THE EFFECT OF REFLECTIVE WRITING ON THE ENGLISH TEACHERS' METACOGNITIVE AWARENESS AND GENDERS' VIEWS ON REFLECTIVE WRITING

(A Thesis)

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ABSTRACT

**THE EFFECT OF REFLECTIVE WRITING ON ENGLISH TEACHERS'
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The study aimed to find out i) whether there is an improvement in English teachers' metacognitive awareness after implementing reflective writing of the teaching process, ii) what aspect of metacognition is conveyed in teachers' reflective writing, and iii) what are female and male teachers' points of view about reflective writing.

The subjects of the research were the in-service Senior High School English teachers in Bandar Lampung (MGMP Bahasa Inggris SMA Bandar Lampung). The research was Pretest Posttest Control Group Design. Metacognitive Awareness Inventory for Teachers, Reflective Writing, and Interview were used to collect the data. The data were analyzed by using Independent Sample T-test through SPSS to see the improvement of metacognitive awareness and by coding the reflective writing and interview transcripts.

The result showed that there was a statistically improvement of teachers' metacognitive awareness after the implementation of reflective writing. Among the aspects of Metacognitive Awareness, English teachers conveyed more expression on monitoring, declarative knowledge, evaluation, planning, conditional knowledge and procedural knowledge in their reflective writing. Lastly, gender perspectives on the process of reflective writing provide intriguing conclusions. Both female and male teachers agreed that reflective writing is beneficial for teachers since it offers a tool for self-evaluation, critical thinking, and professional development. In the case of teaching careers, male teachers had a desire for a school manager position while female teachers hoped to develop competency and build student-teacher relationships. In addition, male teachers are uninterested in maintaining reflective writing because it wastes time, but female teachers are interested in writing.

Keywords: metacognitive awareness, reflective writing, English teachers, gender

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A Thesis

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in

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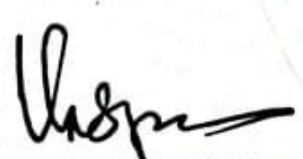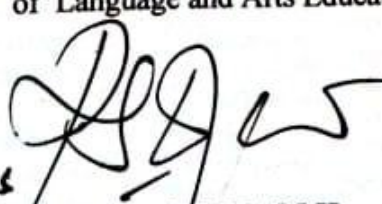|		
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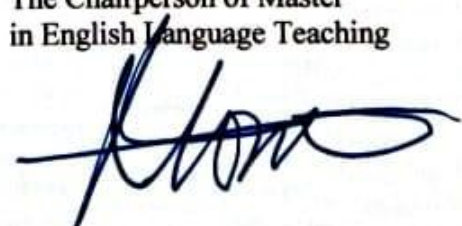**Mahpul, M.A., Ph.D.**
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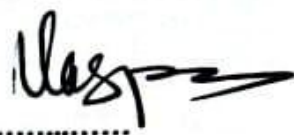The Chairperson of Master
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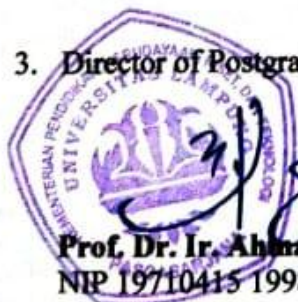   **2. Prof. Dr. Flora, M.Pd.**

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Bandar Lampung, 06 Maret 2023
Yang membuat pernyataan,

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CURRICULUM VITAE

Nabila Ayu Nisa was born on January 3rd, 1997 in Bandar Lampung. She is the only daughter and has 2 brothers in the family of Ibnu Hasyim and Soraya. She started her study at TK Perwanida in 2002, and then she continued her study at SDN 4 Sukaraja and graduated in 2008. She pursued her study at SMPN 1 Bandar Lampung and graduated in 2011. Then, she continued her study at MAN 2 Bandar Lampung and graduated in 2014. In the same year, she was accepted as a student in the English Education Study Program of the University of Lampung. She got a bachelor's degree in 2018. Then, she continued her study in the Master in English Education Study Program, at the University of Lampung in 2020.

DEDICATION

The writer dedicates this study to:

1. Her beloved parents – Ibnu Hasyim and Sorayah

2. Her Almamater – University of Lampung

3. Her friends in the Master in English Education Study Program

4. English Teachers

MOTTO

When tomorrow comes, your existence will shine light

You're the only one treasure

-My Treasure by Treasure-

ACKNOWLEDGEMENTS

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I.   INTRODUCTION

This chapter explains the background of the research, the research question, the objective of the research, the uses of the research, the scope of the research, and the definition of terms.

1.1. Background of The Problem

For several decades, metacognition has been known to help cognitive processes in education in particular. Flavell (1979) defines metacognition as "cognition about cognitive phenomena". Moreover, Flavell (1979) adds that metacognition relates to the monitoring of memory, comprehension, and other cognitive enterprises which are important for learning. Furthermore, Kuiper (2002) discusses that metacognition stimulates and fosters reflective thinking, grants responsibility, builds self-confidence in order to make effective decisions and enables the development of critical and creative thinking. To clarify, it is important for everyone, especially learners and educators, to develop metacognitive awareness to be able to control the way he perceives knowledge and plans action for better learning.

Flavell (1979) in his paper also explains that metacognition, precisely, can be trained to better monitor learning. Indeed, education is a favorable field to train cognitive and metacognitive awareness as students grow with their education level. A lot of research has been conducted on metacognition, students' achievements, and how to develop both (Sudirman, et. al: 2021 dan O'loughlin and Griffith: 2020). However, teachers' metacognition is much more complex than it seems (Zohar: 2006, p. 333).

Duffy, et. al (2009, p. 3) explained that while teachers, like students, need to monitor and regulate their cognitive activity (knowledge of content) and must be strategic when they attempt to solve a problem (knowledge of pedagogy), teachers have the additional tasks of promoting content learning, identifying appropriate strategies, making moment-to-moment decisions to insure students' learning, adjusting for individual differences, and many more. Although teaching seems simple from students' perspectives, it is a process of changing one's understanding through considerations and commitments. In addition, teachers who have knowledge and experience achieved through workshops, training, education, and the teaching-learning process can develop reflective practice to improve learning activities, adjust teaching strategies, and develop professionalism (Zohar: 2006).

Teachers' self-awareness and self-regulation, parts of metacognition, towards particular educational circumstances are essential in preparing and conducting the course. Duffy, et. al. (2009, p. 3) suggest that effective teachers are "more metacognitive". However, many teachers are metacognitively unaware, meaning that teachers are lacking in assessing their teaching and making suitable adjustments to the teaching plans. The developments of metacognitive awareness are based on the interaction of four metacognitive phenomena: knowledge, experience, goals, and actions (strategies) (Flavell: 1979). There are many ways to develop metacognitive awareness such as incorporated through the use of problem and problem-based learning (Gassner: 2009), group discussions (Michalsky, Zion & Mevarech: 2007), and reflective practices (O'loughlin and Griffith: 2020, Vuong & Le: 2021, Sudirman, et. al: 2021).

Precisely, reflection is integral to core professional practice competencies. Reflection in learning is necessary for students and educators to revisit what they have learned for improvement and for in-depth learning (Chang, B: 2019). It gives students an opportunity to document their learning journey and provide references

and suggestions for future activities. As metacognition majorly related to the reflection on experience and knowledge, Dewey (1933, p. 9) described it as an active meaning-making process necessary for learning. Moreover, Valli (1997, p. 68) explained that a reflective person is someone who thinks back on what is seen and heard, who contemplates, who is a deliberative thinker. Reflection, in general, advances in developing individuals' metacognition by connecting particular events to personal experience and knowledge, finding relationships among them, and planning activities for further unfolding events.

Furthermore, Yancey (1998, p. 19) explained that reflection is both process and product. There are many ways for people, teachers particularly, to do reflection. One of which is composing a self-reflecting product such as a reflective essay or writing. Yancey (1998, p. 6) mentioned several contents of reflection including revision of one's goal and work, self-assessment, learning analysis inside and beyond the classroom activity, and projection of future development. While reflection provides all the processes to develop the metacognitive awareness, a reflective writing is the tool and the product of it. Reflective writing becomes a manifestation of metacognition when a writer thinks about thinking while writing about thinking. It also covers the ideas of how teachers' experience in teaching and knowledge of the subject matter is reflected to retrace prior activities and to project for similar events in the future.

