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The Difficulties and Anxiety Of 9th Grade Students in Facing Final Exam During a Pandemic

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ABSTRACT

This research aims to explain students' difficulties in learning mathematics, the factors that cause learning difficulties, and student anxiety in facing school final exams during a pandemic and explain the design of a good mathematics learning system that should be carried out during a pandemic according to the results of this research. This research is descriptive qualitative research that was conducted in one of the junior high schools in the Tangerang district in 2021 with the research sample being 9th-grade students. For getting the data, this research used questionnaires, interviews, and documentation techniques. The result of this study found some of the main problems that happened to students in facing school final exams include students' unpreparedness for online learning, lack of interest in learning in students, lack of understanding of the material, feeling lazy to take part in online learning, difficulties in learning mathematics and the anxiety of students themselves in facing the final school exam. Making a good and comfortable learning system by paying more attention to the mental readiness of students and making teaching materials in the form of audio-visual or video can be one of the right solutions. In addition, face-to-face learning can provide motivation to students to increase their confidence. Thus, their anxiety in facing the final school exam can be overcome.

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INTRODUCTION

The world was shaken by the emergence of the Covid-19 pandemic at the end of 2019 ago. In March 2020, this pandemic officially affected conditions in Indonesia on a large scale. Many government and non-government agencies, educational and non-educational institutions, and others have also been affected. In the education sector, the government has made a policy of studying at home since March 14, 2020. In addition, learning at all levels of education from elementary school to university has been carried out online to reduce mobility and the risk of transmission of the increasingly virulent virus. The implementation of online learning is also echoed by Makarim (Minister of Education and Culture) as

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independent learning.

For this reason, students are required to be more familiar with technology, creative, highly motivated, and must be able to innovate the goal is to prepare a millennial future to be ready for the challenges of globalization (Hadi, 2021). Online learning has become a widespread and growing phenomenon which makes a tremendous impetus for the use of information and communication technology in universities (Markova et al., 2017). Students who do online learning must have self-regulated learning (SRL) skills, which are part of managing, regulating, and monitoring the learning process so that they can achieve their learning goals.

But in reality, online learning creates a lot of new problems. Many students have difficulty in learning. Like difficulty in accessing the internet, difficulty understanding material independently, boredom in learning, unpreparedness with changes from the offline system to online, or even student anxiety in facing their exams during this pandemic. Anxiety is the total human response to a threat or danger (Mulyana et al., 2021). Every anxiety involves the perception of danger, thoughts about danger, and processes of physiological alarm and activation (Moss, 2002). Mathematical anxiety is an uncomfortable feeling that appears as a result of unstable emotions which are characterized by worry, tension, fear, and anxiety when facing an activity that is not wanted in learning mathematics. Math anxiety is one of the emotional factors that can be very disturbing to some children and adults who learn and excel in math (Dowker et al., 2016).

Beilock & Maloney (2015), Winarso & Haqq (2019), and Zientek et al (2010) say that students' negative view of mathematics which is accompanied by difficulties in learning can cause math anxiety. Karger in Hastuti et al (2021) says that anxiety in mathematics can divert concentration in solving problems so students tend to avoid mathematics. This avoidance of mathematics can unconsciously be due to the assumptions of students who consider mathematics to be a difficult and unpleasant subject so it allows students to feel difficulty and anxiety in learning mathematics in class. It's also given obstacles in learning. Students with high levels of math anxiety have lower learning outcomes and math abilities than students who don't have math anxiety (Atmojo & Ibrahim, 2021; Ikhsan, 2019).

There are so many factors that cause high levels of student anxiety in learning mathematics and how they have difficulty learning mathematics itself. And the problem of students' anxiety and difficulties in learning mathematics is one of the main factors that make them feel anxious in facing the final school exam. The many problems faced by final-year

students make them have high anxiety in facing their final school exams. This arises as a result of parents' sometimes unrealistic expectations of their children's abilities, especially anxiety in learning mathematics which is often considered a difficult and feared subject (Pangastuti, 2014). Furthermore, it will be discussed how this happened at the point of the discussion and the results below.

