (that reach by mastered vocabulary) it makes them can speak, write, read, and undestand English easily.

3. Type of Vocabulary

Types of vocabulary is depends on individual purpose in convey the meaning (Hiebert and Kamil's, 2005:3). There are two forms, productive that the vocabulary we use when we write or speak and receptive that which we can understand or recognize. These will explain clearly as follows:

a) Productive or active vocabulary

Productive can be called active. Productive or active vocabulary is the set of words that an individual can use when writing or speaking. According to Jackson and Amvela (2000: 28), "Active vocabulary is the words that you use in your own speech and writing, while passive vocabulary is the words that you recognize and can make sense of in the speech and writing of other people." It means that, active vocabulary is made up of words that come to our mind immediately when we have to use them in a sentence, as we speak and write. They are words that are well-known, familiar, and used frequently. Active vocabulary appears when produce the words to sentences in speaking or

writing. It can be activated by other words, because it has many incoming and outgoing links with other words.

In this case, productive or active vocabulary means the stock of words that a person actually uses in his own speech or writing. It is used in oral or written expression the meaning to others.

b) Receptive or passive vocabulary.

Receptive or recognition vocabulary is set of words for which an individual can assign meanings when listening or reading. It means receptive vocabulary is word that a person understands when they hear or read from other. They don't use own speech. Receptive carries the idea that we receive language input from others through listening or reading and try to comprehend it (Nation, 2000: 37).

On the other hand, receptive vocabulary can be used in passive form. It consists of items which can only be activated by external stimuli. By passive knowledge, we mean that students are able to recognize the word but they are not able to produce it (Sarosdy 2006: 71).

It means that, receptive or passive vocabulary means the words that the students recognize and understand them when they occur in a context. Besides, it also can occur when the students need someone to say something that helps them recall the words

meaning. The students usually find receptive or passive vocabulary in listening or reading materials. They can find the meaning of word when they read the text.

4. Teaching Vocabulary in Intermediate Level

In general education there are some student levels. According to Brown (2001: 96) there are some students proficiency levels with the terms "Beginning", "Intermediate", or "Advanced". Now, we talk about students in intermediate level especially in teaching vocabulary. Moreover, Allen (1983: 45) states that at the intermediate level, we teach many of the same kinds of words that elementary students need. It same with, Harmer (2001: 44) between beginner and Intermediate we often class students as elementary. Like lessons for beginners, the intermediate vocabulary lessons include many words for things and persons in the learners daily lives. The age of our students is a major factor in our decisions about how and what to teach. People of different ages have different needs, competences, and cognitive skills (Harmer, 2001: 37).

Before teacher teach intermediate students, they should know the characteristics of the students to manage their material or classroom atmosphere. Allen (1983: 72) said that there are some characteristics of Intermediate students such as:

a. They need to extend their knowledge of vocabulary related to common areas of experience (food, clothing, transportation,

- health, human relations).
- They have already learned many of the basic words, so the teacher can (and should) use simple English explanations for introducing new vocabulary.
- c. Some intermediate students have learned more English than other members of the same class; therefore, different activities for individuals and small groups should frequently be arranged.
- d. Intermediate students have reached a point in their language study where many become discouraged and lose interest.
- e. One reason for the intermediate students possible discouragements the increasing difficulty of the vocabulary which must be learned-especially vocabulary related to the lives of people for whom English is the native language.

As a teacher, teaching intermediate students need more attention. They should prepare well to manage class, material and classroom atmosphere. In addition to acquiring such as new vocabulary words, intermediate students need to learn new meanings for many of the English words they already know. In particular, they need to become aware of what those common words mean to native speakers of English (Allen, 1983: 73). So, it is the important to all teachers to know the characteristic of intermediate student and the way to teach them.

5. Technique for Teaching Vocabulary

Technique is a useful way of learning new vocabulary, in

particular becoming familiar with spoken form of the word and linking it to its meaning (Nation, 2000: 60). Grain and Redman (2003: 23) said there are many techniques of vocabulary teaching.

a. Mime and gesture

In this technique, a teacher can use real object and command. In real object, the teacher can use something available in the classroom such as blackboard, clock, chalk, and so on. In using command, a teacher can give command such as open the door, read this word, etc. another example is teaching part of body, a teacher can give command such as raise your hand, put your left hand on you head, etc.

