Mathematics teaching anxiety in novice teacher

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Abstract. This study describes the causes, symptoms, and strategies in reducing anxiety experienced by novice teachers when teaching mathematics. This research was qualitative research with the descriptive explorative method. The data was collected using questionnaires and interviews. The subject was 13 math teachers in secondary schools in Riau, Kepulauan Riau, Sumatera Selatan, Jawa Tengah, and Jawa Barat. The data was analyzed by looking for themes and concluding relationships between themes to gain understanding. The findings are (1) novice teachers' mathematics teaching anxiety in secondary schools includes lack of materials mastery, confusion in choosing and applying learning strategies, and difficulty in managing classes, (2) the symptoms experienced by the teachers are vibrating hands, heart palpitations, cold sweat, inability to remember material well and tendency to avoid the learning process, (3) the strategies carried out by novice teachers to reduce the anxiety experienced include understanding learning materials, looking for strategies that are suitable for the material and using learning media as learning aids, and making seating arrangements for students and giving questions.

1. Introduction

Education is the foundation of a nation. A progressive nation must have a good quality of education. The quality of education is supported by various aspects, such as curriculum, facilities and infrastructure, and human resources. One of the most important human resources is a teacher. According to the laws of Republic Indonesia Number 14/2005 concerning on Teachers and Lecturers, teachers generally refer to professional educators with the main task of educating, teaching, guiding, directing, training, assessing, and evaluating the students [1]. To be a good educator, the teacher should have mastered the competencies as a teacher, include mathematics teacher. According to the Minister Regulation of Republic Indonesia Number 16/2007 concerning on Academic Qualification Standards and Teacher Competence, the competency that mathematics teachers must master is using numbers, measurements and estimates, mathematical logic, geometrical concepts, statistical concepts and opportunities, patterns and functions, algebraic concepts, calculus concepts and analytic geometry, discrete mathematical concepts and processes, trigonometry, vectors and matrix, explain the history and philosophy of mathematics, and being able to use props, measuring tools, calculators, computer software, mathematical models, and statistical models [2].

Mathematics subject really needs to be taught at school because by learning mathematics the students can form logical, critical, and systematic thinking skills [3]. This capability can help the students to face dynamic and competitive problems in their daily life. Mathematics itself has three
important parts; content, process, and skill [4]. Mathematics is a subject taught at the elementary school level to college, but many students feel mathematics is a scary and difficult subject to understand [5]. Because of these fears, many students feel anxious every time they study mathematics. Mathematical anxiety involves feelings of tension and anxiety that interfere with numerical manipulation and solving mathematical problems in various daily lives and academic situations [6]. For those who have a high level of math anxiety, mathematics is associated with tension, anxiety, and fear [7].

Research conducted to examine the anxiety experienced by the students has been done, but the research about the anxiety of teaching mathematics in teachers is rarely done. One reason why anxiety in teachers is relatively neglected at the secondary school level is that the researchers may have reasoned that mathematics anxiety is not possible among teachers who specialize in mathematics and use it every day [8]. However, in reality, not all mathematics teachers do not have anxiety in teaching mathematics. This anxiety is usually experienced by novice teachers who have not mastered the teacher competencies that they are supposed to master. Novice teachers are teachers who have teaching experience in under 5 years [9]. This anxiety experienced by the novice teachers ultimately will affect her performance [10].

The teachers who are anxious about mathematics are also found teaching in a rigid manner, emphasizing a rote teaching-learning, spending less time in answering the students’ questions, and not using open questions compared to the teachers with low mathematics anxiety [8]. However, this anxiety is not only experienced by novice teachers but experienced teachers sometimes also have this anxiety. Someone who uses mathematics regularly is also vulnerable to being less productive in their field of specialization as a result of mathematical anxiety. For example, it was found that in junior high school mathematics teachers can experience anxiety in difficult mathematical situations [8]. There is a close relationship between how teachers feel about mathematics and the mathematics learning outcomes of their students [8]. Other effects that are also felt as an effect of mathematical anxiety are shyness and loss of self-confidence [11]. The anxiety experienced by these teachers not only worsens the learning process but also affects the students who are taught because the quality of the teachers can improve the students learning achievement[12]. In several studies, it was found that teachers contributed greatly to improving the quality of education in many countries[13].

Based on the description above, anxiety in teaching mathematics influences the way the teacher carries out the learning process. So research to examine the anxiety of teaching mathematics that the teachers are necessary. Therefore in this study, the anxiety of teaching mathematics in novice teachers will be described.