Reflection, by all means, cannot be separated from the Cycle of Reflection proposed by Gibbs (1988). Gibbs refers to reflection as experiential learning. He stated that reflection should at least consist of a description of prior events, feeling about the event, evaluation of how the subject experienced it positively and negatively, analysis of the situated interpretation, conclusion of the missing steps, and action plan for further events. Furthermore, according to Zohar & Barzilai (2013, p. 7), the application of metacognition in the classroom is an extremely

powerful mode of teaching. This indicates that it is very important for teachers to be able to use reflective practice, and reflective writing precisely.

Metacognitive awareness in science and education has been well-explored for students but lesser for teachers. Also, its relationship to pedagogical knowledge and professionalism for teachers has not been explored much in research. Thus, training metacognition through reflective writing is a new issue to be introduced in teaching training and education, especially in English Language Teaching. To support this, several previous studies below aimed to find out the benefit and effect of reflective writings on students in general.

Firstly, qualitative research by O'loughlin and Griffith (2020) was held on how reflective essays facilitate the development of the metacognitive awareness of upper-level undergraduate anatomy students. This research laid a trend that students developed a more accurate assessment of their skill in evaluation of anatomy and medical imaging. Also, it shows that students expressed greater enthusiasm about the course and developed higher self-confidence in learning. Secondly, another research was done by Vuong & Le (2021) on the use of reflective writings in English language learning and its benefit for primary learners. This study mentioned several benefits of using reflective writings such as knowledge improvement, self-evaluation, and self-regulation awareness. These are important for developing the metacognition of students.

In contrast to the present study, the previous research above focused on college and primary students as their subjects of research. To support this research in examining teachers' metacognition and reflection, a study on this topic is cited by Hiver & Whitehead (2018) who focus on L2 teachers' engagement in metacognitive thought and action in L2 teaching. It was a qualitative study through collecting teachers' reflective writings, observation, and interviews. The authors

argue that metacognitive L2 teachers are better able to reflect on how their actions will encourage or mediate their students' development as metacognitive learners, through deliberate support in planning, reflective questioning, modeling, scaffolding, and explicit strategy explanation. These L2 teachers also approach their own learning and development metacognitively, which can aid in both the ways they approach their own teaching of content and the ways in which they support L2 learners' metacognitive development.

Despite the results of reflective writing and its relationship to metacognition, previous studies above did not examine the quality of teachers' writings deeper. Each writing was a free-written writing without any structured steps and reflective questions to validate the reflective process the students had been through. As Hadidi, et. al (2017) stated that the more reflective people are, the more metacognitive they are. Compared to the previous research mentioned earlier, this paper also focuses on steps of reflection. Dewey (1933) stated that each step of reflection is a step from something to something - technically speaking, it is a term of thought. All the steps will help teachers to reach the highest level of reflection to become better metacognitive teachers for the development of one's own teaching and learning processes.

Besides the relationship between metacognition and reflection, gender is also often associated with the empowerment of thinking ability, particularly metacognitive skills (Siswati & Corebima: 2017) and reflective practice (Wicks: 2015). Gender, according to Unger (1979), depicts traits and behaviors that are appropriate for both men and women. Thus, these characteristics and behaviors will shape the problem-solving process and influence decision-making. Although there are many studies concerned with gender differences in metacognition and reflective practice, the findings are unsettled.

Wicks (2015, p. 11) argues that feeling and emotion have traditionally been linked with the feminine, whereas reasoning and thought have typically been identified with the masculine. Based on this argument, Wicks believed that reflective writing should be more frequently connected with feminine writing and, consequently, female students since it is a genre that incorporates personal and inquisitive characteristics. However, there are contrasting opinions about this issue. Some show that there is a improvement between male and female teachers in developing metacognition (Ciascai & Haiduc: 2011).

Meanwhile, many scholars have looked into reflective writing, but little has been done to look into how social and cultural contexts may influence students' impressions of the genre (Wicks: 2015). Wicks stated in his paper that the world of reason and thought has traditionally been identified with the masculine, whilst the world of emotion and the intimate has traditionally been linked with the feminine. In other words, reflective practice, or reflective writing in particular, as a genre infused with personal and exploratory components, should be more strongly associated with feminine writing. Moreover, the research by Khan, et. al. (2018) concluded that female participants are more reflective.

To conclude, English teachers who are aware of their unique metacognition take advantage of applying metacognition to their teaching and learning activities. Also, teachers have the opportunity in developing their professionalism in teaching along with the development of metacognition. Indeed, metacognition has an important role in education, especially in the English teaching and learning process. Finally, after discussing the background of this research, the researcher concluded the focus title of this research is "The Effect of Reflective Writing on English Teachers' Metacognitive Awareness and Genders' Views on Reflective Writing" with aims of (1) to find out whether there is any improvement in English teachers' metacognitive awareness after implementing reflective writing of the teaching

process, (2) to find out what aspect of metacognition conveyed in teachers' reflective writing, and (3) to find out female and male teachers' points of view about reflective writing.

1.2. Formulation of the Problem

1. Was there any improvement of English teachers' metacognitive awareness after implementing reflective writing?

2. What aspect of metacognition did English teachers convey the most in their reflective writing?

3. What were female and male teachers' points of view of reflective writing?

1.3. Objectives of the Research

1. To find out whether there is any improvement of English teachers' metacognitive awareness after the implementation of reflective writing.

2. To find out what aspect of metacognition conveyed in teachers' reflective writing.

3. To find out female and male teachers' points of view about reflective writing.

1.4. Significances of the Research

The use of this research, especially in learning English, is intended to make scientific contributions to education. The effects of this analysis would be useful for:

1. Scientifically, the researcher expected the outcome of this analysis to validate and explain the hypothesis of metacognitive awareness and reflective writing of teachers in the teaching process.

2. Practically, the writer expected the outcome of this analysis to be used as a guide on the importance of metacognition to enhance the teaching process.

1.5. Scope of the Research

     This research was a mixed-method study which focused on developing teachers' metacognitive awareness by carrying out reflective writing and the points of view of reflective writing from a gender perspective. The sample of this research was in-service English teachers. This research used reflective writing as a tool to develop teachers' reflections on teaching. The activity was composing reflective writing about teachers' previous teaching activities. Teachers' gender was compared based on how each viewed the reflective writing.

1.6. Definition of Terms

1. Metacognition

    Metacognition refers to "thinking about thinking". Flavell said that metacognition is the knowledge you have of your own cognitive processes (your thinking) (Flavel: 1979).

2. Reflection

    Reflective thought as 'active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it tends' (Dewey 1933: 118).

3. Reflective writing

    Reflective writing is the expression on paper/screen of some of the mental processes of reflection. (Moon, J: 2004)

4. Gender

    Gender refers to those characteristics an individual develops and internalizes in response to the stimulus functions of biological sex. As such,

gender identity may be a more important predictor of behavior than sex (Unger: 1979).

Many of the above are found in this chapter, such as the background of the problems, formulation of the problems, objectives of the research, uses of the research, scope of the research, and the definition of terms. These terms are discussed in the following chapter.

II. LITERATURE REVIEW

This chapter is ahead of certain ideas that are discussed in detail. It consists of metacognition, classification of metacognition, metacognition and language teaching and learning, reflection, reflective writing, advantages of reflective writing, gender, theoretical assumption, and hypothesis.

2.1. Metacognition

Human is gifted with the ability to think. This gift is what makes human different from other species. Haukas (2018, p. 11) argued that humans are the only species that can plan their future, think about their past and learn from their experiences, and to some extent also foresee what will happen to them. Furthermore, humans are also gifted with the ability to control their thoughts, empathize with others and even predict the future. In other terms, this ability is known as metacognition where humans regulate their thought and mental activities.

The theoretical view of the term metacognition was first introduced by Flavell (1971). He defines metacognition as "cognition about cognitive phenomena" (Flavell: 1979). However, this definition requires further elaboration, because metacognition also involves knowing how to reflect and analyze thought and how to draw conclusions from that analysis, and how to put what has been learned into practice. In order to solve problems, people often need to understand how their mind functions. Metacognition is defined as being aware of one's cognitive processes and products, as well as anything else that is significant, such as information related to the learning process.