b. Visual aids

In this technique, a teacher can use pictures, photographs, flashcards, and blackboard. For example, the teacher writes words and their meaning on the blackboard then students come forward to write sentence which related the word. By using blackboard the teacher gives more explanation and correct the students' exercises clearly. While picture is one of visual aids which easy to get. It can be from newspaper, magazine, students' or teachers' handmade. Picture can be used to explain the meaning of vocabulary items. The meaning of vocabulary is in the students' mind before he is given the English word because he can understand it from the picture which drawn.

c. Verbal explanation

In this technique, a teacher should select and provide words will be taught based on the students' level, the aim and the time allocated. A teacher can explain the synonym, antonym, and definition of the words. The use of this technique is often a quick and efficient way of explaining unknown words, but usually the students are bored during teaching and learning process.

d. Contextual guesswork

In this technique, the students learn vocabulary from a text.

The students can understand the meaning of difficult words from a text through deducing meaning from context, deducing meaning from form, word association and word formation.

In addition, according to Thornbury (2002: 155-161) there are many way in training good vocabulary as follows:

- a) Guessing from context is probably one of the most useful skills learners can acquire and apply both inside and outside the classroom.
- b) Using word cards. The learner who have difficulty to find 'imaging', they can be trained to prepare and use sets of word cards.
- c) Using mnemonic keyword method involves the association of phonetic and visual imagery components of a word with its definition. It takes unfamiliar information and makes it more

meaningful and concrete and thus, easier to remember.

6. Problems in Teaching Vocabulary

There are some problems in learning vocabulary faced by the students. Roger (1995: 43) states that the ease or difficulty of vocabulary items depends on a number of factors. They are:

a) Similarity to first language

The difficulty of vocabulary items often depends on how a similar item is in form and meaning to the students' first language.

b) Similarity to English words already known

Once the students have some English words that relate to an English word that they are already familiar which is easier than one, which is not.

c) Connotation

Connotation of the word is another difficult aspect that the learners have to get to grip. For example, either skinny or slim could be used to describe someone who is thin. But these words have very different in their connotation; the speaker actually conveys a particular attitude. Skinny is negative connotation, while slim is positive connotation.

d) Spelling and pronunciation

The spelling of English word can cause problem for students who speak language with very regular spelling systems. Particular spelling patterns can also cause confusion where the pronunciation concerned. For example: through, though, tough.

e) Multi word items

A lexical item may consist of more than one word, as in a compound like tennis shoes, or rally car or a phrasal verb such as to put someone up.

f) Collocation

How a lexical item collocates can also cause difficulty. For example we say that people injured or wounded but things are damaged.

7. Language Testing Items in Vocabulary

The purpose of vocabulary test is to measure the comprehension and production of words used in speaking or writing (Madsen, 1983:

- 12). Types of vocabulary test as follows:
- a) Multiple choice task (Heaton, 1988: 55) Multiple choice tests are a popular way of testing in that they are easy to score (a computer can do it), and they are easy to design (or seem to be). Moreover, the format of multiple choices can be used with isolated word, words in a sentence context, or words in whole texts.
- b) Completion test (Heaton, 1988: 62) The completion items can be used for the testing of vocabulary. Test which present such items in a context are generally preferable to those which rely on single words or on definitions.
- c) Gap-fill task (Thornbury, 2002: 133), Gap-fill tests require

learners to recall the word from memory in order to complete a sentence or text. Thus, they test the ability to produce a word rather than simply recognize it. The best-known example of this test type is the cloze test. In a cloze test, the gaps are regularly spaced. In this way, knowledge of a wide range of a word type is tested. Moreover, the ability to complete the gaps depends on understanding the context. Example: Because of the snow, the football match was __ until the following week.

B. Mnemonic Technique

1. Definition of Mnemonic Technique

Mnemonic means a memorization technique (Kozarenko, 2006: 16). It is derived from a Greek word mnemonikon. The memorization art is called mnemonikon after a Greek goddess of memory, Mnemosine, the mother of nine muses. Modern encyclopedias define that mnemonics is an art of memorizing, a set of method and technique that ease the memorization process and help increase memory volume by creating artificial associations.

Mnemonics technique is circus or a stage trick based on the memorization art such as guessing number, things, dates, or names (Kozarenko, 2006: 16). The trick is performed by two artist using a specially developed code. Mnemonic is a system of inner writing that produces the ability to consecutively record information in to the brain, by transforming the information into a combination of visual images.

Mnemonic is a way of organizing information to make it easier to remember, typically by using codes, visual imagery, or rhymes (Foster, 2009: 123). Then Mastropieri & Scruggs in Access Centre (1998) defined mnemonic technique as a systematic procedure for enhancing memory. They said that mnemonic technique is not an overall teaching method or approach. Mnemonic technique is simple strategy that has been proven to be extremely effective in helping people remember things.