RESEARCH METHOD

This kind of research is descriptive qualitative research with an ethnographic approach and literature study to obtain research results in the form of a detailed and in-depth explanation of how learning difficulties and anxiety are experienced by students in facing their final school exams during the pandemic. This research was conducted in one of the junior high schools in the Tangerang district in 2021 with the research sample being 9th grade students which only numbered less than 30 people. Meanwhile, the research sample was taken randomly in one of the two existing classes. There is about one-third of the total population sampled in this study. This is due to limited access to data collection during the COVID-19 pandemic where the data collection process can only be done online. Therefore, the researcher understands very well that this research has limitations in the process of data collection due to the limited space for researchers to directly observe research samples in class and also the process of collecting data from sample subjects.

For getting data collection, this research used questionnaires, interviews, and documentation techniques. The distribution of online questionnaires using google forms is used as the main tool to obtain data from respondents. This questionnaire consists of several types of questions in the form of multiple choice with two answer choices, Likert scale, and short entry. Meanwhile, interviews through WhatsApp were conducted on several randomly selected samples to obtain additional information from the research sample. To complete the validity of the data that has been obtained, the researcher conducted a literature study through previous research documents that supported this research. The results of the study in the form of questionnaires and interview scripts were then processed and analyzed for later interpretation. Because this type of research is qualitative research, the results of this study are obtained by describing the data in the questionnaire and interviews in sentences that are structured, coherent, logical, and do not overlap and are effective to facilitate the reader. The data obtained has gone through the process of data inspection, classification, analysis, and finally to the process of making conclusions. Respondents' answers were well-

checked and classified for later analysis to get the right conclusions and compared with several relevant studies to strengthen the research results.

The goals of the research explain how students' learning difficulties in learning mathematics occur, explain what are the factors that cause learning difficulties and student anxiety in facing school final exams during a pandemic, and provide a detailed explanation of how a good mathematics learning system should be during a pandemic according to research results on this.

RESULTS AND DISCUSSION

Sevindir et al., (2014) in their research show that some students who are working on math problems are indicated to experience anxiety which has symptoms such as palpitations, shortness of breath, stomach pain, sweating, and loss of concentration so they feel difficulty and nervous. Sieber said that anxiety can interfere with cognitive abilities in learning such as concentration, concept formation, and mathematical problem-solving. Symptoms of this anxiety can also appear when students find it difficult to change numbers and symbols in solving math problems they face (Hastuti et al., 2021). There are so many factors that cause high levels of student anxiety in learning mathematics and how they have difficulty learning mathematics itself. And the problem of students' anxiety and difficulties in learning mathematics is one of the main factors that make them feel anxious in facing the final school exam. The many problems faced by final-year students make them have high anxiety in facing their final school exams. This arises as a result of parents' sometimes unrealistic expectations of their children's abilities, especially anxiety in learning mathematics which is often considered a difficult and feared subject (Pangastuti, 2014).

So, it's clear that students' anxieties in facing final school exams come from the problems of learning difficulties they experience in learning mathematics before.

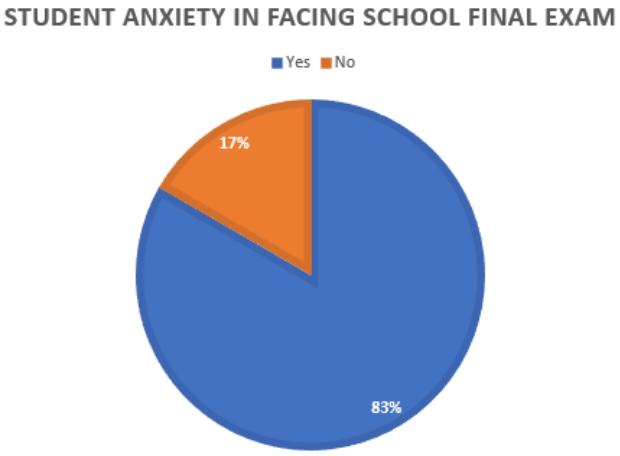

Figure 1. Student Anxiety in Facing School Final Exams

When the student is asked the question “do you feel anxious about the final school exams?”, 83.3% of the sample answered "yes". They felt worried about facing the final school exams. When students were asked about the anxiety they felt in the face of final school exams and how they dealt with it, students gave various responses. Some of them are worried but still grateful for the results that will be obtained, some regret because they get a low score because they are too anxious, some are anxious and are sure that they will not be able to finish their exams well, and so on.