2. Method
This study used a qualitative approach with a phenomenological. The data sources in this study were 13 novice teachers in high schools who had teaching experience in schools under 5 years old. These high school teachers come from schools in Riau Province, Riau Islands, South Sumatra, Central Java, and West Java. In this research, the researcher is the main instrument. Next, the researchers used questionnaires and interviews as a tool to collect the data on mathematics teaching anxiety experienced by novice teachers.

At the beginning of the research, the data was first collected through a questionnaire. The questionnaire used was an open questionnaire. The questionnaire is used to find out general information and to find out whether the informant has anxiety in teaching mathematics or not. The results of this questionnaire were used to attract mathematics teachers who experienced anxiety in teaching mathematics. Next, interviews were conducted with each teacher to see in-depth how much teaching anxiety that they experienced. The interview material used includes the causes of anxiety that the novice teacher experienced in teaching mathematics, the symptoms experienced by the teacher when experiencing anxiety in teaching mathematics, and the strategy of the novice teacher as an effort to reduce anxiety experienced in teaching mathematics. The interview was conducted for 3 weeks starting at the end of November until the beginning of December 2018.
The data in this study were analyzed as descriptive and explorative. In this research, the researchers described the causes of anxiety that the novice teachers experienced in teaching mathematics, the symptoms experienced by the teachers when experiencing anxiety in teaching mathematics, and the strategy of the novice teachers as an effort to reduce the anxiety experienced in teaching mathematics in accordance with the novice teacher's narrative who have experienced these things. After getting information about the novice teachers who experienced anxiety in teaching mathematics, then the interview was conducted. After the interview was complete, the results of the interview were then reduced. Reduced results from interviews were displayed in table form and grouped according to their respective sub-themes. Furthermore, after finding the sub-themes, a theme that connects the sub-themes was found. The analysis was carried out using a model from Bogdan & Biklen [10]. Bogdan & Biklen stated that qualitative data analysis was an effort carried out by working with data, organizing data, sorting it into manageable units, synthesizing it, searching for and finding patterns, finding what was important and what was learned, and decided what can be told to others. In this research, the understanding of mathematics teaching anxiety experienced by the teachers was obtained from the relationship of each theme.

3. Results and Discussion

3.1. Results
In this study, the results of interviews were grouped based on the interview material, such as the causes of anxiety that novice teachers experienced in teaching mathematics, the symptoms experienced by beginner teachers when experiencing anxiety in teaching mathematics and the novice teacher strategies as an effort to reduce anxiety experienced in teaching mathematics. The results of each interview with novice teachers were reduced and grouped to look for the similarities and the sub-themes were made. Furthermore, between the sub-themes that had been found then the main theme was sought. The main theme was used to understand the factors, symptoms, and strategies to overcome mathematics teaching anxiety experienced by novice teachers.

3.1.1. Some anxiety factors that experienced by the novice teacher after teaching mathematics
Anxiety is a natural thing that experienced by everyone. But in some aspects, anxiety can be very disturbing for someone. This disturbing anxiety can affect a person's performance, including a teacher. One form of anxiety that can interfere the teacher performance is anxiety in teaching mathematics. Anxiety in teaching mathematics is a feeling of anxiety or worry when the teacher taught mathematical material to the students. The anxiety faced by novice teachers can be caused by various factors. These factors can come from within or outside the teacher. This anxiety is usually caused by a lack of mastery of the teacher competencies that should have been mastered. The teacher competencies include pedagogic competence, personality competence, social competence, and professional competence.

Before becoming a teacher, every teacher must have undergone an education program that teaches them about teacher competencies, such as how to become a good teacher, stabilizing the material, strategies used in teaching, how to manage the classes well, and how to evaluate the students. However, because these novice teachers have just applied or practiced the knowledge gained during the education program, so there are still many things that cannot be implemented well in the classroom, besides that there are many new things that novice teachers meet in the fields. The things that novice teachers face directly in class can trigger anxiety in teaching mathematics. Anxiety experienced by novice teachers in teaching can affect the learning process. By having teaching anxiety, the teaching-learning process conducted by the teacher in class becomes not optimal and will affect the students learning outcomes. There are many factors that can cause anxiety that the novice teachers felt. The causes of anxiety that novice teachers felt after teaching mathematics are shown in Table 1.
Table 1. The results of the reduction regarding the causes of anxiety that the novice teachers felt after teaching mathematics

