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Noticing of Secondary Mathematics Teachers on Physical and Psychological Violence

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ABSTRACT

The increase in the number of violence can be associated with raising awareness about violence, defining and recording types of violence, or the presence of push factors that cause violent behavior to emerge. However, violence has become more visible in social life with the more frequent use of the media. Violence in schools negatively affects both the quality of teaching and the sense of safety of students and teachers at school. In addition, the fact that mathematics ranks first among the most violent courses may be related to mathematics teachers' noticing, defining and interpreting the types of violence. The aim of this study is to reveal the noticing of secondary mathematics teachers on the types of violence. For this purpose, four video segments representing the types of physical and psychological violence were watched by seven secondary mathematics teachers working in different regions of Turkey. Written opinions of the teachers about the types of violence they noticed in the video sections were taken and semi-structured interviews were conducted with the teachers based on these opinions. The data obtained were analyzed with the content analysis technique and the opinions of the teachers were classified under three categories as "recognized types of violence", "defining the type of violence noticed" and "reaction to the type of violence". The analyzes revealed that the participating teachers generally recognized physical violence in the video sections they watched, but they had difficulties in recognizing and defining psychological violence. Some of the participating teachers preferred to remain unresponsive, even though they had reactions about the types of violence they were aware of. Considering the importance of the reaction in preventing violence, it is suggested that in-service trainings will contribute to raising teachers' awareness of the types of violence.

1. Introduction

The fact that violence accompanies the entire history of humanity and its destructive effect in this process reveals the necessity of preventing it and therefore raising awareness about violence. Based on this requirement, violence is among the fields whose literature is expanding with the studies carried out. New conceptualizations draw attention with the intensification of violent studies. The definition of violence is diversified with these conceptualizations, and in this case, it reveals the necessity of informing about the field of violence. As the definition of violence expands, individuals' awareness of violence also needs to be improved, so that violence can be prevented. An example of this is the increase in harmful behaviors on digital platforms with the pandemic, bringing the importance of digital violence to the agenda. Studies on digital violence have enabled social media users to raise awareness in this regard. In fact, it has been observed that non-governmental organizations regarding the

increasing violence in the digital space have carried out studies to raise awareness (Unwomen, 2020). Therefore, the inclusion of various media tools in the private sphere causes violence to be visible both at the source and at the target, and it is frequently encountered in daily life. At the same time, the inclusion of media tools in the private sphere has made it possible to raise awareness and fight against violence.

Many factors can be listed as the increase in the visibility of violence. Some of the driving factors that lead to violence are violent behavior, studies to raise awareness about the processes after violence, news of violence in social media and comments on this news, and the results of violent behavior are recorded by public institutions and organizations. However, the increase in violence is mainly related to the increase in violent acts (TKDF, 2020). At this point, it can be thought that the violence experienced today is carried out more frequently than it has been encountered in the history of humanity. However, the fact that the cases of violence that were not recorded in the previous processes are now evaluated within the types of violence creates a misconception regarding the increase in violence. To give an example, beating a student in the classroom environment in the previous periods was not considered an element of violence. Beating was considered a punishment, and there was a belief that "the student can be punished and removed from negative behavior". If beating was not accepted as violence while it was a discipline tool in the classroom, there would be no question of recording such violence. After all, there was no such violence and there was no record of violence. In that case, the fact that the student was beaten in the classroom environment did not mean that there was violence in that classroom environment. Defining violence as a type of physical violence in the classroom environment and equipping such violence with legal sanctions reveals that there is violence in the classroom environment and should be prevented. Physical violence in the classroom is a crime today, and the fact that violence is taken into account after a point should not mean that it did not exist in previous periods. However, the beginning of digitization at a certain point should not be read as a sudden increase in violence in the classroom environment.

