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Analyze the correlation of *hafiz qur'an* and *yaumiah* worship toward the level of math anxiety

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Abstract. Anxiety towards mathematics is often experienced by students in the learning process, especially mathematics. High level of mathematical anxiety can affect the process and student learning outcomes. High levels of anxiety can make student learning outcomes low. This research is aimed to analyze the relation of hafiz qur'an and yaumiah worship to the level of math anxiety. Subjects in this study are junior high school students, who in addition to learning he also do activities memorization Al-Qur'an, other than that the students are also very maintaining yaumiahnya worship, such as wajib prayers and sunah, fasting sunah, read qur'an and zikir. This research are descriptive qualitative research. The researchers collected data through questionnaires of anxiety mathematics, sheet of memorization Al-Qur'an, and sheet of muttabaah yaumiah, then the researchers analyzed the data collected. The results are that: (1) Quantity of high zikr can reduce anxiety in learning mathematics, to the level of medium learning anxiety, and (2) obligatory prayers are always done and on time can affect the level of anxiety students in doing math problems, to the level of medium anxiety.

1. Introduction

Mathematics is a universal science that became the basis of the development of modern technology, mathematics has an important role in the various disciplines and development of the human mind power [1]. Mathematics is one of the branches of science that is considered to contribute positively in spurring the progress of science and technology. This is in line with the expert opinion that mathematics has a very essential role for other sciences, particularly science and technology [2]. So that math becomes very important in efforts to improve the quality of education and potential learners.

The results of the learning process sometimes do not always provide a satisfactory outcome. So also with the learning of mathematics, as a whole to the present satisfactory results that can not be achieved. This can be seen from the mathematical value of most students still below the standards of mastery. Judging from the national exam results in 2017 the average value of mathematics students in competence-based national exam (UNBK) is 47.75. The average value of mathematical learning is at the lowest position when compared to the value of other subjects. The value of mathematics in 2017 compared with the value in the previous year is also lower, where in 2016 the mathematics of UNBK is 53.39 [3]. Based on the PISA study in 2015, in the field of Indonesian mathematics only able to reach the position of 62 out of 70 participating countries with a score of 386 [4]. This indicates the level of success of students in learning mathematics is still relatively low, so the need for a review to identify what factors that influence it and the need for efforts to improve and improve learning outcomes.

One of the causes of the low learning outcomes of mathematics students is anxiety to math. Mathematical anxiety creates negative attitudes toward mathematics and negatively correlates with math

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performance that results in low learning outcomes [5, 6]. Students who has a high level of mathematical anxiety has a low learning achievement [7]. In line with it also that students who have performance have low level of mathematical anxiety, and that low-achieving students have high levels of mathematical anxiety. Students with high levels of mathematical anxiety assume that mathematics is a frightening subject [8].

Mathematical anxiety is very influential on the success of learning mathematics students, so that math anxiety can not be considered as a matter of course. Students who experience mathematical anxiety will find it difficult to understand and master the lesson, students will also be difficult to solve math related problems. Due to the bad feelings of fear of mathematics will arise so that will make them tend to avoid math, avoid learning mathematics, and avoid math related problems.

To overcome anxiety the way people do different, one of them by setting the time [9]. Setting the time is meant to be able to determine the priority thing to do, to prepare for the possibility that will happen. Relating to mathematical anxiety experienced by students, students can overcome their anxiety by better preparing themselves before entering in learning or when facing problems or problems that are difficult to resolve.

In addition to preparing well, there is also another way that is used is trying to calm the mind. How to calm the minds of everyone is different for example by listening to music, solitude, reflection, or by praying. For Muslims, praying is part of zikrullah. As Djumhana discloses, one of the benefits of zikrullah is to have serenity [10]. As Allah subhanawata'alla says which means: "Those who believe and their hearts are calm with the remembrance of Allah. Remember, it is only by remembrance of Allah that the heart is at peaceful "[11].

