

## Approach-Avoidance Conflict in Learning Mathematics Synchronously

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### Abstract

*The purpose of this study is to provide an overview of the intrapersonal conflicts among students that occurred while learning mathematics online synchronously. This research uses descriptive methods with a qualitative approach. The implementation of this research at SMA Negeri 3 Wajo in grade XI students who conducted online learning using Zoom. The data collection process is conducted using questionnaire instruments, observation sheets, and interviews. The results showed that intrapersonal conflict still occurs in students when learning mathematics online synchronously, based on the results of interviews, students experience Approach-approach, Avoidance-avoidance, and Approach-avoidance they experience a condition of tension, anxiety, fear, and confusion when given question or question. The leading cause of intrapersonal conflict experienced by the student is the thought that learning mathematics is scary. 77.3% of students feel afraid when told to answer math problems by teachers, especially learning materials conducted online that are not able to be understood properly because of network technical constraints. Based on the results of the questionnaire, 72.2% of students experienced network problems while learning math online synchronously.*

### Keywords

intrapersonal conflict;  
mathematics learning;  
synchronous



## I. Introduction

Since the Covid-19 pandemic hit the world, especially Indonesia from last year, all activities have been disrupted and have forced us to adjust the situation to suppress the spread of the virus. In addition, the education sector is also affected, so that the learning process must be rotated from face-to-face to online learning. Online learning can be an advantage or disadvantage in learning mathematics that is logical, systematic, and symbolic in character (Hamidy, 2021). But this seems different in the research of Pérez-Núñez, Sun, & Williams (2018), which shows that students' mathematics learning outcomes increase when studying online compared to offline. However, there is a difference between what was found and what was stated by Lo & Hew which showed that students' mathematics learning outcomes decreased when using online compared to offline (Hamidy, 2021).

According to I Wayan Gede Narayana (2016), in his research, the synchronous model of online learning was better by 2.2 points than the asynchronous learning method. Synchronous requires teachers and all students to access the internet at the same time. The teacher gives a paper with presentation slides via internet connection. Participants can also ask questions or comments through the chat window. So, synchronous is similar to classroom training. However, the classes are virtual, and participants are spread worldwide

and are connected via the internet. Therefore, synchronous is often also called virtual classroom (Devita Mutiasar, 1999).

When the online learning policy was established, almost all parties involved, namely educators, educator participants, and parents, experienced stuttering using e-learning media. Because most schools in Indonesia so far focus on face-to-face learning. Not many educational institutions have developed distance learning (PJJ), so that schools do not yet have Learning Management Systems that are developed and applied in learning in schools. Studies on online learning and satisfaction with learning outcomes explain dissatisfaction with the results (Fahmi, 2020). Especially in mathematics learning, in reality, the implementation of mathematics learning during the Covid-19 pandemic is still less effective. Students find it difficult to accept mathematics learning face-to-face, especially when facing online learning (Wulan, Rosita, & Nopriana, 2021). Students' understanding of learning mathematics is still haunted by fear and anxiety with the frightening specter of the material and the teacher. This is also reinforced by the results of Wiryanto's research (2020), which states that online learning by teachers and students cannot provide feedback quickly, understanding of the material is not deep, and students do not have high motivation and tend to fail.

In the teaching and learning process of mathematics, especially those carried out informal educational institutions, several components usually affect, one of which is the emotional or psychological state of the students themselves. According to Meiner, emotions affect the quality and quantity of positive learning that can accelerate the learning process and achieve better learning outcomes; on the other hand, negative emotions can slow down learning or even stop it altogether (Henra, 2020). One of the causes of students finding it difficult to accept learning is that students' psychology is low on learning mathematics, if students' psychological conditions are low, students find it difficult to accept the material provided by the teacher, which also affects learning outcomes, learning motivation and mathematics learning achievement (Siregar, 2018). Therefore psychology is very important for learning mathematics. Every teacher is obliged to study educational psychology to see the interests and abilities of students in learning (Dodi, 2016).