When the types of violence are considered, physical violence is the most known and the most obvious type of violence encountered in social life. Visibility of violence makes it possible to recognize this type of violence. In physical violence, a visible (physical) response is given to the victim. Behaviors such as slaps and kicks are seen to leave physical traces on the opposite side. Physical violence has accompanied the existence of humanity. The definition of physical violence for the first time and the sanctioning of this violence can be traced back to primitive societies (Adak, 2000, p.183). Similarly, actions such as hitting students with a ruler, throwing erasers or pulling ears in the classroom environment are shown as examples of this type of violence. However, contrary to what is known, the most common type of violence in social life is psychological violence (Yüksel-Kaptanoğlu, Çavlin and Akadlı Ergöçmen, 2015). This type of violence is not noticed because individuals do not raise awareness. It is known that before the use of physical violence, there is always psychological violence. Although there is no visible result in psychological violence unlike physical violence, the violent person engages in behaviors that will harm the other party emotionally (Uluocak, Gökulu, Bilir, et al., 2014). So much so that this type of violence may not even be noticed by the victim of violence. The purpose of psychological violence is to cause emotional harm to the other party. Considering the classroom environment, behaviors such as humiliating words, words, humiliating attitudes, exclusion from the group, and impressment can be shown as examples of psychological violence. (Ministry of Education, 2006).

The basis of violence is coercion and coercion. The individual who is asked to perform the desired behavior with pressure and coercion is the target and victim of violence (Çakır, Harcar, Sürgevil and Budak, 2008). In the event of violence at school, the victim of violence may be a student as well as a teacher. Again, while violence can occur from student to student in the classroom environment, it can also occur among teachers if there is more than one teacher in the environment. Accordingly, the basis of violence is not determined by gender, age or status. However, it is known that violence against some variables is more common in the social sphere. In the social sphere, women and children can be the

target and victim of violence to a greater extent than men. According to the study of KAMER (2015), 94.3% of married women state that they have experienced domestic violence.

Physical violence, which has been used as a discipline tool for years, has been frequently carried out in the classroom environment from teachers to students. In the violence used in ancient and medieval times, it was seen that the teacher often preferred physical violence, and especially strong and rude male teachers were chosen as instructors (Bulut, 2008, p.106). With the work on human rights and inequalities, the fight against violence at school has started. Today, violence at school is being fought and preventive measures are taken. In the study of Bulut (2008), it was concluded that male students resort to physical violence more than female students. In another study, it was concluded that male students are more likely to be the target of violence in the school environment than female students (Özgür, Yörükoğlu and Baysan Arabacı, 2011, p.54)

Psychological violence at school (the individual's exposure to harmful abstract behaviors and attitudes) has been included in the literature as a type of violence that has attracted attention in recent years. This type of violence is more difficult to notice than physical violence. Accordingly, recognizing psychological violence in schools means preventing the emergence of physical violence (Stets, 1990). The most fundamental problem in preventing violence is the difficulty in recognizing psychological violence. Therefore, psychological violence can often be ignored by lawmakers. While the World Health Organization (WHO, 2014) reveals that normative practices are effective in preventing violence, the necessity of doing more in-depth studies on this area, which is difficult to be noticed or ignored, emerges.

Violence in schools negatively affects both the quality of education and the sense of security of individuals at school (Terzi, 2007). In addition, images of violence cause students to worry about encountering the threat of violence at school (Walker and Walker, 2000). Studies show that students face many types of physical, psychological and economic violence in schools. Looking at the report of the Turkish Grand National Assembly Research Commission (2007, p.109), it can be stated that physical violence is more prominent in schools. In addition, related studies show that students mostly encounter violence in the school environment (Bulut, 2008) and the type of violence that students are exposed to is generally physical violence (Bulut and Aktaş, 2022). In fact, these results may be due to the teacher and student's inability to notice psychological violence and the lack of visibility of psychological violence.