| No. | Sub-theme                                                                 | Relation between sub-themes                                                                 |
|-----|---------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| 1.  | Less material preparation to be taught in class                           | Less material mastership so that there are some materials that have not been mastered properly and need material maturation |
| 2.  | Not fully understanding the material because it has not been repeated or studied for a long time | Difficulties in choosing the right strategy so students can understand the learning material and the material is completed on time |
| 3.  | Good strategy preparation is needed so the students can enjoy and understand the mathematical material that considered difficult by students |                                                                                           |
| 4.  | Difficulties in implementing strategies between cramped material in one semester |                                                                                           |
| 5.  | It's difficult to keep students quiet in class                            | Poor class management, so the teaching-learning process is disrupted                      |
| 6.  | Difficulties in classroom management so the teaching-learning process is not carried out properly |                                                                                           |

When teaching in a class, one of the most important things that have to be prepared before teaching is learning material. Learning material is the core thing that becomes the content of the learning process. In teaching mathematics, of course, the material that must be mastered is mathematical material. Mathematical material is known as a material that is difficult to understand. Some mathematical materials are also connected to each other so that mathematical material becomes complex. So in order to understand the material, there are some preconditions material that must be mastered. This makes some material that is still not completely mastered by the novice teachers, thus spurring the anxiety in teaching mathematics. Besides, because the material is quite difficult and very complex, the anxiety experienced by the novice teachers can also be caused by forgetting some parts of a material. This happens because the novice teachers have not studied the material for a long time, so there are some parts of the material that are no longer remembered.

Furthermore, mastery in the application of learning strategies is also a problem. Learning strategies are very important to be applied in the class. Learning strategies will activate the role of students in the learning process. By using the right learning strategy, it will be able to help the students in understanding the mathematical material and making the learning process more meaningful. However, novice teachers do not have much experience in teaching, so they do not know which one is the most appropriate strategies to be applied in the learning process. In addition, implementing the learning strategy sometimes also quite time-consuming so make the material achievements less achievable especially in the middle of the 2013 curriculum which has quite a lot of material coverage. This makes the novice teacher anxious if the material is not achieved yet.

Another cause of anxiety experienced by novice teachers is the difficulty of conducting classroom management properly. Class management is an obstacle that is often experienced by novice teachers. With difficult material characteristics, most of the students are not interested and become lazy to take part in the mathematics learning process. This can be seen from a large number of students who do not pay attention to the teacher and some students that also disturb their classmates so that it interferes with the learning process. This makes the teacher anxious because the class conditions are not conducive, so the delivery of the material is difficult to do which in turn has a negative effect on the students themselves, even though the class conditions are already conspicuous, the mathematics material is still difficult to understand. Because they do not listen to the teacher's explanation, the students become less understood or even do not understand the mathematics material that has been delivered by the teacher in front of the class. As a result, when the teacher gave a math test, most of the students cannot work on the problem and would get a score below the average. They are some examples of teachers’ statements about the things that caused the anxiety they experienced during the mathematics teaching process in class.
"...Usually, the lack of material preparation will cause anxiety. I haven't been a teacher for a long time, so it seems like the material must be read before entering class, especially if in complicated material, I am fearful of not being good in delivering the material, for example in absolute values, on some absolute questions, there are some questions that need high level of thinking, so the teacher feels afraid if the students do not understand ..." (Teacher 1)

"... the one that most triggers anxiety is because it requires a lot of preparation, for example, in the strategy, mathematics is assumed as a difficult subject, so it must really think of a suitable strategy so that the students can easily understand the material..." (Teacher 9)

"... sometimes the anxious feeling in teaching is mainly caused by some material that is not fully understood because it is not repeated or studied before the teaching process ..." (Teacher 7)

"... many students have problematic attitudes, and students who try to attract the attention of teachers by doing actions that are not supposed to do, so it interferes with the learning process, so I am worried that other students are disturbed and do not understand the material that I convey ..." (Teacher 3)

"... Anxiety occurs when the material is too dense or too much, especially in the 2013 curriculum, there are more than 7 chapters, if at the beginning of the semester you can use the strategy chosen by the teacher, but for example, if it has reached the end of the semester especially near the exam, there are a lot of worries, because there are still a lot of material which has not been taught while the children want to take the exam, if you want to teach using the strategy it will take a little longer ...