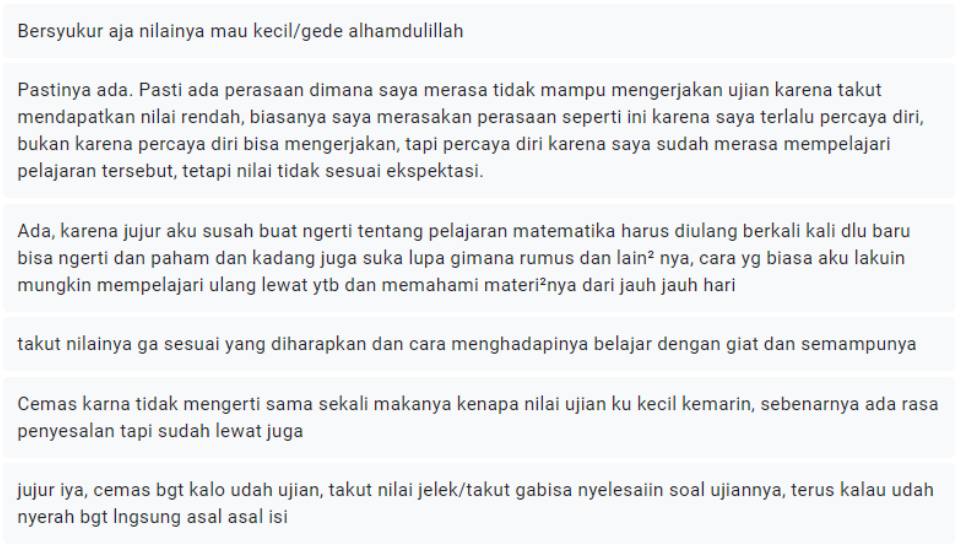

Figure 2. Student’s Responses When Asked About Their Anxiety in Facing School Final Exams

Even if they put in a little more effort, this anxiety would probably be much less than now, because they haven't put in the maximum effort to try to understand the material they have been given. This is reflected in some of their answers who understand how to deal with their anxiety. Most are aware that by studying harder and preparing everything much more

thoroughly, they can minimize their anxiety.

But this condition also cannot be blamed absolutely on students, because a learning process moves in the balance between students, educators, and the ongoing system. It's not only students who are wrong in this case, the teacher's mistakes in preparing learning methods that are not appropriate for the conditions of junior high school students who tend to still need material feeding because they are not as independent as students with higher levels are also one of the other supporting factors.

Moreover, the conditions of online learning make the scope of their learning greatly reduced. Usually, students can freely interact with their teachers, their friends, or the rest of the school community during regular offline learning. But when this pandemic comes, they have to adapt to a new condition like having boring life where they can only study at home by using the gadgets they have.