In the study of Gündüz (2015), it was suggested that most of the violence took place in the classroom, violence was more common in primary education, and the violence of the teacher against the student was more common. On the other hand, Çubukçu and Dönmez (2012) discussed the views of primary school administrators on the types of violence in their studies. In the study, it was stated that school administrators frequently encountered behaviors such as nickname-taking, mocking, cursing, threatening and swearing among students. Similarly, Pişkin (2002) discussed students' violence towards each other in schools under the concept of "peer bullying", which includes both physical violence and psychological violence. Under this concept, the researcher examined behaviors such as beating, slapping, battering, mocking, nicknaming and humiliation by older students, seeing other students as weaker than themselves. Fisher and Kettl (2003) examined the perceptions of primary, secondary and high school teachers about school violence. In the study, it was revealed that most of the teachers were of the opinion that violence directly affects the quality of education. In addition, most of the teachers who participated in the survey (76%) stated that various interventions are necessary to prevent violence.

In the literature, there are studies (Berkowitz, 2014; Davies and Berger, 2019; Hall, 2017) examining teachers' perceptions of violence, as well as studies on violence among students and students. As a matter of fact, the number of these studies is quite low. However, the group that spends the most time with students and knows them closely is teachers. It is also a known fact that teachers can reinforce or weaken violent behaviors through interaction with students (Berkowitz,2014). Therefore, it is inevitable for teachers to take responsibility in determining and preventing violence in schools. At this point,

teachers need to recognize the types of violence they may face in schools and raise awareness about what kind of precautions they should take. It has been demonstrated that violence can be prevented as public health practices and guidance programs raise awareness (Rosenberg et al., 1998). In this direction, it was suggested that students should be supported to control their emotions and develop their problem-solving skills (Grossman et al. 1997). However, it is seen in the studies that teachers remain indifferent in the environment of violence. Therefore, teachers can weaken violence, which is a social problem at school, in cooperation with their students (Berkowitz, 2014). On the other hand, the fact that mathematics lessons are in the first place among the subjects most associated with violence (Gündüz, 2015) may be due to the importance of the lesson, the difficulty of teaching mathematics, the student's mathematics anxiety and student failure. At the same time, this situation may be related to mathematics teachers' awareness, definition and interpretation of violence types. In addition, students' negative experiences with mathematics, lack of adequate teacher support, negative attitudes towards mathematics, negative behaviors in the classroom, and oppressive learning methods (Rousseau and Tate, 2003) that do not serve learning purposes may also cause students to feel psychological violence in mathematics lessons. In line with this view, the aim of the research is to reveal the awareness of secondary mathematics teachers about the types of violence. The research problem and sub-problems created within the framework of this purpose are as follows:

What is the level of awareness of mathematics teachers working in secondary schools about the types of violence that occur in schools?

- What types of violence do teachers notice in the classroom environment?
- How do teachers describe the types of violence they notice?
- How do they react to the types of violence they notice in the video clips?

2. Method

2.1. Research Design

This study was carried out within the framework of a qualitative research with a phenomenological approach. Phenomenological research is a method used to describe the essence of a phenomenon under investigation and to provide rich and detailed explanations of how individuals experience it. This research method focuses on phenomena that individuals notice in daily life but do not have a clear understanding of (Yıldırım and Şimşek, 2016, p. 69) and reveals individuals' interpretations of these phenomena. In this study, the phenomenological research method was used since it was discussed how mathematics teachers make sense of the types of violence in the classroom.

2.2. Study Group

The study group of the research consists of seven secondary mathematics teachers working in public schools in different regions of Turkey. Convenience sampling technique was used to determine the study group. Through this technique, one of the researchers reached the teachers by acting as the key person. Teachers who participated voluntarily were informed about the purpose of the research. Code names were used instead of the real names of the participating teachers due to research ethics. The descriptive characteristics of the teachers are presented in Table 1.

Table 1. Descriptive characteristics of participating teachers

Participants	Gender	Work experience (years)
Gizem	Female	8
Sema	Female	2
Sevgi	Female	5
Hale	Female	4
Ahmet	Male	3
Eda	Female	1
Levent	Male	12

2.3. Data Collection Tools

Two data collection tools were used in the study. The first data collection tool was the written opinions of the participating teachers about the video clips they watched. The second data collection tool is the semi-structured interviews that the researchers conducted with the teachers.