Intrapersonal conflict will occur when the individual has to choose between several choices and then feels uncertain which one to choose to do, but also still has to accept the consequences of his choice. In this case, intrapersonal conflict in learning mathematics in students. At this time, there will be various kinds of confusion, considerations, doubts, and self-conflicts that can occur and affect how he will live his life in the (Akhrani & Supriyono, n.d.; Y, Natascha Dessya, 2013). Unstable emotional and psychological conditions cause intrapersonal conflicts or conflicts with themselves when learning mathematics, based on previous research by Henra (2020), which found that in learning mathematics, students experienced approach-avoidance conflicts, where the cause of the intrapersonal conflict is due to the anxiety and fear of students in learning mathematics.

Henra (2020) has previously carried out research on student intrapersonal conflicts in learning mathematics. Still, indirect or face-to-face learning conditions, this study will re-analyze students' intrapersonal conflicts in learning mathematics in synchronous online learning conditions as is known that online learning has several obstacles in its implementation, especially in Indonesia, which suddenly and forced to adapt to existing conditions to have an impact on the mental condition and understanding of the material in students in learning mathematics. Based on the results of previous research, it is also said that this intrapersonal conflict, if allowed to repeat itself continuously, will impact the

mental health of students. So it needs to be investigated more deeply, especially in the Covid-19 pandemic, which requires the learning process to be carried out online. Sihombing (2020) state that Covid-19 pandemic caused everyone to behave beyond normal limits as usual. The outbreak of this virus has an impact especially on the economy of a nation and Globally (Ningrum, 2020). The problems posed by the Covid-19 pandemic which have become a global problem have the potential to trigger a new social order or reconstruction (Bara, 2021).

To dig deeper into the approach-avoidance conflicts that occur in students when learning mathematics, and emotional approach to students who experience it is needed, strengthening the questionnaire instrument, observation, and interviews are needed by using a personal approach so that students can be more free and comfortable in providing information about feelings. They are currently learning mathematics online synchronously. This study will provide an overview of the approach-avoidance conflicts experienced by students when learning mathematics online synchronously during the Covid-19 pandemic. This research is expected to be a reference for teachers in conducting the online mathematics learning process and provide guidance on students' emotional and psychological conditions when learning mathematics online synchronously.

## II. Research Methods

This study uses a descriptive method with a qualitative approach. This method was chosen to describe the intrapersonal conflicts that students experience in synchronous online learning of mathematics. This research was conducted at SMA Negeri 3 Wajo in class XI students who did online mathematics learning using Zoom. This research is an exploratory case study by applying certain cases in analyzing conflicts in students by using research instruments, namely questionnaires, observation sheets, and interview guidelines.