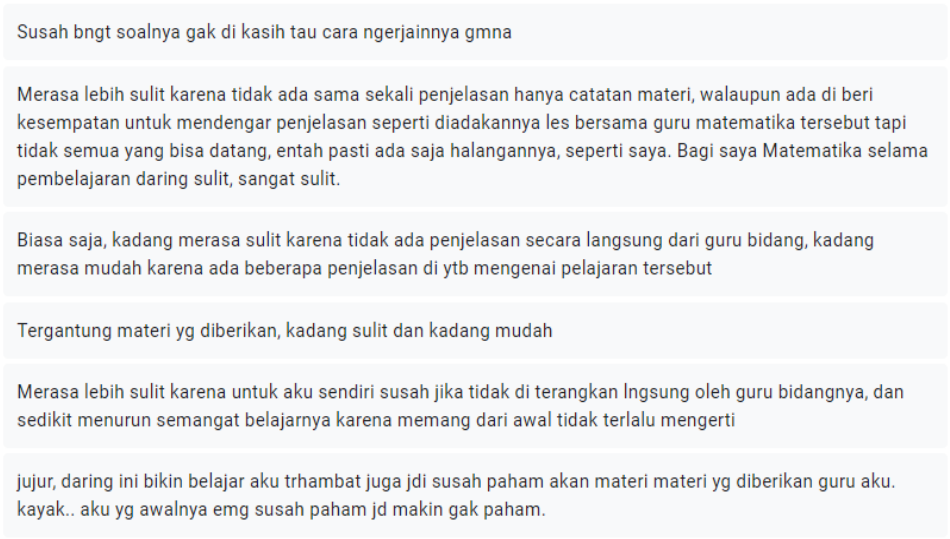

Figure 3. Student Opinion About Online Math

As we all know, the condition of online learning is highly dependent on the signal strength at the student's home. Not only that, many students have good signals but do not have a good learning environment at home. Some students feel that online learning is very inconvenient and boring. From the research conducted by researchers on 9th grade students in one of the private junior high schools in the Tangerang Regency area, there were 1/3 of the classes that the researcher distributed to them questionnaires telling them about all the unrest that occurred. There are so many factors that cause learning difficulties to occur which lead to their anxiety in facing school final exams during a pandemic like this. It was obtained from the results of the analysis of student answers when filling out online questionnaires by

google form.

The condition of online learning makes them feel bored learning because online has been running for quite a long time and students tend to feel less interactive in learning so that the material they receive cannot be understood properly. They assume that the material given by the teacher is like giving questions in every meeting.

Even though the teacher gave the material in the form of a pdf or photo, they were just given practice questions to practice their understanding, they still felt that it was not learning. Many students ask how the learning can continue as usual offline, where students and teachers can freely ask questions and interact. Some of the students asked for an online meeting by Zoom or other, where in this way students could also understand how the notes given by the teacher were meant.

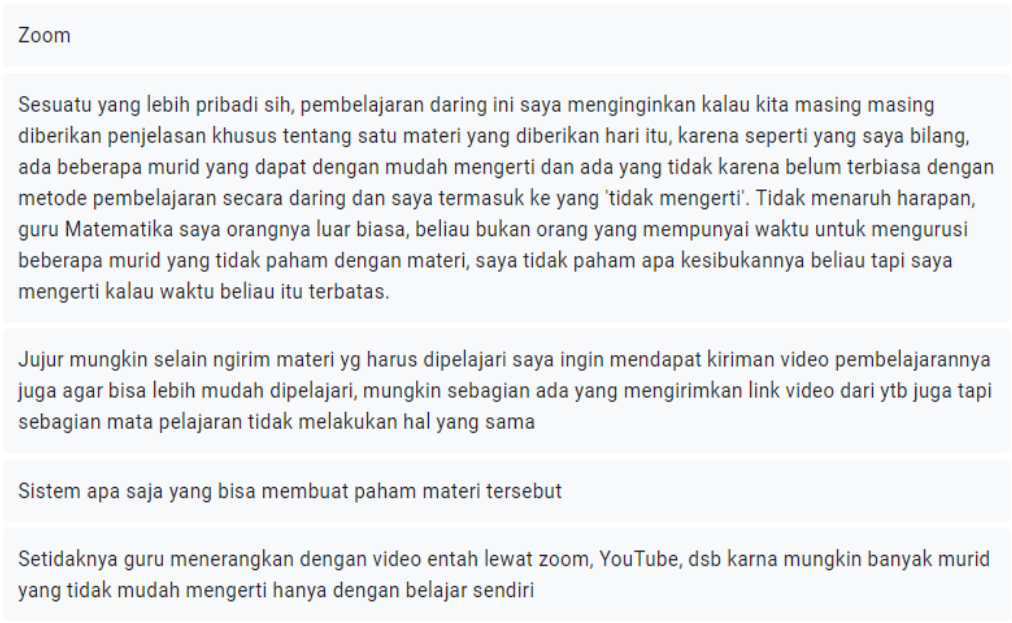

Figure 4. Student's Expected About Learning System

Many students feel that they do not understand the material being taught because the teacher does not provide more explanation. At least there is a learning video if indeed the meeting with Zoom can't take place so they can still understand the purpose of learning well.

The unpreparedness of students in dealing with changes in new learning patterns is the initial problem of learning difficulties and the anxiety of these children begins. This condition of unpreparedness of students causes a decrease in their motivation and interest in learning mathematics. Whereas in reality, they are currently in class IX where they should prepare well for the material lessons they need to face the final exam later.

This lack of interest in learning makes them not understand the material and are increasingly lazy in participating in ongoing learning. So, the problems of learning difficulties they face are getting bigger and heavier. This ends with them feeling anxious about their ability to pass the final exam.