Researchers first identified videos that deal with types of classroom violence through one of the social media platforms, "Youtube". Then, four video clips were created by selecting the sections in which physical and psychological violence came to the fore. The opinion of an expert working on violence was sought to confirm whether the video clips were suitable for the purpose of the study. It was decided that the video sections determined would be appropriate to determine teachers' awareness of violence. The content of the video clips is explained in Table 2.

Table 2. Definitions of video clips

Video clips	Definition
1. Video clip Psychological violence Physical Violence (1.05 minutes)	A newly appointed teacher is introduced to the class by the school principal. When introducing students, the principal describes the class as a "troublesome" class because of the students' behavior. While the teacher states that she does not find it appropriate to use such qualifications, she says that she is against definitions of psychological violence. According to the teacher, students are as precious as diamonds and they deserve attention and praise. While the students are jostling into the classroom, they also push the teacher around. Referring to the teacher's "diamond" analogy, the principal tries to find out who the student making the classroom dirty is. During the entire conversation, the principal has a ruler in his hand. Using this ruler, he hits the desks and shouts at the students. Although psychological violence dominates the entire video section, there is also the existence of physical violence.
2. Video clip Psychological violence (50 seconds)	The teacher-student interaction in the classroom environment is discussed in a humorous way. In the video, the student asks the teacher a question. In this question, the student uses qualifications to express that the teacher is old. Although this questioning style seems like a joke, it contains psychological violence.
3. Video clip Psychological violence (31 seconds)	The principal's calling the students to account in the classroom environment is handled in a humorous way. The principal calls the student "fat" while saying that he hates the student. Then, in his criticism of the student's weight, the principal shouts at the students with a ruler in his hand. During this shout, he uses slang words such as "dude" and "ox" to children. Throughout the video, it is seen that the students are exposed to psychological violence.
4. Video clip Psychological violence Physical Violence	Violent interactions of female students with each other are discussed in a humorous way. The video contains the speeches of three female students who met at the break time. While these three students are talking among themselves, two female

(35 seconds)	students engage in psychological and then physical violence to the other female student.

Video clips were sent to the participating teachers via e-mail. They were asked to describe the subject of the research as violence and what violence they saw in the video section they watched. The participants conveyed their written opinions to the researchers via e-mail. Online interviews were conducted to understand how teachers define types of violence based on their written opinions and how they react when faced with such violence in the classroom. While talking about the types of violence that the participating teachers noticed in the videos during the interviews, they were also informed about the types of violence they were not aware of.

2.4. Data Analysis

In phenomenological research, there is an effort to create themes that can define the meanings of the phenomenon in the analysis of the data obtained, with the aim of revealing the experiences and understandings. For this purpose, the data obtained in the study were analyzed using the content analysis technique. In this process, the transcriptions of the online interviews with the teachers were translated into text using the "sonix ai" software. After this process, the data obtained in line with the sub-problems of the study were classified under three categories as "recognized types of violence", "defining the type of violence noticed" and "reaction to the type of violence". The findings obtained as a result of the analyzes were presented and interpreted in a descriptive manner by making direct quotations from the views of the teachers. The analysis process was carried out by two researchers simultaneously but individually. In addition, in order to increase the credibility of the study, the written texts created after the interviews were sent to the teachers and the participant's confirmation was obtained.

3. Result

In this section, the written and verbal responses of the participating teachers were synthesized within the categories that complement each other.

The teachers answered the following questions in the interview form for the four video clips they watched: "What kind of violence did you notice in the video?", "How would you describe the types of violence you noticed?" and "How do you react to the violence you notice?" In this direction, the types of violence that teachers noticed in line with their answers to the first question are presented in Table 3.