Ibn Katsir interprets this verse that the peace of a believer's heart is only earned by dzikir to Allah Ta'ala. The human heart feels comfortable and calm in the presence of Allah Ta'ala, feel at ease when remembering and mentioning His name, and is pleased to Him as a Helper and Protector. Therefore Allah Almighty says, "Remember, it is only in the remembrance of Allah that the heart is calm." That is, Allah Ta'ala has the right to be remembered and mentioned His name. This verse teaches the Muslims that those who believe in Allah Subhanahu wata'ala believe that God will help him when in difficulty and this will create a calming effect in one's soul and mind. So the fear or anxiety that an individual can overcome can be overcome by always remembering Allah subhanawata'ala. One's belief in a power that can overcome difficulties encountered will be able to overcome the anxiety disorder experienced.

In a study related to anxiety and stress experienced by students it was found that by dzikir can decrease stress and anxiety level significantly, the indicator is based on the heartbeat of respondents [12]. This study further strengthens the notion that with dizikir can provide calm for the culprit so as to reduce the level of anxiety experienced.

Specifically there is no research that examines the relationship between the level of religiosity with the level of mathematical anxiety of students, but according to Larinta and Gustiani they found that the higher the level of religiosity in students the lower the anxiety facing the National Exam (UN) and the lower the religiosity of the students, the more high anxiety facing UN [13]. This indicates that there is religiosity relationship with anxiety level although in this research the anxiety studied is anxiety to various subjects that tested do not discuss student's anxiety of mathematics in specially deserved there is linkage because mathematics is one of the subjects tested in UN.

In addition to the relationship between religiosity with the level of anxiety students face the UN there are other studies that examine the influence of aspects of worship to one's achievement. The research conducted by Hakiki found that the observance of worship was directly proportional to the student achievement under study [14].

Based on previous explanation on mathematical anxiety relation with mathematics learning result, and recitation of quran and worship yaumiah with student anxiety level, so this research is done to see the correlation of rote qur'an and worship yaumiah to student's mathematical anxiety level.

2. Method

This research was qualitative research. The qualitative research approach used in this research is descriptive. That is research on the problems of the current facts of a population, and the data collected are in the form of words, images, and not in the form of numbers [15, 16]. Through this qualitative

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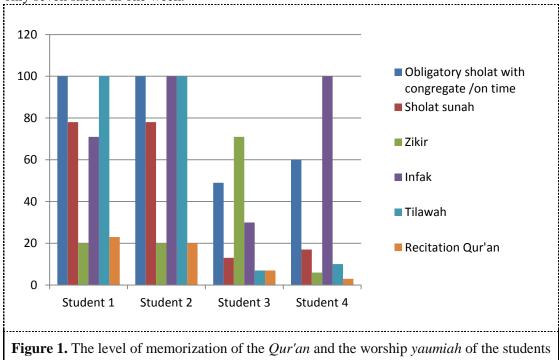
approach, all the facts both oral and written from all observed data sources and other documents, are described as being. The researcher will plan, design, execute, collect, analyze data, conclude, and create research reports [16].

Subjects in this study were four students of VIII and IX grade of junior high school. Two students at the same time also attended the Qur'an tahfiz program, and the other two students did not follow the special program of Qur'anic tahfiz but they were still required to memorize the Qur'an. Besides, the students are also emphasized to carry out the practice of yaumiah in accordance with the targeted. Worship yaumiah which is meant among them is the obligatory prayer congregation, sunnah prayer, read the Qur'an, zikr, and infak / sodaqoh. The place of study is the Daarut Tauhid bimbel that uses curriculum like the school in general.