In his paper, Flavell explained that metacognition "can cause you to select, appraise, revise, and abandon cognitive activities, goals, and tactics in light of their interactions with one another and with your own abilities and interests with respect to that enterprise". Metacognition appears to be necessary for creating effective mental representations and guiding problem-solving processing. It is critical for people to understand what knowledge to apply, as well as when and why to apply it when addressing problems. Nonetheless, research on metacognition in language learning typically tends to focus on students, meanwhile metacognition is also important for professionals especially for teachers (Haukas: 2018, p. 25).

2.2. Metacognition Classification

In his 1979 paper, Flavell proposed a formal model of metacognitive monitoring which included four classes of phenomena and their relationships. The four classes were (a) metacognitive knowledge, (b) metacognitive experiences, (c) tasks and goals, and (d) strategies or actions. Below are concepts showing the components of Flavell's class of metacognition.

A. *Metacognitive Knowledge*

The first of Flavell's (1979) classes was metacognitive knowledge, which he defined as one's knowledge or beliefs about the factors that affect cognitive activities. Metacognitive knowledge can lead the individual to engage in or abandon a particular cognitive enterprise based on its relationship to his interests, abilities, and goals. Flavell described three categories of these knowledge factors: 1) Person variables 2) task variables, and 3) strategy variables.

The person variables include the individual's knowledge and beliefs about himself as a thinker or learner, and what he believes about other people's thinking processes. Flavell gave examples of knowledge such as a person believing that he can learn better by listening than by reading, or that a person perceives her friend

to be more socially aware than she is. One's beliefs about himself as a learner may facilitate or impede performance in learning situations.

The task variables encompass all the information about a proposed task that is available to a person. This knowledge guides the individual in the management of a task and provides information about the degree of success that he is likely to produce. Task information can be plentiful or scarce, familiar or unfamiliar, reliable or unreliable, interesting or not, or organized in a usable or unusable fashion. Task knowledge informs the person of the range of possible acceptable outcomes of the cognitive enterprise and the goals related to its completion. Knowledge about task difficulty and mental or tangible resources necessary for its completion also belong to this category.

The strategy variables involved identifying goals and subgoals and selecting cognitive processes to use in their achievement (Flavell, 1979). Flavell also emphasized that these types of variables overlap and the individual actually works with combinations and interactions of the metacognitive knowledge that is available at that particular time. He also stated that metacognitive knowledge is not fundamentally different from other knowledge, but its object is different. He also mentioned that metacognitive knowledge may be activated consciously or unconsciously by the individual. This question of consciousness later became a subject of controversy among researchers in metacognition.

B. *Metacognitive experiences*

Flavell's (1979) second class of phenomena included the subjective internal responses of an individual to his own metacognitive knowledge, goals, or strategies. These may be fleeting or lengthy and can occur before, during, or after a cognitive enterprise. As monitoring phenomena, these experiences can provide internal feedback about current progress, future expectations of progress or completion,

degree of comprehension, connecting new information to old, and many other events. New or difficult tasks or tasks performed under stress tend to provoke more experiential interaction, while familiar tasks may tend to provoke less metacognitive experience. According to Flavell (1979), the metacognitive experience can also be a "stream of consciousness" process in which other information, memories, or earlier experiences may be recalled as resources in the process of solving a current-moment cognitive problem. Metacognitive experience also encompasses the affective response to tasks. Success or failure, frustration or satisfaction, and many other responses affect the moment-to-moment unfolding of a task for an individual, and may in fact determine his interest or willingness to pursue similar tasks in the future. Flavell underscored the overlapping nature of metacognitive knowledge and metacognitive experience.

C. Metacognitive Goal and Task

Metacognitive goals and tasks are the desired outcomes or objectives of a cognitive venture. This was Flavell's third major category. Goals and tasks include comprehension, committing facts to memory, producing something, such as a written document or an answer to a math problem, or simply improving one's knowledge about something. Achievement of a goal draws heavily on both metacognitive knowledge and metacognitive experience for its successful completion (Flavell, 1979).

D. Metacognitive Action and Strategies

Metacognitive strategies are designed to monitor cognitive progress. Metacognitive strategies are ordered processes used to control one's own cognitive activities and to ensure that a cognitive goal (for example, solving a math problem, writing an effective sentence, or understanding reading material) has been met. A person with good metacognitive skills and awareness uses these processes to

oversee his own learning process, plan and monitor ongoing cognitive activities, and compare cognitive outcomes with internal or external standards. Flavell (1979) indicated that a single strategy can be invoked for either cognitive or metacognitive purposes and to move toward goals in the cognitive or metacognitive domains. He gave the example of asking oneself questions at the end of a learning unit with the aim of improving knowledge of the content or monitoring comprehension and assessment of the new knowledge.

Aspects of Metacognition (Schraw & Moshman: 1995)

Meanwhile, Schraw and Moshman (1995) explained, in line with Flavell (1979), that metacognition can be separated into two major elements. They proposed a distinction between metacognitive knowledge and metacognitive regulation. Schraw and Moshman's distinction between metacognitive knowledge and metacognitive regulation has received a lot of approval and has been widely used in many research studies.

The first element of metacognition is metacognitive knowledge consists of two components: knowledge about cognition and awareness of one's own cognition. Metacognitive knowledge is the understanding of one's own cognition as well as the awareness of one's own cognition. Metacognitive knowledge refers to what a person knows or believes about himself or herself, as well as the tasks, goals, actions, or tactics he or she has undertaken, also the experiences he or she has had in relation to them. This knowledge, as described by Haukas (2018, p. 12), includes knowledge and beliefs about what people think they can and cannot do well and also knowledge and beliefs about how and to what extent factors like age, gender, intelligence, motivation, personality and educational background influence learning. Schraw & Moshman (1995) explain that metacognitive knowledge traditionally (or knowledge of cognition) contains three kinds of knowledge

declarative knowledge which refers to knowing "about" things, procedural knowledge which refers to knowing "how" to do things, and conditional knowledge which refers to knowing the "why" and "when" aspects of cognition.

1. Declarative knowledge

Schraw & Moshman (1995) stated that declarative knowledge includes knowledge about oneself as a learner and about what factors influence one's performance. For example, research investigating metamemory (i.e., knowledge about memory processes) indicates that adults have more knowledge than children about the cognitive processes associated with memory. Good learners appear to have more knowledge about their own memory and are more likely than poor learners to use what they do know.

In the language teaching context, it is related to how teachers are aware of their teaching needs, teaching problems, also strengths and weaknesses. More specifically, declarative knowledge also includes teachers' conceptions, also beliefs of structures, goals, and their own personal abilities. Knospe (2018, p. 122) illustrated this knowledge in writing activity in the classroom. He explained that learners who have metalinguistic knowledge are able to think about languages as abstract and rule-based systems on a higher level. Accordingly, this explicit knowledge about foreign languages and the learning processes involved are part of declarative metacognitive knowledge as well.

2. Procedural Knowledge

On the other hand, Procedural knowledge refers to "knowledge about the execution of procedural skills" (Schraw & Moshman, 1995, p. 353). Generally, this knowledge is reflected through strategies that lead

individuals to perform mental activity. Furthermore, procedural knowledge is usually unanalyzed because it is an automatic knowledge and often requires extensive practice to discover what we know how to do and the strategies to do it. In a broader sense, much of this knowledge is reflected through strategies that lead individuals to resolve the problems if there is any.

In teaching activity, this aspect refers to knowledge about how to apply different kinds of teaching strategies. Teachers who have the awareness of their own procedural knowledge are able to select the correct strategy and adjust it to suit the classroom environment including students' level of cognition, teaching facilities, etc. Haukas (2019, p. 12) explained in her study that the selection of appropriate strategies that can positively impact their teaching and learning outcome. Furthermore, the appropriate teaching strategies can help teachers solve problems or challenges effectively in the classroom.

3. Conditional Knowledge

Meanwhile, conditional knowledge refers to "knowing when and why to apply various cognitive actions (Schraw & Moshman, 1995, p. 353). Conditional knowledge enables people to make particular decisions about how to approach a given task or which strategies to choose. It is a knowledge of performing solutions in correct time, space and reason to make use of declarative and procedural knowledge. This is especially important when it comes to the effective selection of strategies and allocation of resources (Knospe: 2018, p. 122).

This knowledge ultimately concerns selecting various strategies depending upon the condition in which teaching is internalized. This is important for teachers to allocate appropriate strategies to the given

condition efficiently. To be clear, conditional knowledge includes the understanding of both the value and the limitations of procedural knowledge and knowing when, how, and why procedures should be used.