Ikhsan (2019) says that mathematics anxiety should not be experienced by students or students with low levels of anxiety in learning mathematics. A low level of math anxiety will provide high learning outcomes. In line with this, according to the results of research conducted by Zuraidah et al (2020) if students' math anxiety decreases, student learning outcomes tend to increase. Students' mathematical anxiety can also be overcome by the ability of a teacher in processing mathematics learning. For example, by making mathematics lessons in a better direction and easily accepted and liked by students. Make students comfortable in participating in mathematics learning, so that in the end students like math subjects. There are still many students who feel anxiety about learning mathematics. For example, students find it difficult to concentrate on learning mathematics because previously, students have overcome fear. Mathematics anxiety can also be caused by teachers who are sometimes less precise in applying approaches and methods in learning (Mulyana et al., 2021).

The main factor in the success of students to understand the lesson is the teacher's ability to convey the material to be taught. Usually, in conventional learning, the teacher's dominance is very high, so there is a lack of independence from students and usually, this learning is uninterested for students. The ability of teachers is very influential on the development of student learning to a higher level, this is due to the unconsciousness of students in understanding mathematical concepts that must think logically, rationally, critically, carefully, efficiently, and effectively which will be useful in the future era. The level of understanding in a student's mathematics subject is more influenced by the student's own experience. Learning mathematics is an attempt to help students construct knowledge through the process of learning mathematics (Tayeb et al., 2016)

Given these situations and conditions, a creative teacher must improve student learning outcomes in studying mathematics by seeking a method or other model that can help students be more motivated in learning mathematics, with their disciplinary motivation to be formed. To anticipate this problem so that it is not sustainable, the teacher must continue developing and establishing various models/methods that vary. The method used so that students can actively participate in learning presented in one of the studies from the journals that the researcher read is the *Guided Discovery Method*. The *Guided Discovery Method* is a model

that exposes students to situations where they are free to investigate and draw conclusions while the teacher directs students to make guesses, intuition, and trial and error. This learning model in the teacher's role is to state the problem, then guide students to find a solution to the problem with orders or with worksheets. Students follow the instructions and find their solutions. *Guided Discovery* is usually done with individually developed materials. The teacher must be sure that the material "found" is mathematically justifiable (Tayeb et al., 2016).

But in this study, the researcher has not specifically discussed how the right learning method can be done. This research is still limited to how these learning difficulties and anxiety take place and what inputs from students are submitted for the online learning process in the future. Here the following are some of the special points that were conveyed by students as input for further online mathematics learning, especially for students who are in class IX where they are required to be able to complete the final exam well to get the opportunity to get the intended high school, including making a better and more comfortable learning system; making learning materials in the form of audio-visual; personal approach to students; there is a virtual meeting during the learning process, and giving motivation to students so that their confidence increases in facing the exam.

CONCLUSION

From a pandemic that causes learning to take place online, many students feel anxious about facing their final school exams, especially in mathematics. This is due to student unpreparedness for online learning, the lack of interest in learning students, student's lack of understanding of the material being taught as a result of ongoing online learning, difficulty learning mathematics (because of the difficulty of learning mathematics for students), and feeling lazy to join online learning.

This is the challenge and our new concentration of educators in creating appropriate learning with such conditions. Junior high school students who tend to be spoiled and not independent need us as teachers in their learning, and in online learning like this it is impossible to get one person down, we need good cooperation between students and parents though. Suggestions for further research is how to reduce this problem of difficulty and anxiety by considering several conditions, responses, and suggestions from students directly in dealing with these online learning changes.

REFERENCES

Atmojo, B. T., & Ibrahim. (2021). Pengaruh Kecemasan Matematika dan Self-Concept Saat Pandemi Covid-19 Terhadap Hasil Belajar Matematika Siswa. *Jurnal Penelitian Pendidikan Matematika Dan Sains*, *4*(1), 34. https://doi.org/10.26740/jppms.v4n1.p34-40

Beilock, S. L., & Maloney, E. A. (2015). Math Anxiety: A Factor in Math Achievement Not to Be Ignored. *Sage Journal*. https://doi.org/https://doi.org/10.1177/2372732215601438

Dowker, A., Sarkar, A., & Looi, C. Y. (2016). Mathematics anxiety: What have we learned in 60 years? *Frontiers in Psychology*, *7*(APR). https://doi.org/10.3389/fpsyg.2016.00508

Hadi, W. (2021). *Kecemasan Siswa Terhadap Matematika Pada Pembelajaran Online di Masa Pandemi Covid-19 Ditinjau dari Tingkatan Sekolah dan Gender*. *5*(1), 427–440.