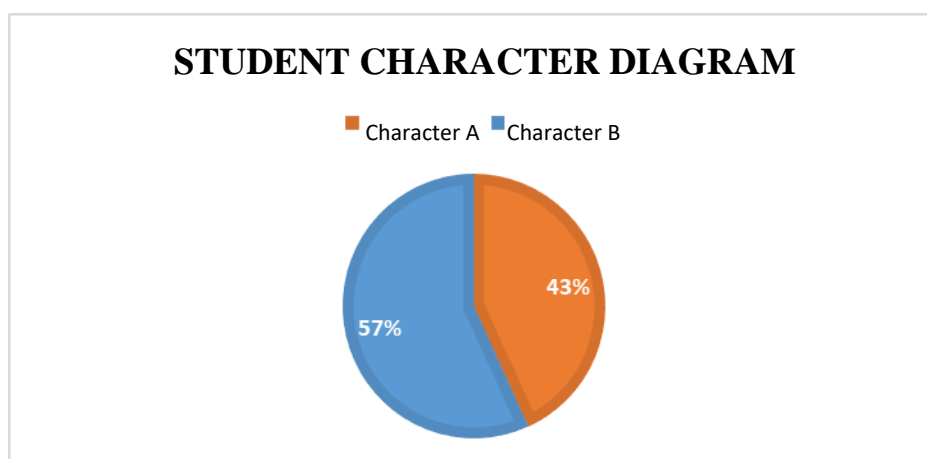
The number of participants was 44 students, but the observed students were selected to be the subject of the research focus based on the questionnaire results, where 2 subjects took the special case stimulus for approach avoidance. This research is divided into 3 stages. In the first stage, distributing online questionnaires for character screening to students to see students who can experience intrapersonal conflict and their opinions in online learning. Character indicators are divided into 2. In Henra's research (2020), he cites the results of Friedman and Roseman's research on human personality, which they classify with type A and type B profiles, where character A; 1) can't sit still, 2) walk fast, 3) eat fast, 4) talk fast, 5) impatient, 6) do two things at once, 7) dislike free time, 8) obsess with numbers, 9) measuring success by quantity, 10) aggressive, 11) competitive, 12) always feels pressed for time, and character B; 1) don't care about time, 2) sabra, 3) don't like to brag, 4) play for fun not winning, 5) relax, 6) don't be chased by time, 7) act calmly, 8) don't rush. According to Friedman and Roseman, people who have character A tend to experience intrapersonal conflict.

Then in the second stage, cases were applied to the learning process using Zoom and observed as a stimulus to see the condition of students. Stimulus case approach-avoidance conflict is the teacher gives 1 item about the material being taught at that time with a moderate level of complexity. The teacher says that if the answer is correct, it will get additional points. In the third stage, interviews were conducted with students who were the main subjects of conflict to explore what they felt and experienced when they were in the case experienced in the learning process. The data analysis process used is the Miles & Huberman model, namely data collection, data reduction, data presentation, and verification carried out cyclically (Miles, Huberman, & Saldaña, 2018). The triangulation technique is used in this study by checking data from different ways but from the same

source to see the validity of the data. The analysis was carried out from the first time filling out the online questionnaire; after collecting all the data, a reduction was made to the interview data by connecting the results of the questionnaire and observations, then concluding.

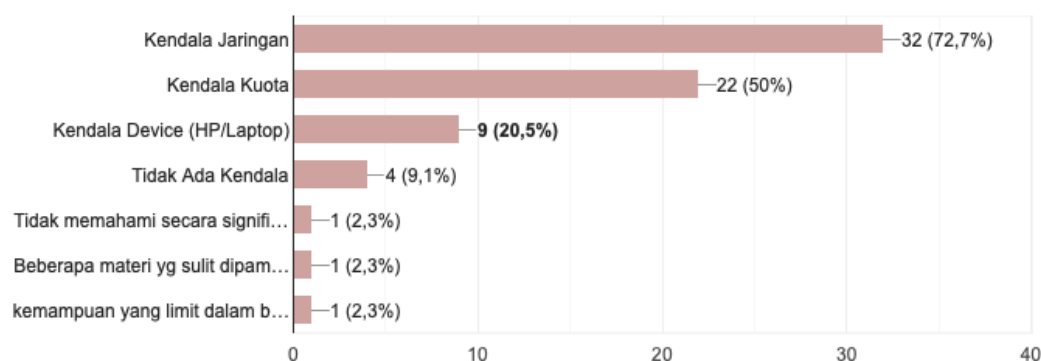
### III. Discussion

Intrapersonal conflicts can always exist in the learning process, especially mathematics, but these conditions are very invisible; a special approach is needed in dealing with them. The results of student character screening using an online questionnaire can be seen in Figure 1. The following graph:



*Figure 1. Students Character*

In Figure 1, as many as 43% of students have character A and 57% of students have character B, where character A tends to experience intrapersonal conflict so that the focus of the subject at the next stage is all students who have character A. From 43% of students with character, A will undergo the observation focus phase during the learning process with case interventions prepared previously. An overview of the obstacles faced by students in synchronous online learning can be seen in Figure 2 the following diagram:



*Figure 2. Bar Diagram of Student Constraints in Online Learning*

Based on Figure 2. Bar Diagram of Student Constraints in online learning shows that the main factor that hinders students from learning is the network where 32 students choose network constraints, 22 students choose quota constraints, and 9 students choose to be constrained on their cellphones or laptops. In comparison, there are only 4 students who

feel not constrained, and 3 others because of material factors. This is also in line with Muhammad Firman Annur's (2020) research, which states that students experience obstacles in learning during the Covid-19 pandemic, one of which is technical obstacles that interfere with communication. Communication disorders due to poor networks can be a factor causing conflict, semantic difficulties, misunderstandings, and communication channel noise are inhibiting factors in communication (Robbins; Muslim, 2014).

The results of the Approach-avoidance conflict stimulus experienced by the SAPV01 subject chose to remain silent when receiving questions from the teacher; based on the results of the interview, SAPV01 reasoned that he was ashamed to answer because he was not used to answering questions in forums or classes, either directly or online, even though SAPV01 actually knew the answers to the questions. The physical and emotional conditions of SAPV01 were afraid, embarrassed, and indecisive, while SAPV02 also chose to remain silent and did not answer; based on the results of the interview, SAPV02 reasoned that he was ashamed and did not want to be called a smart pretentious student even though SAPV02 also knew the answer to the question, the condition physically and emotionally SPAV02 looks unsure, hesitant, and embarrassed. SAPV01 and SAPV02 felt very sorry when they found out that the answer they thought was actually correct but had already been answered by another friend, so they felt a deep sense of regret and blamed themselves for not daring to answer and failing to get additional points from the teacher.

In the case of Approach-avoidance conflict SAPV01 and SAPV02 experience a condition where they face a positive-negative valence that simultaneously occurs and attracts each other when they want to answer a question that they know the answer to but because they feel embarrassed and there are other burdens so that the negative valence appears, this condition can take place long if the subject is in the middle of the valence and can cause severe frustration if the subject is not able to exercise proper emotional control. Even though positive valence has been achieved, negative valence will still stick and cause frustration. SAPV01 and SAPV02 chose to avoid these valences, but other valences affected their emotional state more, namely regret and guilt. This conflict cannot be guaranteed to be completely resolved because the positive and negative valences in this conflict are intertwined, so efforts are made to avoid this type of conflict in learning.

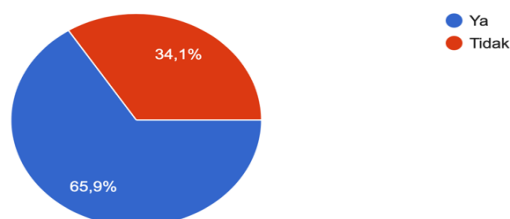
The results of this study are in line with what has been previously researched by Henra (2020), which states that the Approach-approach conflict experienced by students with character type A shows indecisive, hesitant, and aggressive conditions, Avoidance-avoidance conflicts show conditions of fear, anxiety. And shyness and Approach-avoidance conflict indicate a state of hesitation, anxiety, and shame. Intrapersonal conflict cases have also been previously studied by Khanza Paramitha (2018), which shows that the factors that cause EA students to experience intrapersonal conflict include internal factors consisting of low emotional maturity where "EA" feels anxious and nervous when facing different choices, failure when choosing choices make it difficult to choose options. Faced further, he does not understand his strengths and weaknesses.

Knowledge of conflict, types of conflict, causes, and impacts of conflict helps educational leaders to define conflict management strategies. To determine conflict management strategies correctly and correctly, it is necessary to know the management objectives, factors that influence management, knowledge of the conflict process, how to manage conflict, and the ability to see signs of proper conflict management (Muslim, 2014). Subjects who experience this intrapersonal conflict will try their best to defend themselves against symptoms that can develop into a syndrome and disturb the individual's mentality (Perdiansyah, 2015); self-defense is carried out as in some subjects trying to face it the negative valence. Factors that affect students' emotional learning online are networks, such as the description of the results of the questionnaire, the majority of

students complain of being disturbed because of internet network constraints, small things like this are certainly very influential on the mental condition of students who are depressed because of the material and technicality of their network.