Table 3. Types of violence that teachers noticed in the video clips they watched

Video	Type of violence	Participating Teachers						
		Ahmet	Eda	Gizem	Hale	Levent	Sema	Sevgi
1.video	Physical	√	√	√	√	√	√	√
	Psychological	√				√	√	√
2.video	Physical							
	Psychological	√		√		√		√
3.video	Physical							
	Psychological	√	√	√	√	√	√	√
4.video	Physical						√	√
	Psychological	√	√	√	√	√	√	√

When Table 3 is examined, all of the participating teachers noticed the physical violence in the first video clip they watched. In particular, they stated that physical violence took place between 0.30 and 0.45 seconds of the video they watched. In this direction, Hale exemplified the physical violence that occurs from teacher to student and from student to teacher in the environment with the following statements: "*Students jostling each other inside or the teacher hitting the table with a ruler are threatening behaviors that may cause one to be afraid. It may make the student think that there is no safety of life.*" Similarly, Eda and Gizem stated the existence of physical violence by showing students pushing each other as an example.

On the other hand, the participating teachers Sevgi, Sema, Levent and Ahmet talked about the psychological violence that took place between 0.03-0.09 seconds in the video they watched. According to Levent, the principal calling the student as "precious diamonds" is violence. Although Levent could not name this situation he noticed as psychological violence, he emphasized that psychological violence took place with the following statements: "*… the principal's calling students "diamonds" even though he believes they are not diamonds, is humiliating them and exposing them to violence.*" Sema, on the other hand, evaluated the expression "precious diamonds" as the principal's show of superiority over the teacher and said that "*the principal's ignoring the teacher while in the classroom and scolding the class is an example of psychological violence applied to both students and teachers.*" Focusing on a different point in this sense, Ahmet drew attention to the principal's division of the classroom into good and bad, and stated that introducing class students to the new teacher in this way would cause a prejudice in the teacher. According to him, this situation reflects the type of verbal violence. Therefore, the participant teachers had difficulty in recognizing or naming psychological violence, while reaching a consensus about noticing physical violence in the first video clip they watched. Three participating teachers (Ahmet, Sema, and Sevgi) recognized both psychological and physical violence and defined the types of violence in question.

Teachers showed different reactions to the types of violence they noticed in the first video section they watched. With the statement "*I do not want to leave a bad impression on the student*", Ahmet stated that verbal acts of violence involving psychological violence should be avoided. Eda, on the other hand, said that in cases where students were jostling in the classroom, she made her warnings decisively and loudly. In response, Sema made the following statements, explaining that Eda's statements could not work:

> "*I do not prefer to warn students orally when they use physical violence among themselves. At that moment, students usually do not hear me because they are nervous. I intervene directly. I sit students in different corners of the classroom so that they do not harm each other during the lesson. If they continue to verbally tease each other or resort to physical violence again, I will have to punish them; because that is better than permanent harm to anyone.*"

While Gizem used the expressions "*I will direct the students to the guidance service*", she stated with "*empathy and drama*" that students should be questioned whether they act consciously or unconsciously and to react after determining this question. Unlike other teachers, Hale preferred "*self-protection*". In such a case, she considered it appropriate not to interfere with the students and thought that these behaviors of the students should be punished by the school administration.

When it comes to violence from teacher to teacher in the video, the reactions of the teachers varied. In this sense, Eda said that she would "*silently contact the manager*" when she saw such violence from her manager, while Hale explained with the following statements that she could not react: "*It would bother me if the manager banged on the table, but I wouldn't react to it. I wished he would end this as soon as possible, but I couldn't tell the manager that.*" Levent stated that if the principal who comes to the classroom inflicts violence on himself and his students, he will not be affected by his reactions, even if the person he encounters in the classroom environment is the administrator. The important thing for Levent was to try to communicate with the students and make them believe that they are special first.