"... I feel very anxious if the students are noisy, the students are difficult to be told, they don't seem to care so much about mathematics subject ..." (Teacher 12)

3.1.2. The symptoms experienced by the novice teachers when they feel anxious in teaching mathematics

Anxiety in teaching mathematics is a very natural thing that happened to novice teachers. However, psychologically the anxiety experienced can affect the performance or even the novice teacher's health. Anxiety experienced by novice teachers when teaching can cause symptoms. These symptoms are physical symptoms, cognitive symptoms, and behavioral symptoms. Physical symptoms are reactions shown by the body, the reaction is a disorder. Physical symptoms experienced can be seen directly by the gesture. Cognitive symptoms in the form of worries about something that will happen that interfere with concentration and thoughts. Behavior symptoms are forms of behavior that resulted from anxiety. The symptoms experienced by the novice teachers vary in each individual. Each novice teacher may not only experience one type of anxiety symptom. The symptoms of anxiety experienced by novice teachers when teaching mathematics are shown in Table 2.

| No. | Sub-theme                                           | Relation between sub-themes                                      |
|-----|----------------------------------------------------|----------------------------------------------------------------|
| 1.  | Hands are vibrant due to lack of confidence        | Physical symptoms experienced by the novice teachers include vibrating hands, heart palpitations, cold sweat |
| 2.  | Cannot teach calmly because the heart is pounding continuously | Cognitive symptoms experienced by beginner teachers are not able to remember the material well |
| 3.  | The heart palpitates until cause cold sweat        | Behavior symptoms experienced by the novice teachers tend to avoid the learning process |
| 4.  | Can not remember the material that must be taught on that day well even though the material has been studied before |                                                                     |
| 5.  | Tend to avoid the learning process by asking students to learn independently with group discussions and assigning an assignment |                                                                     |

The symptoms that occur in novice teachers because of mathematics teaching anxiety are quite varied. The novice teachers said that the anxiety they experience resulted in a feeling of unease when
teaching. This feeling of unease causes various symptoms. Physical symptoms experienced by the teacher include a vibrating hand, heart palpitations, and cold sweats. The symptoms experienced by the novice teacher greatly influence the way the teacher teaches. Physical symptoms experienced by the teacher can also be seen in plain view so the students can find out the anxiety experienced by the teacher. Cognitive symptoms experienced by the teacher in the form of anxiety which results in the teacher not focus and unable to remember the material to be delivered to the students in the class. This symptom occurs because the teacher has high concerns before entering the class. When experiencing these symptoms the teacher must reopen the material handbook to recall the material to be taught to the students. The behavior symptoms experienced by teachers are avoidance behavior. Avoidance behavior is a form of behavior in which an individual experiences anxiety, so that the individual tries to stay away from the source of the anxiety. Teachers who experience anxiety try to avoid conveying material and doing lots of interactions with students. The teacher is more seeking and using approaches that make the students work on their own so that the teacher is not too involved and does not need to explain the material to the students. The students are asked to work independently with group discussions. The teacher also gives more assignments to students.

The following are some examples of teachers’ statements regarding the symptoms experienced when feeling anxiety in teaching mathematics during the mathematics teaching-learning process in class.

"... if I am anxious and not confident, my hands are usually trembling, sometimes I am afraid when students know ..." (Teacher 6)

"... usually when I was not ready to teach the students, I feel very nervous in delivering the material to the students..." (Teacher 11)

"... when I was starting to teach because I was too nervous so I got the cold sweat..." (Teacher 5)

"... hmmm the symptoms that I faced is lost, suddenly I am confused about what to say, the material that should have been learned and memorized before entering the class suddenly disappeared, so I have to look at the book first ..." (Teacher 8)

"... usually if I feel difficult to deliver certain material, I ask the students to study independently with group discussions, continue to be given assignments so the students understand the material themselves ..." (Teacher 4).