Finally, the researcher concluded that mnemonic technique is memory tool that help people to remember words.

2. Classification of Mnemonics

Mnemonic devices have been differently classified by different scholars. Thompson in Amiryousefi and Ketabi's Journal (2011: 179-180) arranges mnemonic technique into five classes; they are linguistics, spatial, visual, physical response and verbal methods.

a) Linguistic Mnemonic

1) Peg word method

Peg-word method is a remembering number method by changing it into certain shaping objects that are similar with that numbers (Warseno and Kumorojati, 2011: 166). Through peg word method unrelated items can be remembered easily by relatin them to easily memorizable items which act as pegs or hooks (Thompson in

Amiryousefi, 2011: 179).

Peg word method has two stages. At first students are asked to remember number-rhyme pairs like *one is bun, two* is shoe, three is tree, four is door, five is hive, and so on. In the second stage the students are asked to visualize the word and try to link it to rhyming words.

2) The keyword method

It firstly was developed in 1975 by two of psychology, Raugh and Atkinson. It is a method which use words as keywords as a tool for remembering the meaning of target word. This method is new if compared to other mnemonic method. The method has been investigated ever since for its effectiveness in helping learners retain newly learned words in their memory.

Keyword method is a mnemonic method using a means to aid in the information recall in learners with their short term-memory (Condus, Marshall, & Miller, 1986: 69). This method involves the association of phonetic and visual imagery components of a word with its definition (Atkinson & Raugh, 1975). The keyword method, a mnemonic that incorporates visual imagery, can be used when learning a variety of material, but is especially effective when learning new vocabulary words, such as when learning a second

language (Dehn, 2008:283). Essentially, the keyword method is a mnemonic that combines verbal information with visual imagery.

Nation (2000: 313) writes that the keyword method has been compared in experiments with: (1) rote learning; (2) use of pictures; (3) thinking of images or examples of the meaning- instantiation-context-the unknown word is placed in sentence context and the meaning of the word is provided; (4) added synonyms the meaning is accompanied by other known synonyms; and (6) guessing from context.

Keyword means an English word that sounds like some part of the foreign word. In general, the keyword has no relationship to the foreign word except for the fact that it is similar in sound. The keyword method divides vocabulary learning into two stages. The first stage requires the subject to associate the spoken foreign word with the keyword, an association that is formed quickly because of acoustic similarity. The second stage requires the subject to form a mental image of the keyword "interacting" with the English translation; this stage is comparable to a paired-associate procedure involving the learning of unrelated English words. To summarize the keyword can be described as a chain of two links connecting a foreign word to its

English translation.

There are examples of keyword such as to remember the name of "Darwin", the students can use a keyword of "dark wind" by adding visual drawing of the wind that has black color; and to remember the name of "Maryland", the students can use a keyword "Marriage and a land" by adding visual drawing of marriage and a land (Loorayne and Lukas in Joyce, Weil, and Calhoun, 2009: 238). Although keyword method seems difficult, many studies have showed that this method can make learn the foreign language easy (Atkinson in Atkinson, Atkinson, and Hilgard, 1993: 370).

b) Spatial method

1) The loci method

A method of loci is a mnemonic device that uses certain places and are well-known as means of certain words and technical term placement that must be remembered by the students (Syah, 2005: 162). A loci method is the oldest mnemonic (Thompson in Amiryousefi, 2011:179). Method of loci is an effective and fun method of remembering things that is similar with archive storage system (Warseno and Kumorojati, 2011: 119-120). This technique is very beneficial to memorize subject materials

in order format or a large number of lists. By this technique, the students can memorize things complete with the ordered number. Loci must be in a location that is easy to remember, because it will be used to the next steps (Warseno and Kumorojati, 2011: 121).

The examples of method of loci are: the parts of body here are used to used for loci number 1 until 10, they are: head, eyes, nose, mouth, ears, neck, breast, stomach, foot, and hand.

2) Spatial grouping

A spatial grouping is a kind of spatial mnemonic that has a method of writing words by forming patterns (Thompson in Amiryousefi, 2011:180). Writing words in the form of patterns help the students to recall the words better (Holden in Amiryousefi, 2011:179). Because the students have remember the pattern, they can also remember the parts that are signed by the words in the pattern. The example of the pattern can be a triangle pattern.