In the second video clip, there was a psychological violence accompanying the humorous attitudes from the student to the teacher. Regarding this, Ahmet described these attitudes in the video as "humiliating" attitudes. Sevgi, on the other hand, stated that she noticed psychological violence from the beginning of the video and pointed out that this violence was directed from the student to the teacher and could be interpreted as disrespect for the teacher's profession. Sevgi explained the psychological violence she noticed with the following statements: *"Actually, I noticed psychological violence against the teacher's profession. The student reacted as "really" to the teacher's statement "I am an educator". In this case, the teacher tried to explain himself."* Levent, one of the participating teachers, noticed the psychological violence in the second video clip as well as in the first video clip, but could not name it. He also stated that, unlike other teachers, the violence is directed not from student to teacher, but from students to TV series viewers. According to Levent, it was actually a kind of violence when the student made fun of and cynically criticized a TV series watched by the student's grandfather. The other three teachers (Sema, Eda, and Hale) stated that they did not notice any type of violence in the video in question.

Ahmet described the students' attitude towards the teacher as "cynical". He stated that he would react as follows in the face of cynical attitudes expressing psychological violence: *"If I were in a classroom setting, I would try to close the issue. If the student continued, I would wait quietly for him to shut up first...."* Gizem thought that students' awareness of their behavior involving psychological violence against the teacher should be improved through "empathy". She emphasized that such behaviors should be discussed in the classroom, so that students can question whether their behavior is right or wrong. Sevgi stated that she would not react in any way to the violence in question: *"If I come across a situation where my education is ridiculed in some way, I can alienate him from the educators if I react harshly to the student. In that case, I prefer to ignore it."*

Regarding the third video segment, in which psychological violence came to the fore, Ahmet realized that there was psychological violence by stating that the teacher insulted the student, and he realized the existence of psychological violence by showing 0.06-0.14 seconds of the video segment as evidence. Regarding this, Ahmet said, *"Because of the physical appearance of the student in the class, the teacher calls the student "fat" and likens him to an ox that has seen hay. Doing such an act in the classroom environment will cause your friends to treat the student in the same way. This will be met with sarcasm among his friends."* Similarly, Hale cited psychological violence from teacher to student between 0.03-0.17 seconds as evidence. Hale explained this violence by using the words *"It is violence when the teacher uses very bad words and makes bad analogies"*. Eda, who used the definition of emotional violence instead of psychological violence, defined emotional violence from teacher to student as *"a person applies pressure through ways such as humiliating, threatening, using slang, constantly criticizing the victim person or group"*. Eda listed the violence she noticed in the video, giving examples as follows: "*The teacher says she hates the students. She insults and threatens one of the students by calling them a nickname. The teacher uses slang expressions to the students."* Although Levent noticed psychological violence, he did not use the concept of psychological violence here, as in other reflective views, and explained the violence he noticed as follows: *"Addressing the student with his physical characteristics in 0.29 seconds and humiliating him is violence, and I think its type is humiliating violence due to his physical characteristics."*

Sema, who suggested that she should react to the type of violence she noticed in the third video clip, stated that there was psychological violence from the teacher to the student, and that she had encountered such a classroom. While sharing this experience, Sema drew attention to what she said by using the following expressions: "Students who study in such a classroom say that they are not liked by the school administration and that the school administration does not have these windows repaired even though their windows were broken". However, she stated that when students feel unloved, they engage in behaviors that may harm the environment in order to make themselves noticed. As a matter of fact, she emphasized that making students in such classes feel worthless is also a psychological violence with the following statements:

> *"The psychological violence perpetrated on these students further fuels their behavior. In my undergraduate education, a teacher gave us movies to review. In these movies, a teacher who chooses to*

be friends with the students usually comes and saves that class that everyone has given up. But I think this situation is experienced as 1% ratio in real life. Of course, in every classroom there are students who can be saved. Even a small compliment you say to these students or making them feel noticed can be enough. I'm not a fan of making friends with students like in the movies. Students and teachers should know their place and move forward. Otherwise, such classes abuse the situation too much. But the fact that I am my student's teacher does not give me the right to apply psychological violence to this person. Yes, I don't find those movies realistic; but as a person who has seen the positive effect of a small sentence on the student, I know that insult is never the solution, even though I know that I will not be able to win those students completely. I can't fix this situation, but at least I won't spoil it"