The second element of metacognition according to Schraw & Moshman (1995) is metacognitive regulation. Shcraw & Moshman defined Metacognitive regulation (or regulation of cognition) as "metacognitive processes that aid in the control of one's thinking or learning". Metacognitive regulation is described as a series of behaviors and events that assist teaching than it is about a set of information that determines how those actions occur. As Schraw and Moshman (1995) pointed out, there are several regulatory skills that have been mostly referred to in research literature.

1. Planning

"The selection of proper tactics and the allocation of resources that affect one's performance" is what planning entails (Schraw & Moshman, 1995, p. 354). Planning is important for teachers in setting goals, selecting acceptable techniques/methods, and arranging time and strategies. Noushad (2008, p. 11) suggested, that individuals' planning skills contain making predictions, strategy sequencing, and allocating time or attention selectively before beginning a task whether the individuals are capable of planning the actions ahead and task performance progresses smoothly, or find a total fail.

Duffy, et. al (2009, p. 2) explained that teachers need to make conscious and deliberate decisions when planning and when working with students. They also suggested that most effective classroom teachers opt for well-planned school days in which efficiency dominates. Also, Berliner (1994, p. 29) said effective teachers engage in sophisticated planning and capitalize on varied kinds of instructional opportunities. There is no

standardized procedure of teaching, especially language teaching for teachers to follow. Because of the diverse environment of teaching and learning they will face, it is important for teachers to plan the procedure by themselves as well as the other conditional challenges by adjusting the environment.

2. Monitoring

On the other hand, monitoring refers to "on-line awareness of comprehension and task execution" (Schraw & Moshman, 1995, p. 355). This skill is best seen as the process of executing a certain task and how well it is regulated at regular intervals to determine whether or not the teaching and learning process is going successfully. Monitoring skills can be developed through practice and training.

Metacognition's distinctive characteristics of self-monitoring and self-regulation require teachers to ask themselves questions about their understanding (Duffy, et. al: 2009, p. 4). Questioning oneself is known to be a sign of someone performing metacognitive practice. To monitor the teaching and learning activity, teachers have to do this practice while teaching. Some studies called this practice as reflection-in-action in which teachers reflect their teaching in the time the practice is happening. In the writing classroom, Knospe (2009, p.123) explained that metacognitive monitoring denotes an awareness of one's current thoughts and involves strategies like reading, re-reading, reflecting and reviewing which can also be done in language teaching and learning classrooms.

3. Evaluation

Lastly, "appraising the products and regulating processes of one's learning" is what evaluation means (Schraw & Moshman, 1995, p. 355). To

put it another way, evaluation entails taking a close look at the result and judging whether the learning meets the learning objectives and whether the regulating mechanisms used were effective. (Schraw & Moshman, 1995) explained that re-considering one's aims and conclusion after completing a task is an example of evaluation skills. These components are closely associated with one another and they fulfill the same goal.

To conclude, metacognition promotes teachers' understanding of their own teaching and thinking processes while also assisting them in regulating their cognition through the planning, monitoring, and evaluation processes. Also, it is particularly important in problem-solving, reading, writing, and memory.

2.3. Metacognition and Language Teaching

Wenden (1987) is most likely to be the first who emphasizes the importance of metacognition in language learning and teaching. Teachers frequently work in highly unexpected environments every day, by interacting with learners of a variety of skills and motivations who continuously change. Lin, Schwartz, and Hatano (2005) stated that teaching has some unique qualities that differentiate it from many of the tasks that metacognitive interventions have supported. For instance, the problems encountered in teaching can require days or even months to resolve. Teachers that are metacognitively aware reflect on their knowledge, beliefs, and teaching methods on a daily basis to plan, implement, monitor, and assess their own teaching as well as their students' learning, and apply the findings to improve teaching.

According to Wenden (1987, p. 584), metacognitive strategies which also refer to regulatory skill are defined as general skills through which learners manage, direct, regulate, guide their learning, i.e. planning, predicting, monitoring and evaluation. Beside the strategy, metacognitive knowledge is also important to

complete metacognition. Wenden (1987, p. 574) following Flavell's view of metacognitive knowledge explained that it covers the knowledge of person, task, and strategy, of language learning as the set of facts individuals acquire about their own cognitive processes as they are applied and used to gain knowledge and acquire skills in varied situations. This set of metacognition components are also in line with what has been defined by Flavell (1979) and Schraw & Moshman (1995) about metacognition in general. For some reasons, metacognition is embedded in teacher education programmes all over the world, including those for language students. It is a means for teacher students to develop their capacities both as learners and as teachers of a foreign language (Dypedahl: 2018, p. 48).

Teaching is a balancing act that relates to doing the right thing in the right way and at the right time in response to problems posed by particular people in particular places on particular occasions (Duffy et al. 2009). This way of framing language pedagogy reveals the inherent unpredictability and indeterminacy that characterize L2 classroom settings. When teachers are aware of their metacognitive knowledge of certain challenges (person, task, and/or strategy), it is the regulatory skill or the strategy which is applied to confront teaching challenges. Insights obtained through applying the strategy repeatedly can also be absorbed into the existing metacognitive knowledge to develop, revise, and refine the knowledge. For illustration, when teachers report that their students cannot understand their explanation in teaching texts (metacognitive knowledge of task), they realize that their way of teaching needs to be adjusted to meet the student's level of comprehension. This awareness will be the base for teachers to set a strategy by planning and predicting the teaching and learning process. It can also aid teachers in developing their own theories of practice informed by their teaching experience, and responding with effective classroom decisions at the appropriate time and place. Then, they will perform monitoring and evaluation to gain more metacognitive

knowledge to develop and refine the outcome of the learning. Flavell explained that this kind of experience is, then, abstracted and incorporated into cognitive structure as a part of "the cycle", in this concern, part of "the teaching cycle".

2.4. Reflection

According to Dewey (1933, p.9), reflection referred to "assessing the grounds (justification) of one"s beliefs", the process of rationally examining the assumptions by which we have been justifying our convictions. People instinctively reflect on events, perhaps to better understand what has happened and make sense of it; the idea of learning from the past, especially trying not to repeat mistakes is well established (p.22). The process of reflection includes debriefing and reframing to expand beliefs and understanding, Dewey added that reflection thus implies that something is believed or disbelieved in, not on its own direct account, but through the ground of belief (p. 11). Through reflection, we are able to relate our personal experiences to a wider perspective, which helps us to see the bigger picture.

Because of the requirement to relate an issue or challenge with an act of finding and questioning to address the problem, reflection is becoming more widely used in the built environment professional disciplines (Dewey: 1933, p. 12). It is assumed that careful reflection on experience is required for people, particularly experienced teachers, in order for practical knowledge to supplement theoretical knowledge. Reflective practice is depicted by Dewey (1933, p. 5) as a chain. It draws steps as a problem is addressed, then moves on to other questions to investigate. Moreover, Boud (2001) added that all learning builds on existing perceptions and frameworks of understanding and links must be made between what is new and what already exists if one is to make sense of what is happening to him. Finally, after getting used to it, this mental chain will produce a continuous movement or cycle of a certain problem to be applied at a later time.

2.4.1. The Gibbs' Reflective Cycle (1988)

It is not sufficient to have simply an experience in order to learn without reflecting upon this experience which may quickly be forgotten, or its learning potential lost. Generalization and concept about the experience can be generated from the feeling and thought taken from this reflective process. To acquire this process, Gibbs (1988) proposed his "structured debriefing" a six steps model of reflective process (p. 49-50) to follow in order to be a reflective teacher. It can be used to reflect on a single experience as well as a continual cycle of improvement for a repeated experience. In this case,the teachers can employ this thinking cycle right after their teaching is done and they need to prepare for the next teaching activity (evaluation). The recognition of the significance of feelings in reflection is one of its main characteristics of Gibbs. Furthermore, he splits evaluation into what worked and what didn't. It is a good model for some practitioner courses because of these additional stages. In this study, the researcher adopted this cycle to form questions for teachers to compose a reflective writing. The question compositions were elaborated in chapter III. The following is the cylce of reflection which is the basis of the reflective writing of this study.