3) The finger method

The finger method is a kind of spatial mnemonic that the students can be asked to make an association in each word with a finger in this method (Thompson in Amiryousefi, 2011:180). This method is useful to learn

numbers, days of the week and month of the year, especially for young learners (Holden in Amiryousefi, 2011:180).

c) Visual Mnemonics

1) Pictures

Pictures here mean that pictures is visual mnemonics that the new words that are usually paired with their definitions or equivalents can be better learned if they are paired with pictures (Thompson in Amiryousefi, 2011:180). Objects and pictures can facilitate recall (Gians and Redman in Amiryousefi, 2011:180). Pictures and objects not only can be used to give meaning and information but also they can be used to motivate and attract the interest of the students (Wright in Amiryousefi, 2011:180). This method can be used by elementary or pre-intermediate students.

2) Visualization or imagery

This method is a visual mnemonic that has a method that visualizes words instead of using real pictures (Thompson in Amiryousefi, 2011:180). The students imagine a picture or a scene which is associated with the target word. The visualization can be used in vocabulary learning for examples: if the new word is "exploration", the students can link with a mental picture of "A scientist is

using special drills for oil exploration" by relating it to the picture of a scientist (O'Malley and Chamot in Amiryousefi, 2011:180). The difference between visualization and the method of loci is that words in visualization for each word a picture is imagined while words in the method of loci are related to a familiar place and seen as an imaginary walk through the familiar place.

d) The Verbal Method

1) Grouping or semantic organization

Materials that are organized are easier to keep in, will enhance their recall and it can be a long-term memory (Anderson and Thomson in Amiryousefi, 2011:180). If the examples of the target words to remember are: dog, cat, chair, sofa, table, milk, eggs and butter, these words can be organized and remembered in these three categories: animals is for dog and cat, furniture is for chair, sofa and table, and food is for milk, egg and butter.

2) Story-telling or the narrative chain

This method allows the students to link words together with a story (Thompson in Amiryousefi, 2011:180). Firstly, the students should make an association of the target words with a topic or some topics. The students should make a connection of them by making a story that

contains the target words Holden et.al. (Amiryousefi, 2011:180). This method is useful for students, especially for high level students.

e) Physical Responses Methods

1) Physical response method

This method allows the students to move their body or parts of their body in a certain way (Thompson in Amiryousefi, 2011:180). This movement can illustrate the meaning of the word and also be better in understanding and recall. The example of the method is: if the target word is tiptoe, the students can raise their tiptoe and move across the room. It means they can imagine the action of moving their tiptoe (Thompson and Holden in Amiryousefi, 2011:180).

2) Physical sensation method

Through this method, the students make an association of the new word to a physical sensation (Oxford and Scarcella in Amiryousefi, 2011:180). The example of this method is the students can feel cold when they learn the word "frigid".

Frome these theories above, it can be conluded that there are several method of mnemonic technique. But the researcher conducted mnemonic keyword method which is an effective way. It provides a meaningful visual image upon which to base memory for a new word's meaning. In addition, keyword method cans enhance memory and also creativity and the same time alleviate the frustration of the students.

3. The procedure of Using Mnemonic Keyword Method

According to Mastropieri & Scruggs in Access Centre (1998), procedure for teaching mnemonic keyword method is using steps recoding, relating, and retrieving.

a. Recoding

Recoding involves selecting part of the target word that looks like, or sound like, a word with which the student is familiar. For example, for the word *apex*, a students might selected the word *ape*. For the word *corpuscle*, a student might select *corpse*. In other word, students recode the original word into a word that they can easily imagine.

b. Relating

The next step is relating the recoded word to the definition of the target word using imagery. For example, since the definition of *apex* is a highest point, a student might relate the recoded word *ape* to the definition by imagining an ape at very high point. Such as King Kong on the Empire State Building. The definition of *corpuscle* is a blood cell, so a student might imagine

a corpse traveling around the arteries of a body reaching out with "dead" arms to pick up oxygen or attacking disease-carrying germ in the form of monsters.

c. Retrieving

The last step is retrieving, or recalling, the meaning of the target word. When a student sees the word, the first is to think of the keyword for that word (*ape* or *corpse*). Next, the picture or image related to that word has to be recalled – the ape on high place, or the corpse in the bloodstream. Finally, the image must be linked to the definition.