Hastuti, E. S., Eclarin, L., & Dalam, K. K. S. (2021). Kecemasan Siswa Sekolah Menengah Pertama Menyelesaikan Masalah SPLDV Pada Kelas Virtual Dalam. *Journal of Progressive Mathematics Education*, *8435*(1).

Ikhsan, M. (2019). Pengaruh Kecemasan Matematis Terhadap Hasil Belajar Matematika. *De Fermat : Jurnal Pendidikan Matematika*, *2*(1), 1–6. https://doi.org/10.36277/defermat.v2i1.28

Markova, T., Pryadilina, N., & Damary, R. (2017). Key Challenges of On-line Education in Multi-cultural Context. *Procedia - Social and Behavioral Sciences*, *237*(June 2016), 83–89. https://doi.org/10.1016/j.sbspro.2017.02.034

Moss, D. (2002). Psychological Perspectives: Anxiety disorders: Identification and Intervention. In *Performance Anxiety: Origins and Management* (Vol. 1, Issue January, pp. 1–49). https://www.researchgate.net/publication/259560188_Psychological_perspec%0Atives_Anxiety_disorders_Identification_and_intervention%0D

Mulyana, A., Senajaya, A. J., Ismunandar, D., & Kunci, K. (2021). Indikator-Indikator Kecemasan Belajar Matematika Daring di Era Pandemik Covid-19 Menurut Perspektif Siswa SMA Kelas X. *Penelitian Matematika Dan Pendidikan Matematika*, *4*, 14–22. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjBxrKNwMnvAhUaqksFHVrMCfwQFjABegQIAhAD&url=https%3A%2F%2Fwww.e-journal.my.id%2Fproximal%2Farticle%2Fdownload%2F501%2F390&usg=AOvVaw2IJRB9auSxoAtmIcAMvgeC

Pangastuti, M. (2014). Efektifitas Pelatihan Berpikir Positif untuk Menurunkan Kecemasan dalam Menghadapi Ujian Nasional (UN) pada Siswa SMA. *Persona:Jurnal Psikologi Indonesia*, *3*(01), 32–41. https://doi.org/10.30996/persona.v3i01.367

Sevindir, H. K., Yazici, C., & Yazici, V. (2014). Mathematics Anxiety of Secondary School Students: A Case Study for Kocaeli Area. *Procedia - Social and Behavioral Sciences*, *152*, 630–636. https://doi.org/10.1016/j.sbspro.2014.09.254

Tayeb, T., W, A., & Idris, R. (2016). Minimalisasi Kesulitan Siswa Dalam Penyelesaian Masalah Matematika Dengan Penerapan Pola Latihan Terbimbing Kelas XII IPA 1 SMA Negeri 1 Anggeraja, Kecamatan Anggeraja, Kabupaten Enrekang. *MaPan*, *4*(2), 221–230. https://doi.org/10.24252/mapan.2016v4n2a6

Winarso, W., & Haqq, A. A. (2019). Psychological disposition of student; Mathematics anxiety versus happiness learning on the level education. *International Journal of Trends in Mathematics Education Research*, *2*(1), 19. https://doi.org/10.33122/ijtmer.v2i1.32

Zientek, L. R., Yetkiner, Z. E., & Thompson, B. (2010). Characterizing the Mathematics Anxiety Literature Using Confidence Intervals as a Literature Review Mechanism. *The Journal of Education Research*, *103*(6). https://doi.org/https://doi.org/10.1080/00220670903383093

Zuraidah, Z., Sari, T. H. N. I., & Yuniarti, S. (2020). Pengaruh Kecemasan Matematika Dan Prokrastinasi Akademik Siswa Terhadap Hasil Belajar Matematika Siswa Kelas Viii Smp Negeri 7 Balikpapan. *Inspiramatika*, *6*(1), 1–7. https://doi.org/10.52166/inspiramatika.v6i1.1922