Figure 2.1. Gibbs' Reflective Cycle (1988)
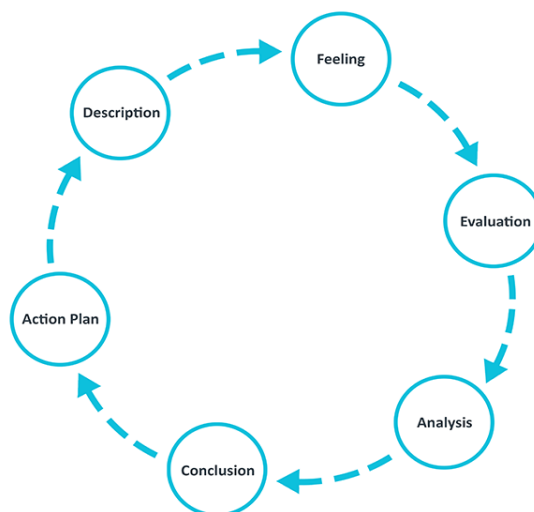
Step 1 – Description

This step is a brief description of the experience or event to set the scene and give context.

Step 2 – Feelings

This step covers the consideration of thinking and feeling before the experience. How did you feel during the experience? How did you feel after the experience? This is another short descriptive step, rather than being analytical.

Step 3 – Evaluation

Evaluation looks objectively at both positive and negative aspects of the experience. This step describes the key elements that went particularly well. Was there anything that did not go well or did not work? If appropriate, evaluation can include what others did or did not do well.

Step 4 – Analysis

Analysis attempts to explain why the experience was positive or negative and should form the largest section of reflection by taking into account points made in the previous steps and identify any factors which helped e.g. previous experiences, carrying out research, or consulting with others by considering the role in the experience and the contribution to its success of this experience. If things did not go to plan, why do you think this was e.g. lack of preparation or external factors beyond your control? It can be useful to consider other people who were involved in the experience. Did they have similar views or reactions to you? If not, why do you think that was the case?

Step 5 – Conclusion

This step focuses on what has been learned. Are there any skills which need to be developed as a result of the experience? If so, how would it be applied in future experiences or situations? Are there areas of knowledge or particular skills which need to be developed? Is there anything you would do differently in the future? Try to give specific examples.

Step 6 – Action Plan

What specific actions can now be taken to build on knowledge or skills? This may include any training that would be beneficial (formal or otherwise), as well as identifying sources of information or support (people or resources).

2.4.2. Reflective Teaching

Reflective teaching is a concept in teacher education in which student-teachers or working instructors examine their own practice and its underlying foundations, then evaluate alternate approaches to achieve the teaching goals. According to Valli (1997, p. 70), reflective teacher education focuses on how successful teachers think. Reflective teaching, in fact, provides the route to teaching experience regardless of a teacher's years of experience. Teachers typically bring attitudes about teaching and learning that they have developed during years of experience as students. These unspoken beliefs are not always manifested in actions. Reflective teaching aids in the harmonization of teachers' ideals and their actual practices.

One of the most important aspects of helping reflective practitioners is to offer teachers alternative approaches to help them focus on their experiences and take action systematically. To emphasize, reflective teachers are active in asking questions and evaluating their beliefs and assumptions about what they do in

practice, therefore training on reflective practice is essential. Zeichner and Liston (2013, p. 7) stated that acknowledging teachers as reflective practitioners is to accept teachers as active individuals with ideas, beliefs, and theories related to their work, as well as both problem posers and solvers in the educational context rather than regarding them as merely the implementers of pre-planned programs.

According to Zeichner & Liston (2013, p. 6-7) a reflective teacher

1. examines, frames, and attempts to solve the dilemmas of classroom practice;
2. is aware of and questions the assumptions and values they bring to teaching;
3. is attentive to the institutional and cultural contexts in which he or she teaches;
4. takes part in curriculum development and is involved in school change efforts;
5. takes responsibility for his or her own professional development.

2.5. Reflective writing

Reflective writing is the expression of the mental processes of reflection on paper or screen (Moon: 2004). Reflective writing is regarded as a "means of extracting meaning from events and experiences" (Boud, 2001, p. 9). He also added that past experiences profoundly affect perceptions of what does and does not count as important, it acts to sensitize us to some features of our world and blind us to others and it shapes the intent we have which guides our priorities. Vuong & Le (2021) explain that when people contemplate events through writing, they see findings that are not ordinarily visible. Teachers recall their experience and begin to recognize the invisible acts that happen to be a new knowledge or a habit of their teaching style and strategy. When preservice teachers begin to construct a reality about teaching, they learn to access their personal beliefs through the important questions and answers needed for assimilating their role as teacher and the characteristics contributing to the effectiveness of a teacher (Collier: 1999). He also added that reflective journals (writing) clarify and extend individual thoughts and

concerns and provide supervisors with a means of consistently supporting interns' inquiry into their development as learners and teachers.

Keeping writing is a helpful habit for people since it allows for the surveillance of unseen aspects of oneself. Boud (2001) views journal writing as a form of self-expression, as a record of events or as a form of therapy. Reflective writing helps individuals to clarify and elaborate on their own ideas and issues while also giving supervisors a way to continuously support the exploration of how they are growing as professionals. It is not just a place for authors to keep track of their experiences and events but also a media where they may reorganize those events and themselves. Collier (1999) in his study recommended that if novice teachers can be guided to understand their personal experiences through the mind of a learner first, they may be more likely to assimilate their understanding into the process of teaching.

The idea that teachers are reflective practitioners makes the assumption that they are capable of posing and resolving issues taken from their educational activity. Teachers work to find solutions to issues that develop in the classroom every day, every hour, and even every minute. How they frame or pose the problem has an impact on how they resolve those issues. Reflective educators consider how they frame the issue at hand as well as potential solutions. On the surface, the reflective practice movement involves a recognition that teachers need to play leadership roles in curriculum development and school reform, that they should actively formulate the purposes and ends of their work, that they should examine their own values and assumptions. Reflection also denotes an understanding that colleges, universities, and research and development facilities are not the sole producers of new knowledge regarding education. It acknowledges that educators have theories, beliefs, and ideas of their own that can help all educators improve their teaching (Zeichner & Liston: 2013, p. 5).

2.6. Advantages of Reflective Writing

Moon (1999a) mentioned numerous goals for keeping reflective writing in her discussion of using journals to promote learning via reflection. (pp. 188-194). These include

1. Deepen the Quality of Learning (Teaching)

    Reflective writing encourages the growth of the teacher's problem-solving abilities by facilitating critical thinking or the development of a questioning mindset. It will give them the chance to establish creative methods and plans for facilitating students' learning. The teachers will be able to use this ability to not only advance in their careers but also to solve personal problems.

2. Unable to Understand One's Own Learning Process

    From repeated reflective journal writing, teachers consciously can understand their teaching style and habit. Reflective teachers can be assisted in assessing the teaching environment through reflective writing by identifying the gaps between their knowledge (related to PCK) and areas where they need to improve, for instance.

3. Increase Active Involvement Personal Ownership of Learning

    Reflective writing can help in the development of general metacognitive abilities by letting teachers think critically about how to educate and how to handle teaching difficulties. By giving teachers the sense that they are actively in charge of the educational process, reflective writing might boost their feeling of autonomy and control of the teaching process.

4. Enhance Professional Practice

    Reflective instruction will benefit teachers in developing their careers. Teachers will have a better awareness of their strengths and limitations by reflecting on their teaching method, which will support their professional development.

5. To enhance the personal valuing of the self towards self-empowerment

   By helping teachers feel more in charge of the process and making it more purposeful and successful, reflective writing can help them become more conscious of and accepting of their own teaching styles. This, in turn, can help them be more motivated to teach.

6. Enhance Creativity

   Reflective writing helps teachers develop new teaching strategies and procedures by better utilizing accurate understanding. Reflective teaching enables teachers to come up with creative strategies to keep students engaged and having fun during class activities.

7. The Representation of Learning

   In the reflective learning cycle, students have the potential to create beneficial feedback that teachers can utilize to enhance their instruction. For example, by highlighting places where students need more in-depth explanations or by identifying teaching strategies that need to be improved.

8. As the Media of Expression

   Reflective writing provides an alternative 'voice' for those not good at expressing themselves. It can be the media for teachers to express their feelings and opinions of their own teaching experience without anyone's judgment. This can help the teachers to be confident and aware of their teaching strategy.