3. Result and Discussion

The results of the research of the four students who became the subject of research that is diverse. Judging from the quantity of practice her yaumiah, there are students who always do discipline her yaumiah but there are also students who are less disciplined in doing her worship yaumiah. The first and second students are very disciplined in doing her worship yaumiah. Sholat which obligatory must always be done every time and always on time, Sholat sunah tahajud, duha, rawatib, and zikr always done every day at least once, infak / alms is also routinely done at least five times in one week, recitations Qur'an was at least one juz in a day. The third student is quite disciplined in doing his worship yaumiah, in one week of obligatory prayer often twice not implemented, praying in congregation and on time only once a week as well as praying sunah tahajjud, sunna prayer duha almost every day is done, sunah rawatib prayer only twice a week as well as infak, for a very disciplined dhikr, but the recitation of Qur'an is still less discipline that is only 5 sheets in one week.

The fourth student is quite disciplined in doing the yaumiah worship, obligatory prayers always done although rarely on time, sunnah prayer is rarely done at least one to three times in a week, as well as with zikr, to sunah rawatib prayer a little often ie seven times a week, recitations Qur'an it is also rare that only seven sheets in one week.



In memorizing the Qur'an, the recitation quantity of the four students is also different. The first student memorized seven juz by understanding some meaning, in a day he used to memorize for two and a half hours. The second student is more or less the same, he has memorized 6 juz by understanding

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some meaning, and in a day he used to memorize for two and a half hours. The third student is a bit different, he memorized two juz but did not understand the meaning. The fourth student he only memorized 1 juz and understood some meaning.

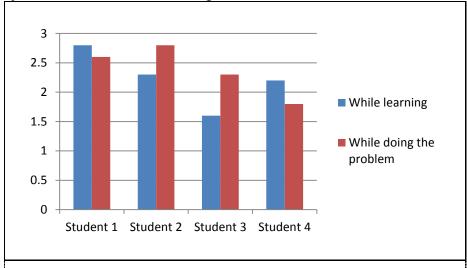


Figure 2. Mathematical anxiety level of students while learning and while doing the problem

Mathematical anxiety of students in this research is divided into two categories, namely anxiety in learning mathematics and anxiety in doing math problems. The first students in learning mathematics often experience anxiety with the percentage of 83% while in doing math problems percentage often experience anxiety that is 58%. The second student in learning mathematics often experience anxiety with the percentage of 42% while in doing math problems percentage often experience anxiety that is 75%. Third students in learning mathematics often experience anxiety with the percentage of 8% sometimes experience anxiety with the percentage of 42% while in doing math problems percentage often experience anxiety that is 42% and sometimes experience anxiety with the percentage of 42%. The fourth student in learning mathematics often experience anxiety with the percentage that is 34% sometimes experience anxiety with percentage 33% while in doing math problem percentage often experience anxiety that is 10% and sometimes experience anxiety with 42% percentage.

From the data obtained can be seen that there are some relevance yaumiah worship with the level of mathematical anxiety. The third student whose quantity of zikir is the most the level of anxiety in the learning of mathematics is the lowest, which is in the category of medium anxiety level. While the fourth student with the least amount of zikr, the level of anxiety in learning mathematics is high, as well as two other students also have high learning anxiety level. This is in accordance with the Qur'an and the Djumana phrase and the Salam study that the zikir or remembrance of Allah can provide serenity and can reduce anxiety [10,11,12]. There is also a link between obligatory prayer and mathematical anxiety level. The fourth student who always performs obligatory prayers but not always on time, in doing math problems has a medium level of anxiety. Unlike the third student, in the case of obligatory prayer he does not always do it and often not on time, the level of anxiety in working on math problems is high. In contrast to the recitation of the Qur'an which has the opposite relevance. Perhaps in terms of recitation the Qur'an there are other factors that cause less affect the decrease in the level of anxiety. It could be that students who memorizing the Qur'an lack understanding or lack of meaning that recitation.

4. Conclusion

There are several things that can be used as conclusion of this study, namely: (1) Quantity of high zikr can reduce anxiety in learning mathematics, to the level of medium learning anxiety, and (2) obligatory prayers are always done and on time can affect the level of anxiety students in doing math problems, to the level of medium anxiety.

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