3.1.3. The novice teacher strategies as an effort to reduce anxiety experienced in teaching mathematics

Mathematics teachers experience various types of anxiety. The anxiety of teaching mathematics they experienced influences the teaching-learning process in the classroom. The anxiety experienced by the novice teacher is not necessarily allowed to hinder the learning process continuously. Beginner teachers try to make various efforts to find solutions to the anxiety they experience. The solutions they do vary depending on the anxiety they experience. The strategies that novice teachers do as an effort to reduce the anxiety experienced are shown in Table 3.

| No. | Sub-theme                                                                 | The relation between sub-themes                                                                 |
|-----|---------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| 1.  | Make preparations such as material maturation before teaching so that you can be comfortable in teaching | Preparing the material before teaching by trying to understand the subject material by yourself, asking friends or senior teachers |
| 2.  | Try to understand the material by self-study or asking friends and senior teacher | Reading the books that related to learning strategies and using learning media to help speed up the process of understanding the material to the students |
| 3.  | Reading books related to the mathematics teaching strategies               |                                                                                                 |
| 4.  | Try to understand the material well before teaching, look for the most appropriate |                                                                                                 |

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One of the main problems of the novice teachers in teaching mathematics is in the lack of mastery of mathematical material. The strategy done by the novice teachers to overcome anxiety in teaching mathematics is to learn and understand the mathematical material that will be taught in-depth either by self-study or studying the material with other people such as friends and senior teachers. After learning the material well, novice teachers will be more confident in delivering material to students.

The second strategy to overcome the difficulties in applying the strategies in the dense material. Implementing a strategy is an important thing to do. This strategy is needed to make students better understand the mathematical material that is considered difficult. Mathematics teachers must try to find the right strategy so that students can understand the material and the dense material can be conveyed to the students. The strategies used by the teacher include re-reading books on learning strategies to find the right strategies to teach a mathematical material and using instructional media to save time in explaining the material. This solution is proven to have a positive effect on reducing anxiety in teaching mathematics. After using the right strategy, the teachers can assist with the learning media, so the students will be better in understanding the mathematical material and do not waste the time so that the material can be completed on time.

The novice teachers also face problems in class management. The efforts made by the novice teachers in overcoming this is by rearranging student seats. The students who have problems and often disturb their friends are asked to be in the front seat. This effort is done in order to make the troubled students no longer disturb their friends and pay more attention to the teacher's explanation in front of the class. The next effort is to give some questions to all students and ask the students to ask the teacher if there is something they do not understand. Students who do not listening to the teacher become calmer and try to focus on the questions given by their teacher.

The following are some examples of teachers’ statements about the strategies that they did in reducing the anxiety they experienced during the mathematics teaching process in class.

"... what is it, one of which that I did was maturing the material, studying first before teaching, yeah, at least I got ready before teaching, so I wouldn't worry too much in the class ..." (Teacher 1)

"... I usually read books on learning strategies, look for strategies that are likely to be possible for later teaching-learning so that the students are not bored and can quickly understand the material" (Teacher 9)

"... I usually try to learn it by myself first, understand it by myself, but if I still don't understand it, I usually ask my friend when I was in college, or sometimes ask the senior mathematics teacher ...

"... I try to be assertive with them, sometimes I ask the students who can't handle it to sit in the front of the class, so they can focus on paying attention to my explanation, so they don't disturb their other friends ..." (Teacher 10)

"... hmmm, in my opinion, the important point so that we don’t feel worried is understanding the material, keep looking for the right strategies to teach the material, keep looking for media that can..."
help the teaching-learning process, so the learning process can be done quickly according to the targets that have been determined ... "(Teacher 13)

"... at first I let the child, and after the students realized that they had made a mistake, I gave the assignment to do the questions, and then those who didn't understand I asked them to ask me ..." (Teacher 5)

3.2. Discussion

Anxiety in teaching mathematics is anxiety experienced by the teacher when teaching mathematics. This anxiety is usually experienced by novice teachers. Anxiety experienced by novice teachers can disrupt the learning process. Many factors cause anxiety can occur. These factors include the lack of mastery of the material. Material is the main thing in the learning process. As a teacher of mathematics, the introduction of a mathematical material is a mandatory thing to do. But the novice teacher was found that they do not master the mathematics material well. This lack of material mastery is caused by the mathematical material that quite a lot, difficult to understand and very complex. To be able to understand the mathematical material, preliminary knowledge of the material is very necessary because in mathematics between one material and another material is interrelated. So, the novice teacher said that there were enough difficulties in mastering the mathematical material. These results are in accordance with Peker [14], who states that mastery of mathematical material is an important component that determines the level of anxiety in teaching mathematics. In another research state that mathematics anxiety in the most important independent variable that causes mathematics teaching anxiety [15].