9. Foster Reflective Interaction in a Group

   For students to look forward to a teacher's lesson and pay close attention, the teacher and students must get along well. Through reflective teaching, teachers may assess each student's talents and performances and consider them as individual learners. Teachers must come up with strategies for connecting and conversing with the students, involving them in the lessons, and enhancing their learning.

2.7. Gender

According to Psychology Dictionary, gender refers to the attitudes, feelings, and behaviors that are associated with a person's biological sex, the condition of being male, female, or neutered. Moreover, Unger (1979) states that gender depicts traits and behaviors which are acceptable for men and women. Those are influenced by certain cultures in the community. It indicates that gender determines how a man and woman should possess or act based on a certain norm in a community. Gender differs from sex. Sex is related to biological characteristics, while gender is associated with people's perspectives in the community. In short, gender is some characteristic of a human being that is created by people (community).

Research of gender in educational environments has been studied for years. Results of these studies were also varied with different implications. Some showed that female teachers are positive, confident and motivated in teaching as a profession and so-called caring factors (i.e., preferences for working with children, contributing to community life, influencing other people's opinion, helping others). One study conducted by Dewaele & Mercer (2018) found that gender turned out to be a significant variable also, with female teachers reporting significantly more positive attitudes towards their students. Teachers with higher levels of English proficiency did not have to worry about their position as "expert" in the FL classroom and were therefore potentially more confident and optimistic. Moreover, Tasner, et.al. (2017, p. 47) explained in their study that the predominance of women in the teaching profession(s) is an effect of the harmonization of the female respondents' habits and their perception of the field they are entering.

Meanwhile, other studies showed different points of view, seeing male teachers and the imbalance in the education field and the oblique views they perceived in society. Acker (1995, p. 114) stated that cultural beliefs about what is

appropriate work for males and females--or, more generally, the patriarchal patterns in society-provide a backdrop for everything teachers do (Acker: 1995, p. 114). The patterns drawn by society were seen as a hindrance for male teachers to enter the education field as they felt less confident and were intimidated by the society. Moreover, Tasner, et. al reported that in Slovenia, the highest proportional gender imbalance is drawn by 16,014 teachers took part in the pedagogical process, 88% of whom were women, generally in primary schools and primary schools with an adapted programme: at the end of the 2014/15 school year (p. 49). Despite the contrary result of the studies above, Tasner, et. al. (2017, p. 67) explained that the result of their study confirms that the orientation towards life and work balance is important to our respondents of both genders. Female and male teachers teach with different motivation and approach by considering the orientation of work and life balance they have.

Gender and Reflective Writing

Many studies have looked at the relationship between gender and various aspects of human behavior. To emphasize, genders have the ability to react differently when writing. Additionally, males and females are reported to have different levels of practicing reflection, among which is reflective writing. Wicks (2015, p. 11) argues that feeling and emotion have traditionally been linked with the feminine, whereas reasoning and thought have typically been identified with the masculine. Based on this argument, Wicks believed that reflective writing should be more frequently connected with feminine writing and, consequently, female students since it is a genre that incorporates personal and inquisitive characteristics. The importance of reflective writing for teachers, as discussed above, is perceived differently by each gender. These differences are attributed to the characteristics of each gender, as both have distinct perspectives on the writing process. Therefore,

reflective writing is a part of a complex cultural system that runs in the background (Wicks: 2015).

2.8. Theoretical Assumption

Metacognition is defined as being aware of one's cognitive processes and products. It is a process in which a person actively monitors, controls, and directs their cognitive process in order to achieve cognitive objectives. In preparing teaching activities, teachers are expected to make them as suitable as possible for him/her and the students. To build this metacognition, reflective writing is one of the best ways. It helps teachers monitor his/her teaching and plan for further teaching activities in the future. Then, teachers who have been reflective teachers are expected to improve their teaching strategy and also professionalism.

Furthermore, there is a tendency for female and male teachers to reflect on their teaching activities in various ways. This relates to the features and behaviors that each group promotes. Females are more prone to displaying emotion, which is necessary for describing and drawing feelings in a reflective cycle. Females are also more likely than males to be conscious of their own feelings. During producing reflective writing, this activity is beneficial for increasing personal reflection.

2.9. Hypothesis

Based on the theoretical assumptions above, the hypothesis of this study was formulated as follows:

H_0 : There is no statistically improvement in teachers' metacognitive awareness after implementing reflective writing.

H_1 : There is a statistically improvement in teachers' metacognitive awareness after implementing reflective writing.

In short, based on the explanation of the supporting theories, assumptions, and some previous related studies, the hypothesis is drawn up. Using the approach and tools discussed in chapter three, these hypotheses are tested. The methods of this research are explained in the following chapter.

III. METHODOLOGY

In this chapter, research methods are discussed in order to answer the research questions and achieve the objectives of the research. The research method describes the design of the study, population and sample, procedures of the study, data collecting technique, instruments, data analysis, and hypothesis testing.

3.1. Research Design

This research was a mixed-method study which combines both quantitative and qualitative studies to answer different research questions. According to Creswell (2014, p. 293), mixed methods research is an approach which investigates behavioral and social problems by collecting and analyzing rigorous quantitative and qualitative data in response to research questions, and integrating or "mixing" the two forms of data in a particular research design to produce a new and more complete insight or understanding than what might be obtained from quantitative or qualitative data alone. For this reason, the researcher decided to conduct a mixed-method to provide more comprehensive and convincing evidence. To emphasize, this study uses the explanatory sequential mixed methods. Creswell (2014, p. 44) explained that explanatory sequential mixed methods is one in which the researcher first conducts quantitative research, analyzes the results and then builds on the results to explain them in more detail with qualitative research. It is seen as explanatory as the qualitative data helps to further explain the initial quantitative data results. The qualitative phase comes after the initial quantitative phase, which is why it is seen as sequential.

The aims of conducting this research were (1) to find out whether there is a improvement in English teachers' metacognitive awareness after implementing reflective writing of the teaching process, (2) to find out what aspect of metacognition conveyed in teachers' reflective writing, and (3) To find out what are female and male teachers' points of view about. Each aim was discussed with different methods which were explained as follows. In this study, the researcher focused on the first objective and employed the results to seek detailed results by fulfilling the second and third objectives which were analyzed qualitatively.

The design employed in this study to answer the first research question was *one-group pretest-posttest design*. It is illustrated as follows:

T1 X T2

Note:
T1 : Metacognitive Awareness Inventory for Teachers (Balcilkanli:2011)
X : Reflective Writing
T2 : Metacognitive Awareness Inventory for Teachers (Balcilkanli:2011)

Lastly, the second and third research questions were answered qualitatively by examining teachers' reflective writing and the points of view about reflection after writing reflectively. A qualitative method of this research resulted in descriptive data in the written and oral form of teachers' points of view that have been observed. The data were collected using reflective writing and interviews.

3.2. Research Subject

The population of this study was teachers who have experience in teaching. The sample was in-service Senior High School English teachers in Bandar Lampung (MGMP Bahasa Inggris SMA Bandar Lampung). The sample was chosen based on the condition that teachers have been teaching English for years. Moreover, the researcher used random sampling, specifically, in-service Senior

High School English teachers in Bandar Lampung consisting of 14 teachers. Meanwhile, the subjects of the interview were 2 male teachers and 2 female teachers of MGMP Bahasa Inggris SMA Bandar Lampung as well.

3.3. Research Instruments

There were three kinds of instruments employed in this study namely Metacognitive Awareness Inventory for Teachers, Reflective Writing, and Interview. Each instrument is explained in the following.