Levent stated that he would support his victimized student in case of violence by making the following statements in order for students to be aware that their physical characteristics are not a defect in the classroom: "Sometimes I would say that being fat is a better situation, and sometimes being thin is a more useful situation." Drawing attention to the violence against the students from the teacher in this direction, Eda stated that she will try to prevent the problem by contacting the teacher in order to stop the verbal violence. Expressing the opposite of this, Hale stated that she would "listen to the director without opposing him".

When the types of violence noticed by the teachers in the 4th video section are examined, most of the teachers evaluated the students' insulting their friends by calling them "looser" as "peer bullying". Regarding this, Hale mentioned that peer bullying frequently takes place in classroom environments and also stated that students repeat psychological violence under the name of "joking" without realizing it. While Sevgi interprets "peer bullying" as a kind of psychological violence, she uses different conceptualizations such as emotional violence and verbal violence.:

"I noticed that one student used emotional violence against another. Then I realized that two students physically abused their friends. Upon this incident, I realized that the teachers got angry and applied verbal violence to the students."

When faced with student-to-student violence in the classroom environment, Ahmet stated that he would "try to solve the problem" through individual interviews with the students. Levent, who had the same opinion as Ahmet, stated that he could solve the problem by talking to the students. Sevgi, on the other hand, said that if this type of violence occurs, she will talk to all class students and proceed as "I will talk about the consequences of the violence and the uneasiness it has caused in others and to build empathy". Stating that she will contact the guidance service and direct the students to the administration, Eda emphasized that she will warn the students harshly when faced with such violence. According to Eda, "punishment" was a must in such violent events. Stating that in such a situation one can "get mad," Gizem said: *"…even though students are wrong, I do not make insulting statements to students. Of course, it is necessary to solve problems without losing the necessary composure, but not everyone can act in the same way."* Sema emphasized that this kind of violence occurs frequently in high schools. According to her, the teacher should not interfere with verbal behaviors unless there is a complaint from the student. However, she also stated that this reaction may change according to the personality structure of the student who has been subjected to violence. However, when it comes to physical violence, she thought that the situation should be intervened directly and the necessary punishments should be made. Sema also suggested that students resort to some alternative ways in such situations. She interpreted the student's crying to make the other party feel guilty as emotional exploitation. Noting that students who develop crying as a defense mechanism will not be healthy individuals in the future, she stated that these individuals will create an unhealthy society. In the continuation of her statement, she stated that the teachers' reactions to violence will have an impact on the society in general and its future: *"As Atatürk said, it will be the work of the new generation of teachers, and we teachers should take care to raise healthy individuals for a healthy society."*

4. Conclusion and Discussion

All of the participating teachers generally noticed and defined physical violence in the video sections they watched, but they had difficulties in recognizing and defining psychological violence. For instance, the participating teachers noticed the physical violence in the first video section they watched and defined this type of violence through the violence environment in the video. On the other hand, some of the participating teachers did not notice the psychological violence prevailing in the video. However, it is important for them to be aware of the psychological violence in question in order to prevent the environment of physical violence that may arise. It is known that psychological violence is a harbinger of physical violence. The absence of visible consequences of psychological violence such as physical violence (Uluocak et al., 2014) is an obstacle to its recognition. On the contrary, the participating teachers could not notice the physical violence in the face of intensely experienced psychological violence in the 4th video section they watched. Accordingly, it can be stated that in the face of intensely experienced types of violence, even visible physical violence can remain in the background and cannot be noticed. In addition, the use of the ruler as a tool of physical violence in an environment of violence was not found remarkable by the mathematics teachers. However, the ruler is one of the most used physical violence tools (Gündüz, 2015). It was seen within the scope of this study that teachers did not evaluate the ruler as an object of violence. Based on this finding, it can be stated that the ruler has not been used as an object of violence in the classroom in recent years.

