

THE RELATIONSHIP BETWEEN ONLINE GAME ADDICTION AND VIOLENT BEHAVIOR AMONG ADOLESCENTS AT SMPN 45 PEKANBARU

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Abstract

Online games are one form of activity that causes addiction in adolescents, online games can trigger violent behavior. Exposure to videos containing elements of violence can increase physiological arousal in online games, cause aggressive thoughts, emotions, and actions, and reduce positive and prosocial activities. The purpose of this study was to determine the relationship between online game addiction and violent behavior in adolescents at SMP 45 Pekanbaru. This research method is quantitative with a cross- sectional approach and a sample of 84 taken from a population of 514 using the Stratified random sampling technique. Data collection using the Online Game Questionnaire and the Violent Behavior Questionnaire and the analysis used was the Chi-Square test. The results of this study were obtained from male respondents (71.4%) while female respondents (28.6%), almost half were 12-13 years old 24 people (28.5%), while more than half were 14-17 years old 60 people (71.5%). the level of online game addiction with a moderate level of (44%), the level of violent behavior with a high level of (61.9%), respondents experienced moderate addiction with severe violent behavior (22.9%), using the chi square test with a significance level of 90%, it was found that the p-value of 0.455 was greater than the significant value of 0.05 (p-value 0.787 > 0.05). The conclusion of this study is that there is no relationship between online game addiction and violent behavior in adolescents at SMPN 45 Pekanbaru.

Keyword: Online Games 1; Addiction 2; Violent Behavior3

INTRODUCTION

Current technological developments are very useful for humans in the modern era, starting from providing benefits and increasing knowledge, education and entertainment. [1]. One technological product that provides entertainment is online games. With technological advancements, online gaming has flourished. Technology, especially in the virtual world, has now created millions of games, ranging from very simple ones to complex ones that even involve wagering virtual money. Many people are certainly familiar with these online games, and they are enjoyed by a wide range of people, from children, teenagers, and adults. [2]. The average age of online gamers is between 12 and 30. The goal of playing online games is not just to win, but to make friends with other online gamers. [3].

In 2018, Newzoo revealed that there were 2.3 billion online gamers worldwide. The number of online gamers in the Asia Pacific region was 1.2 billion, while in Indonesia there were 82 million. Indonesia ranked 17th in terms of revenue from online gaming. The total number of internet users in Indonesia as of 2024 was 221,563,479 out of a total population of 278,696,200, a 1.31% increase from 2023, or 3,650 million. (APJII, 2024). Of the total internet users, 34.40% are aged 12–27 years, with the majority using gadgets or smartphones to access the internet. In Indonesia, 16.00% of internet users use Wi-Fi to play online games

for entertainment. (APJII, 2014). The high intensity of a gamer's playing time causes the gamer to become addicted to playing games.

According to [4] a gamer, addiction is defined as playing games for more than 30 hours per week, or an average of 4 hours per day. Online game addiction can make players feel happy, satisfied with the challenges, and so on. However, excessive use will have a negative impact on the player's life, such as social relationships (crime, withdrawal from the environment, and bad behavior towards family), health (irregular sleep patterns, irregular eating patterns, headaches, back pain, social anxiety, and depression). Academic performance (truancy, dropping out, and loss of educational opportunities)[5].

In this advanced era, technology is developing very rapidly, including in terms of electronic games. Millions of online games have been created at this time, ranging from easy, simple, to difficult games. It is not uncommon for players to spend money to play online games. [6]. Online games are games that are played using the internet. [7]. Online games in general are video games that are played with an internet network connection and can be played using electronic devices such as cellphones, computers, laptops, etc. [7]. Many people are familiar with this electronic game, especially teenagers. Teenagers often use online games to relax or fill their free time. If addicted, players lose track of time and become lazy about other activities. [8]. The negative impact of playing online games on school students is that it makes students lazy to go to school, neglects schoolwork, and disrupts physical health.[9]. [10]. explains that playing online games has bad effects, including eye discomfort, neglect of obligations, lack of social interaction, and easily becoming emotional.

Online game addiction is a psychological disorder whose existence is not recognized and can affect the players and have an impact on social relationships and work problems because it makes teenagers forget about time and forget about the normal routine of teenage life. [11]. [12]. Online game addiction experienced by teenagers has an impact on several aspects of life, such as health, psychological, academic, social and financial aspects and online game addiction is often experienced by students and they cannot control themselves when playing online games.

Online gaming addiction plays a significant role in verbally abusive behavior in individuals who play online games. Due to the fact that the longer the time spent playing online games, the greater the likelihood of losing and the greater the obstacles encountered while playing, this leads to aggressive behavior. [10]. While playing, a player faces many challenges and setbacks due to the high intensity of the game. When players fail to achieve their goals for a long time and repeatedly, they become frustrated, which causes them to become aggressive both verbally and non-verbally. [13].