3.3.1. Metacognitive Awareness Inventory for Teachers

The MAIT is considered to be a resource that helps teachers realize their metacognitive levels as a teacher (Balcikanli: 2011). Based on the inventory, awareness is measured in both components of metacognition, Knowledge of Cognition, and Regulation of Cognition. The inventory was modified to a 4-point Likert-Scale with no neutral option. A tendency of picking a neutral option allows people to avoid the cognitive effort needed to choose between their positive and negative feelings on an issue (Nowlis et al: 2008, p. 320). Meanwhile, for each item on the inventory, participants must interpret the question, recall related facts and memories, interpret the information to form an opinion, and then apply this opinion to the relevant Likert point (Johns: 2005, p. 238). Therefore, to avoid the unmotivated, ambiguity and uncertain answer, the researcher did not provide any neutral option. There were 24 items in the form of questions that were administered twice before and after the treatment. The scale had several categorical terms to answer different questions and was served in multiple choice. It can be illustrated as follow:

Table 3.1 The Point of the MAIT Scales

Scale		Point
Frequency	**Intensity**	
Always	Strongly Aware	4
Usually	Aware	3
Rarely	Not aware	2
Never	Strongly Not Aware	1

Validity of Metacognitive Awareness Inventory for Teachers

This inventory was used to see the level of teachers' metacognitive awareness. The construct validity of this instrument was in line with the theory of Metacognition by Schraw and Moshman (1995) covering two elements of metacognition and each aspects of them covering Declarative, Procedural, and Conditional Knowledge in Knowledge of Cognition, and activities such as Planning, Monitoring, and Evaluation in Regulation of Cognition.

Table 3.2 The Item Specification of the MAIT (Balcikanli: 2011)

Factors	Item Number
Factor I - Declarative Knowledge	1,2,3,4
Factor II - Procedural Knowledge	5,6,7,8
Factor III - Conditional Knowledge	9,10,11,12
Factor IV - Planning	13,14,15,16
Factor V - Monitoring	17,18,19,20
Factor VI - Evaluation	21,22,23,24

Reliability of Metacognitive Awareness Inventory for Teachers

Reliability refers to whether scores to items on an instrument are internally consistent, stable over time, and whether there was consistency in test administration and scoring (Creswell: 2014, p. 298). A Cronbach Alpha was used to measure the internal consistency of the items of the inventory. An instrument is

reliable when the value of Cronbach Alpha is higher than 0.6 ($\alpha > 0.6$). Furthermore, to determine the reliability of the questionnaire, Cohen, Manion, and Morrison (2007, p. 509) provided a guideline to measure reliability as follows:

Table 3.3 Alpha Value of Reliability

Alpha Value	Descriptions
> 0.90	Very highly reliable
0.80 – 0.90	Highly reliable
0.70 – 0.79	Reliable
0.60 – 0.69	Minimally reliable
< 0.60	Unacceptably low reliability

The following table shows Cronbach's Alpha of Pre-Metacognitive Awareness Inventory for Teachers and the Post-Metacognitive Awareness Inventory for Teachers. The Alphas were analyzed statistically to see whether the inventories were reliable or not.

Table 3.4. Reliability of Pre-MAIT

Reliability Statistics

Cronbach's Alpha	N of Items
.873	24

The above table shows the reliability statistics of the Pre-Metacognitive Awareness Inventory for Teachers. The alpha on the statistics above shows a value of 0.873 which is higher than 0.60 ($\alpha > 0.6$). This means that the pre inventory had a high reliability.

Table 3.5. Reliability of Post-MAIT

Reliability Statistics

Cronbach's Alpha	N of Items
.887	24

This table shows the alpha of the Post Metacognitive Awareness Inventory for Teachers. From this table, the alpha showed a value of 0.887 ($\alpha > 0.6$). It can be concluded that the Post Inventory also had a high reliability.

3.3.2. Reflective writing

The use of reflective writing in this research aimed to examine the process of reflection done by English teachers after finishing their teaching and learning process. There were eight questions that follow the six steps of the reflective cycle from Gibbs, et. al (1988). The subjects were provided with 30 minutes and no word limitation in writing. The reflective writing in this study was developed with a clear step of writing reflectively by providing guided questions to answer reflectively adapted from the reflective cycle of Gibbs, et. al (1988). The following table shows the item specification for the questions to write reflective writing.

Table 3.6. The Item Specification of Guided Questionof Reflective Writing

Steps of Reflective Cycle	Item Number
Description	1
Feeling	2
Evaluation	3
Analysis	4, 5
Conclusion	6
Action Plan	7, 8

In analyzing the data, the researcher analyzed the writing qualitatively. To find out what aspect of metacognition mostly expressed by teachers, the researcher followed the coding procedure by Auerbach & Silverstein (2003, p. 43). By analyzing it qualitatively, the writer found the core meaning of what the participants said that led to central themes of the subjects' metacognition. Furthermore, collecting, analyzing, and interpreting data from the writer in this study was constantly moving back and forth to conclude logical results and information.

3.3.3. Interview

The objective of the interview in this research was to collect data on teachers' points of view of reflective writing and the development of metacognitive awareness they feel after writing in gender perspectives. In conducting the interview, the researcher used semi-structured interviews. In a semi-structured interview, the researcher had set a list of questions based on the elements of metacognition (Schraw and Moshman: 1995) which were metacognitive knowledge and self-regulation to seek the point of view, belief, and problems faced by male and female English teachers in composing a reflective writing. The researcher recorded and noted down the responses which were done informally to get authentic answers. Any unscripted questions were also performed and recorded to gain relevant data which were needed to support the related questions further (see Appendix 9).

Table 3.7. The Item Specification of Interview Questions

Elements of Metacognition	Aspects	Item Number
Metacognitive Knowledge	Aspect I- Declarative Knowledge	1
	Aspect II- Procedural Knowledge	2,3
	Aspect III- Conditional Knowledge	4
Self-Regulation	Aspect IV- Planning	8, 5
	Aspect V- Monitoring	6,7
	Aspect VI- evaluation	9

By having an interview, the core meaning of what the participants said can be portrayed that led to central themes of the subjects' world lives. In other words, the main task in interviewing is to look for the meaning of what the interviewees

say. The interviewer can track information about the topic and constantly moved back and forth to conclude logical data and information by collecting, analyzing, and interpreting data from the interview transcripts.

The Validation of Qualitative Data

In ensuring the validation of research data, the researcher conducted Triangulation, member checking, and peer examination to increase the authenticity and credibility aspects of the data collected. Creswell (2014, p. 259) triangulation of data is the collection of data that are collected through multiple sources to include interviews, observations and document analysis. Potter (1996 cited in Sudirman, et. al: 2021) argues that research findings are derived from people in many different situations, and the researchers were more persuaded to conclude such instruments. Triangulation is therefore used to combine several sources of information so that they converge or follow a single interpretation. The other strategies of data validation conducted in this study were member checking and Peer examination. The informant served as a check throughout the composition of generating reflective questions. An ongoing dialogue regarding the interpretations of the informant's reality and meanings will ensure the truth value of the data and helped to choose and dump appropriate questions for guiding the teachers in composing reflective writing. Then, in peer examination, researcher going back and forth examined the data with other expert peer. By integrating data from several sources, the researchers may convincingly argue that the interpretation is more accurate (reflective writing and interviews).

3.4. Data Collecting Technique

In collecting the data, the techniques employed in this research are as follows:

1. Administering Pre-Metacognitive Awareness Inventory for Teachers and Post-Metacognitive Awareness Inventory for Teachers

The inventory was administered twice, before and after the treatment to see the difference of the metacognitive awareness of teachers. In addition, the inventory was adapted from the Metacognitive Awareness Inventory for Teachers of Balcikanli (2011).

2. Asking Teachers to Compose Reflective Writing

Reflective writing in this research was used to examine teachers' reflective thinking on teaching. Teachers were asked to write reflective writings about previous teaching activities. There were eight guided questions adapted from the Reflective Cycle of Gibbs, et. al (1988) covering six steps of thinking reflectively. The researcher coded the writing by categorizing the narratives into metacognitive aspects. It was done to see which aspects of metacognition appeared the most when teachers wrote reflective writing.

3. Recording the Interview

The interview in this research was to seek information on teachers' points of view about reflective writing and teaching professionalism from a gender perspective. Furthermore, the researcher conducted a structured interview with nine questions which was developed based on the Metacognition Classification of Schraw and Moshman (1995).

4. Analyzing the data

After gaining the data from the interview sessions and reflective writing, the researcher transcribed teachers' narratives and reflective writing, then coded them by finding the common and similar opinion of all the narratives and sentences, then summarized them to obtain final themes. In analyzing the

quantitative data, the researcher analyzed by using Independent Sample T-test through SPSS to see the improvement of metacognitive awareness.

3.5. Research Procedure

This study's analysis procedures are explained as follows:

1. Determining the issue of research

The main issue of this research was that most teachers are not aware of their metacognition and do not utilize it to plan and monitor the teaching process. Therefore, the objective of this study was to find out whether there is any statistically improvement in English teachers' metacognitive awareness after implementing reflective writing, to find out what aspect of metacognition conveyed in teachers' reflective writing, and to find out what are teachers' opinion about reflective writing.