Teachers claimed that they tried different ways in explaining their reactions to physical violence. Participating teachers could react to physical violence such as warning students loudly, separating students, sending them to the guidance service and punishing them. On the other hand, there were also participating teachers who stated that they could not react in the face of physical violence in order to protect themselves. Responding to physical violence is an important step to prevent violence from occurring. Not reacting to physical violence may cause the violence to continue increasing and spreading. Teachers can reinforce or weaken violent behavior through interaction with students (Berkowit, 2014).

While some of the participant teachers noticed the psychological violence in the second video section, some of them stated that there was no violence. The humorous attitudes in the video section in question might hinder the recognition of psychological violence. This situation shows that the difficulties to be experienced in recognizing the environment of violence occurring within the pattern of complex relationships in social life are normal. Violence does not take place in relationships in its pure form. In all this intensity of interaction, the visibility and awareness of violence decreases. The teachers, who noticed the psychological violence hidden among the cynical attitudes, claimed that they should be treated with caution in response. According to teachers, it is necessary to develop students' awareness through empathy. Based on the study (Pişkin, 2002), which states that psychological violence perpetrated by students in a humorous way is frequently seen in peer bullying (Pişkin, 2002), it can be said that raising awareness on this issue can also create important results in the fight against peer bullying. It has been determined that although teachers talk about the concept of peer bullying, they do not have enough knowledge of the content of the concept. However, peer bullying is considered as a disciplinary offense with the recent amendment made in the "Regulations on Secondary Education Institutions of the Ministry of Education". (Ministry of Education, 2022). Therefore, it is necessary to increase teachers' awareness of their understanding of peer bullying. Similarly, in the 3rd video section where psychological violence is at the forefront, most of the participating teachers explained the psychological violence they noticed by showing the time period in the video as evidence. In addition, a teacher (Levent) named psychological violence by saying "humiliating violence" instead of the concept of psychological violence in his explanations despite noticing psychological violence. It is noteworthy that another teacher (Sevgi) used conceptualizations such as "peer bullying", "emotional violence" and "verbal violence" when describing psychological violence. This may be due to the fact that the definitions of psychological violence in the literature differ (Gündüz, 2015; Polat, 2016).

The noticing of mathematics teachers working in secondary schools about the types of physical and psychological violence was revealed in this study. Considering that mathematics is difficult due to its

nature, it is important for teachers to exhibit behaviors that will give students confidence in the classroom environment. The trust here will support the student's belief that they will not encounter any form of violence in the classroom environment. In addition, this situation can positively affect the classroom atmosphere and enable students to express their mathematical thoughts freely without hesitation from their teachers and classmates. When mathematics teachers' awareness of the types of violence increases, they will be able to control situations that may cause psychological violence, especially in the classroom environment. Thus, it can be said that they can prevent the emergence of psychological violence that triggers physical violence. In this regard Lupu (2015) stated the high importance of being aware of the harmful effects of violence through education programs and adopting appropriate behavior and appropriate teaching practices in this direction. In addition, he stated in the study that positive feedbacks motivate students in mathematics lessons, differentiated activities prevent students who have difficulty in assimilating information from being driven to violence, and increase the efficiency of the teaching process by encouraging students with special skills.

Conducting the research with seven secondary mathematics teachers can be considered as a limitation of the study. Similar studies can be carried out in different fields of education and with more participating teachers. In fact, follow-up studies can be carried out by determining the gender of the participating teachers as a variable. Considering the results of the research, it was determined that the teachers could not make enough sense of physical and psychological violence. It was seen that teachers could not define the peer bullying that is frequently experienced by students in schools. In addition, it was concluded that teachers were undecided when reacting to the type of violence they noticed, and moreover, they preferred to remain unresponsive. Considering the importance of reaction in preventing possible violence, it is anticipated that in-service training will contribute to raising teachers' awareness of the types of violence.

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