Another cause of anxiety experienced by the novice teachers is determining the right strategy for the material. There is no single strategy that is suitable for all the material. So the teacher needs to choose the right strategy for the material so that the learning process runs effectively and efficiently. In addition, another difficulty is implementing the strategy in the material that must be achieved and it is quite dense. Learning strategies are needed so that the learning process runs well. With learning strategies, students are expected to be active so that students can understand the material well. However, to implement the learning strategy requires a lot of time. This makes the teacher anxious because if they implement the learning strategy, at the end of the semester the target material is not finished, but if they do not use the learning strategy, not all students are active in the learning process so that only a few students understand the material.

Furthermore, mathematics teaching anxiety experienced by novice teachers is also caused by the difficulties in classroom management. Mathematics is a subject that is considered difficult by the students so that many students are less concerned with learning mathematics so that many students do not pay attention to the teacher's explanation. Students who do not pay attention to the teacher's explanation also disturb their other friends so that the situation in the classroom is not conducive. This is very disturbing for the teachers when teaching in the class. The teacher's focus becomes disturbed so that he cannot deliver the material properly. This makes the teacher anxious because if the class is not conducive it will be difficult to deliver the material so that students do not understand the mathematical material teach by the teacher. These results are in accordance with the previous research conducted by Ramirez et al [8] which found that anxiety experienced by the teachers provides a negative relationship to student performance in teaching-learning.

Anxiety experienced by the novice teachers results in various symptoms. Symptoms that arise can be physical symptoms, cognitive symptoms, and behavioral symptoms. Physical symptoms shown by the novice teachers include vibrating hands, heart palpitations, and cold sweat. The cognitive symptoms experienced by the novice teachers are anxiety which the teachers do not focus on and unable to remember the material which wants to be delivered to the students in the class. Behavior symptoms experienced by the teacher in the form of behaviors to avoid explaining the material. The teacher tries to avoid delivering the material to the students. The teachers ask the students to do independent learning with group discussions and work on assignments. This result is in line with the research conducted by Lyons & Beilock [7] who found that mathematical anxiety can cause tension,
anxiety, and fear. In another study, Peker [16] also found that mathematics teaching anxiety experienced by teachers resulted in decreased motivation and difficulty in determining effective teaching methods.

Various efforts are done by the novice teachers to reduce the anxiety that they experienced in order to do the learning process well. The efforts made include trying to understand the mathematical material that is difficult to understand. Understanding the mathematical material is usually done by repeating or recalling the mathematics material to be taught. Another way is to ask people who are more likely to understand the mathematical material. After understanding the mathematical material that will be taught, usually, the anxiety experienced by the novice teachers will be reduced and can do the learning process better.

Next, the teacher will determine the most appropriate strategy to teach the material by considering the characteristics of the students, the characteristics of the material, and the learning objectives to be achieved. The chosen strategy is sought to be able to make the teaching-learning run more effectively and efficiently. By applying the right strategy, it is expected that the material can be conveyed well so that the students can understand the material and at the same time the target of material achievement can be fulfilled. The novice teachers also use learning media to help speed up and facilitate the delivery process. Learning media which usually used can attract the students' interest in learning mathematics.

Next to overcome the mathematics teaching anxiety caused by difficulty managing the class. Class management is identical to how the teacher can manage the class well. With good classroom management, the teacher can deliver the material more optimally. Some efforts made by the novice teachers to be able to arrange the class so the students can focus on the learning is rearrange the sitting position of the students who often interfere with the learning process. The problematic students are asked to sit in the front row so they can focus on the teaching-learning process and no longer disturb the learning process. Another way is to give assignments to work on some math problems. By working on the problem, the students will try to understand how to solve the problem so, the students will learn to understand the concept of the material being taught. This result is in line with the research conducted by Nilab Sidiqi [17] which provides several ways for teachers to reduce anxiety such as using group discussions, using student-centered strategies, introspecting the way teachers teach, planning the teaching-learning process in more detail, and understand the contents of the mathematics curriculum well.

4. Conclusion
Based on the analysis, it was found that mathematics teaching anxiety in novice teachers was caused by three things, they are; lack of mastery of the material, difficulties in applying strategies and poor class management. The symptoms of anxiety experienced by the teacher are trembling hands, heart palpitations, cold sweat, unable to remember the material well and tend to avoid the explaining process. The strategy that has been tried by the teacher is trying to understand the material that is considered difficult by the teacher before teaching in class, choosing the right strategy and assisted with the learning media so that the teaching-learning process runs more effectively and efficiently, and tries to make students focus on learning by organizing the students’ seat and give the students an assignment in the form of questions that must be solved.

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