However, based on the questionnaire data, most students enjoy learning mathematics online synchronously because they are considered more interactive and can meet face-to-face virtually; the data is illustrated in the following diagram:

Apakah Anda Suka Belajar Matematika secara Daring Synchronous (teleconference)?  
44 jawaban

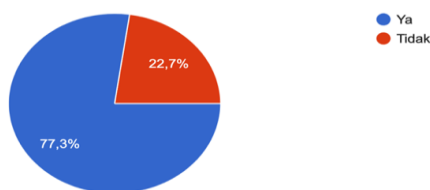


**Figure 3.** Students Stated that They Enjoyed Learning Mathematics Online Synchronously

Based on Figure 3. It can see that 65.9% of students stated that they enjoyed learning mathematics online synchronously using Zoom, and 34.1% said they were not happy. This is in line with Anwaril Hamidy (2021) research results, which state that students prefer to learn using Zoom and positively impact their learning outcomes.

But this is not the main basis for stating that synchronous learning can reduce intrapersonal conflicts in students because it has been proven that in synchronous direct and online learning, students still experience intrapersonal conflicts. Because intrapersonal conflict cannot be overcome by just making students happy in the learning model, a deeper emotional approach is needed to be released from the valences in their minds. This condition can be seen in the results of the questionnaire in Figure 3 below.

Saya merasa takut jika disuruh mengerjakan soal matematika atau menjawab pertanyaan matematika secara langsung maupun secara online melalui zoom/google meet.  
44 jawaban



**Figure 4.** Diagram of Students' Fear of Working on Math Problems

Based on Figure 3 above, it can see that 77.3% of students feel afraid when asked to work on questions or answer math questions that are posed by the teacher directly or online using Zoom, and 22.7% of students feel not afraid.

Based on several studies on mathematics anxiety, it can seem that mathematics anxiety has a very negative effect on learning outcomes/study achievements as well as on students' mathematical abilities. A teacher or instructor must understand how the indicators of students' mathematics anxiety are to overcome the mathematics anxiety that occurs in students (Syafri, 2017). This is also reflected in the results of research by Dwi Ratna Wulan (2021), which states that the psychology of junior high school students in learning mathematics through online learning during the Covid-19 pandemic obtained a percentage

of 64%, which was included in the medium category, this is because it is influenced by factors, namely emotions, beliefs. And schemas of students' self, interests, and motivations.

This study implies that the level of student enjoyment in the learning model or media used does not guarantee the emotional and psychological comfort of these students, there are still intrapersonal conflicts in some students who are invisible to the teacher, so the results of this study can be a guide for teachers to get closer. Themselves and help students emotionally in solving their problems with mathematics; students who do not answer when asked do not mean they are stupid or do not know the answer, but because of the valence pressure factor that occurs in them so that the role of the teacher is directly needed in improving mental quality. Students in learning mathematics.

#### IV. Conclusion

The conclusion obtained in this study is that intrapersonal conflicts are still experienced by students who are learning mathematics online synchronously using Zoom; students who experience conflict avoidance approach their physical and mental conditions such as fear, anxiety, confusion, hesitation, and looks tense when studying. This is also due to their understanding that learning mathematics is difficult and scary. As many as 77.3% of students say they are afraid when they answer questions, especially when there are technical network problems when learning online, which makes their emotions a little disturbed.

Based on the results of this study, suggestions for further development for similar research are also provided so that: (1) students should ensure that students are in a healthy condition and there are no personal problems from home, (2) should ensure that the learning model used has implemented an emotional approach, and (3) ensure that teachers do not have conflicts of interest with certain students and/or individuals, because things like this are very influential in the learning process in general, and in mathematics learning in particular.

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