4. Implementation of Mnemonic Keyword Method

In this research, the researcher uses mnemonic keyword method to increase students' vocabulary mastery. Because of memorizing is very important to enlarge vocabualry, the writer found these method to help students in mastering it. Step to use mnemonic keyword method can be describe as follows:

- a) The teacher gives text about people, animals and historical building to the students.
- b) The teacher asks students to find out the difficult word or words that they do not understand.
- c) The teacher writes the difficult words on the whiteboard including the meaning.
- d) The teacher uses specific word in order to students can memorize

easily.

- e) The students is asked to make an assosiation between the target word and the keyword
- f) The teacher says words followed by the students to say properly.
 The teacher gives some correction if there are students making mistakes in saying or pronouncing the words.
- g) Then, the teacher asks students to work on group to classification the difficult words according to part of speech and the students know the synonym of certain word.

Table 2.1 Mnemonic Keyword Method in Presenting Vocabulary

Word	Phonetic	Code	Meaning
		Mnemonic	
Accept	ək'sept	Asep	Menerima
Adult	ə'd∧lt	Adul	Orang dewasa
Astute	ə'stuwt	Astutik	Cerdik, lihai
Direct	də'rekt	Derek	Langsung
Deny	di'nai	Deni	Menyangkal
Enchant	en'cænt	Encan	Memikat
Engine	'enj ən	Enjing	Mesin
Towel	ʻtawəl	Toel	Handuk
Unjust	Λn'jΛst	Anjas	Tidak adil

5. Advantage and Disadvantage of Mnemonic Keyword Method

- a) The advantage of mnemonic keyword method
 - 1) It helps student in understanding the material that has been taught by the teacher.
 - 2) It helps student to memorize the new word in English easily.
 - 3) It facilitates student to learn and memorize learning

material easily.

b) The weakness of keyword method

- The teacher needs a long time to preparing and planning the learning program.
- 2) The students can not interact and communicate directly with the teacher.
- 3) The modules are arranged centrally so that the material is presented less relevant to students' need, such as the elusive language and the teachers less of illustrating something.

C. Previous Study

There are previous studies about mnemonic technique that found by the researcher. First study conducted by Rochimah (2016) entitled *The Effectiveness of Using Mnemonic Devices in Teaching Vocabulary at the Seventh Grade of SMP N 2 Prembun in the Academic Year of 2015/2016*. The research method used is pre-experimental. The researcher used mnemonic technique in giving treatment to the experimental class. To collect the data, the researcher used observation and test including pre test and posttest. The research finding indicate that using mnemonic device is effective in teaching vocabulary at the seventh grade of SMPN 2 Prembun.

Second study conducted by Sujarwo (2017) entitled *Using Mnemonic Technique in Improving English Vocabulary Achievement of the Twelfth Grade Students of SMA Tut Wuri Handayani of Makassar*. This research aimed to find out whether or not the use of mnemonic technique can improve

the student's English vocabulary achievement. Pre-experimental design was applied in the research with one group pretest and posttest. The researcher used mnemonic technique in giving treatment to the experimental class. The population of this research was the third year students of *Students of SMA Tut Wuri Handayani of Makassar*. The total sample of this research consisted of 30 students taken through purposive sampling technique. The result of this research proved that the use of mnemonic technique can improve the student's English vocabulary achievement.

Third study conducted by Ina Rosdiana (2009) entitled *The Effectiveness of Mnemonic Devices in Learning Vocabulary Learning Process*. She has two research question, there were (1) Do mnemonic devices enhance the students in learning and memorizing vocabulary? and (2) can mnemonics devices influence the students in their vocabulary learning activity? In this previous study, it was experimental research. The researcher used observation and test including pre-test and post-test to collect the data. The researcher used mnemonic technique in giving treatment to the experimental class. The subject of the study consisted of 30 participants. According to the data collected from pre-test and post-test gained from the experimental class, taught vocabulary by using mnemonic devices and without mnemonics devices in analyzing the students' error in vocabulary, it shared the mean score of pre-test was 73 while the mean score of post-test was 84. The conclusion of this study is teaching vocabulary using mnemonics is effective to help students.

Based on the previous studies above, mnemonic technique is effective to improve students' vocabulary mastery in various grade. This technique can make the students more interest in learning vocabulary. The difference from the previous study lies on grade level, kind of text, and method research. Yet, this study use quasi experimental research and mnemonic keyword method is not verified in the eighth grade of MTs Al Ma'arif Tulungagung. In addition, the researcher would like to take the research entitled *The Effectiveness of Using Mnemonic Keyword Method on Students' Vocabulary Mastery of the Eighth Grade of MTs Al Ma'arif Tulungagung*.