2. Selecting and Determining the Population and Sample

The population was in-service teachers who have been experienced as English teachers. The subjects were chosen on the condition that teachers had been teaching English for years. The sample was in-service English teachers of MGMP Bahasa Inggris in Bandar Lampung.

3. Selecting the Materials

The researcher selected reflective writing to develop teachers' understanding of reflection and metacognitive awareness and the Metacognitive Awareness Inventory for Teachers as the tool to assess the awareness level of metacognition especially for teachers.

4. Administering Metacognitive Awareness Inventory for Teachers

The inventory was initially distributed before the researcher gave a treatment of reflective writing to the learners. The MAIT is considered to be a resource that helps respondents who were teachers of the English Language Teaching to recognize their metacognitive levels of teaching. It has been developed from the previous inventory named Metacognitive Awareness Inventory.

5. Reflective writing

The researcher conducted reflective writing activity for teachers to find out what aspect of metacognitive awareness in teaching conveyed the most. Gibbs' Reflective Cycle (1988) was implemented as a guide for composing reflective writing. Meanwhile, the content of the writing was related to the teaching experience.

6. Administering the post Metacognitive Awareness Inventory for Teachers

After having the treatment, the subject had a second MAIT as the output for the post-inventory. The level of the post-inventory, then, as compared with the pre-inventory to see whether there is improvement in the MAIT of teachers. To see the improvement, the researcher distributed the same inventory as the initial one.

7. Interviewing

Next, in-service teachers were interviewed about their experience in composing reflective writing related to the teaching process and their opinion about the importance of the metacognitive ability to be infused in pedagogical content knowledge. Other implications occurred as the researcher analyzed the data comprehensively.

8. Analyzing the data from the instruments

Finally, in order to address the questions of this research, the data collected from inventories, reflective writing, and interviews were analyzed. Since the method of this study is a mixed method, to gain rich data and information, the data will be analyzed in different methods according to each method of the research questions. Research question 1 will be analyzed quantitatively, meanwhile research question 2 and 3 will be analyzed qualitatively by following the coding procedure by Auerbach & Silverstein (2003, p. 43), the steps were elaborated on the next subtitle.

3.6. Data Analysis

The data of this research were collected and analyzed quantitatively and qualitatively. The quantitative data of inventory were analyzed using the Paired Sample T-Test in the SPSS program to see the improvement between the pre–Metacognitive Awareness Inventory for Teachers and post Metacognitive Awareness Inventory for Teachers. To gain further finding related to the first research question, qualitative data were obtained from English teachers' reflective writing and the interview to answer the second and third research question.

In analyzing data of the interview and reflective writing, typically throughout the data analysis process, the reseacher indexed or coded the data using as many categories as possible. Taped interviews and the participant's reflective writing were transcribed verbatim. In this study, the researcher coded them by following the coding procedure by Auerbach & Silverstein (2003, p. 43). He mentioned six steps for constructing a theoretical narrative from the text (transcripts) which cover:

1. stating research concerns and theoretical framework,
2. selecting the relevant text for further analysis,
3. recording repeating ideas by grouping together related passages of relevant text,

4. organizing themes by grouping repeating ideas into coherent categories,
5. developing theoretical constructs by grouping themes into more abstract concepts consistent with your theoretical framework, and
6. creating a theoretical narrative by retelling the participant's story in terms of the theoretical constructs.

3.7. Normality Test

After organizing the Inventory's results data, it is necessary to examine the data's normality. Although for meaningful conclusions, assumption of the normality should be followed irrespective of the sample size. If a continuous data follows normal distribution, then we present this data in mean value. Further, this mean value is used to compare between/among the groups to calculate the significance level (P value) (Mishra, et. Al: 2019). The data was analyzed to determine whether the data is normally distributed and also to determine which SPSS parametric to apply. The test for normality is demonstrated by the following data.

Table 3.8. Normality Test of Pre and Post MAIT

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pretest	.190	14	.183	.945	14	.493
Posttest	.181	14	.200'	.943	14	.459

a. Lilliefors Significance Correction

*. This is a lower bound of the true significance.

It can be seen in the above table that the Sig. value is 0.493 (Pre-inventory) and 0.459 (Post-inventory). The value is higher than 0.05 ($\square > 0.05$) which can be concluded that the data are distributed normally. Then, the data can be analyzed using a parametric test. In this study, the researcher applied the Paired Sample T-Test to seek for improvements between the pre-inventory and post-inventory of MAIT.

3.8. Hypotheses Testing

By using SPSS 16 at a significance level of 0.05, the hypotheses of research question 1 was analyzed. If significance level results are lower than Sig 0.05 ($\alpha < 0.05$), the alternative hypothesis is accepted. The hypothesis was drawn as follows:

H0 : There is no statistically improvement in teachers' metacognitive awareness after implementing reflective writing.

H1 : There is a statistically improvement in teachers' metacognitive awareness after implementing reflective writing.

Therefore, from the clarification of the above methodology beginning with deciding the research design, population and sample, instruments, data collecting technique, until finally analyzing the data to be able to address the theories suggested to answer the three formulations of the problem. After doing all of these processes, the results are explained in chapter four.

V. CONCLUSIONS AND SUGGESTIONS

This chapter presents the conclusions drawn from the result of this research study and some suggestions for teachers or educators and future research.

5.1. Conclusion

Based on the analysis of the findings of the research presented in the chapter before this one, the researcher arrives at the following conclusions, it is concluded that:

1. There is an improvement in teachers' metacognitive awareness after the implementation of reflective writing. In this study, reflective writing is guided by questions derived from a reflective cycle to assist teachers in formulating reflective writing concepts. Moreover, the researcher examined whether there is a significant difference between the pre-test and post-test of the aspects of metacognitive awareness.

2. Second, English teachers conveyed more expression on monitoring, declarative knowledge, evaluation, planning, conditional knowledge and procedural knowledge. Moreover, it can be seen that the regulation element is higher than the knowledge element.

3. Lastly, gender perspectives on the process of reflective writing provide intriguing conclusions. Both female and male teachers agreed that reflective writing is beneficial for teachers since it offers a tool for self-evaluation, also critical thinking, and professional development. In the case of teaching careers, male teachers desired to be promoted as school managers while female teachers hoped to develop competency and build student-teacher relationships. In addition, male teachers are uninterested in maintaining

reflective writing because it wastes time, but female teachers are interested in writing.

5.2. Suggestion

In accordance with the conclusion described in the previous section, the researcher has a few suggestions to make, which are as follows:

5.2.1. Suggestions for Teachers/Educators

1. Undoubtedly, reflective writing is helpful in maintaining teachers' evaluations. Teachers may keep writing weekly, monthly, or every six months to gradually discover new things about themselves and their teaching essentials.

2. To build improved metacognitive awareness, such as a deeper understanding of how to enhance teaching, teacher-educators must implement training sessions in this area to foster metacognition and develop professionalism.

5.2.2. Suggestions for Further Research

1. Reflective writing has been shown through statistical analysis to improve teachers' metacognition. Further research has the potential to broaden the scope of the study in the area of teaching professionalism.

2. It is suggested for future research to widen the practice of reflective writing into journal writing. To suggest, multiplying the writing activity several times may dig into the use of reflective writing. Moreover, further research should offer people more time to write to gain richer data and insights.

3. When conducting an interview, the questions should be delivered in a natural flow in order to obtain genuine information from the subjects. To

obtain valuable information, the interview should be conducted carefully and completely.

5.3. Limitation of the Research

The limitations of this study were reported in two issues, reflective writing treatment implementation and the absence of repetition of composing reflective writing. Firstly, the implementation of reflective writing was merely done without any delivery of knowledge about reflection and reflective writing. The result of the Metacognitive Awareness Inventory for Teachers showed minimum gain from the pre inventory and the post inventory which means that the difference of both inventory is depicted ambiguously. Secondly, the treatment of reflective writing was done once. To obtain abundant and firm data of teachers' reflection, reflective writing must have been done repeatedly into reflective journaling to form habitual reflective thinking and teaching. The absence of repetitive implementation of reflective journals means that the data is poor and limited in certain ways of analysis.

Finally, the statements above describe the conclusion of the study during the current research. Furthermore, the preceding suggestion would be used to perform better future research.

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