Teenagers addicted to online games often behave aggressively. Physical aggression is demonstrated by hitting; if someone hits them, they often retaliate by hitting harder. Verbal violence is usually demonstrated by making threats in harsh language. [14]. Online games come in various genres, such as the most popular currently, namely Real Time Strategy (RTS) which emphasizes the player's ability to strategize, First Person Shooter (FPS) which takes the concept of warfare using military weapons and Role Playing Game (RPG) which allows players to play and create avatars or fictional characters, where the aim of these three genres is to injure or even kill enemies to win the game. This activity may make teenagers believe that hurting others is fun and acceptable, as they often do when playing online games, so this facilitates gamers to act violently or behave aggressively in the real world, such as in the school and family environment. [15]. In addition to offering various challenges and realistic visuals, online games allow interaction between players, both verbally through voice chat

and nonverbally through written chat. These interactions are often used to express anger, hate speech, rudeness, teasing, cursing, and so on (trashtalk). This type of interaction risks transforming a person into a verbally aggressive person. [16].

Exposure to violent videos can increase physiological arousal in online games, lead to aggressive thoughts, emotions, and actions, and reduce positive and prosocial activities. Online games that are too difficult can also increase frustration and anger, leading to aggressive thoughts. These aggressive thoughts are necessary for playing violent games. Repeated activation of aggressive thoughts can lead to relatively permanent changes in an individual because the repeated and continuous activation of knowledge structures related to aggression will eventually become part of a person's personality. [17].

As many as 37.3% of students admitted to making fun of people who lost when playing online games. 38.6% of students admitted to saying unpleasant things because of negative signals and 44.6% of students admitted to shouting at bullies when playing online games. [18] The most aggressive behavior is aggressive behavior that violates property rights or the rights of others, namely that respondents will damage the belongings of friends who have bullied respondents. [19].

Online games, which were initially intended for entertainment, can become a dangerous problem if they contain elements of violence. Teenage aggression is increasing and often makes society uncomfortable. For example, fights between teenagers can occur anywhere, but the perpetrators are still students. Arguments that initially appear to be just mischief, but because their environment rejects them, they escalate into criminal acts, resulting in death. [17]. This occurs due to the emergence of verbal aggression, which refers to hostility involving words that hurt others, such as insults and profanity. Examples of physical attacks include punching, stabbing, tripping, shooting, and other acts of physical violence. [17]. [14] making statements, the highest forms of aggressive behavior are verbal aggressive behavior (replying to friends' teasing), attacking objects (throwing objects when angry), and violating other people's property rights (damaging the belongings of friends who don't know anything). [20], In her study, "The Relationship Between Online Game Addiction Tendency and Aggressive Behavior in Adolescent Girls," she found a positive and significant correlation between online game addiction and aggressive behavior. The higher the online game addiction, the higher the aggressive behavior. [11] which examines Online Games Related to Aggressive Behavior in Adolescents A Study at the Semarang Game Center, There is a significant relationship between addiction to playing online games and aggressive behavior in adolescents at the Semarang game center.

This phenomenon occurred in the environment of SMPN 45 Pekanbaru, on October 22, 2024, the author interviewed 29 students and 27 (94%) of them played online games and 2 (6%) others did not play online games, 10 (35%) of them experienced a high level of online game addiction, 11 (38%) of them experienced a moderate level of addiction, and 8 (27%) others experienced a low level of addiction. 2 (6%) of them did not behave violently and they said it was just a game, and 27 (94%) others had violent behavior such as making fun of their friends, saying rude things, and scolding their friends, stomping their feet, and shouting and there was a feeling of wanting to throw their cellphones. 7 (25%) of them became victims. violent behavior, such as being scolded, shouted at, made fun of and even to the point that the victim felt annoyed and retaliated against his friend's actions, and 22 (75%) others became perpetrators of violence.

METHODS

This research is a quantitative study, using a quasi-experimental design with a one-group pre- and post-test approach without control. This research will be conducted at Pekanbaru 108 Public Elementary School, Pekanbaru City. The research will be conducted from the planning stage to the final report, from September 2024 to February 2025. The sample will be all 59 fifth-grade elementary school students at Pekanbaru 108 Public Elementary School. Total sampling is used to select the sample. Total sampling is a sampling technique where the sample size is equal to the population. The research instrument used is a knowledge and skills questionnaire. Bullying attitudes. The Bullying Behavior Knowledge Questionnaire is a questionnaire used to measure students' knowledge about bullying behavior. This questionnaire, created by Prayunika (2016), consists of 17 closed-ended questions and uses the Guttman scale: 1 for correct, 0 for incorrect, and 0 for unknown. The questionnaire will be interpreted as good (76-100%), sufficient (56-75%), and less than ideal (<55%). This attitude questionnaire consists of 21 statements, all of which are unfavorable. The scale used is a Likert scale with values ranging from (1) strongly agree (2), agree (3), somewhat disagree (4), disagree (5), and strongly disagree. This questionnaire will be interpreted as positive (>75%), negative (<55%), and neutral (56-74%).

RESULTS

Table 1 Respondent characteristics based on gender

No	gender	Frekuensi (f)	Presentase (%)
1	man	60	71.4
2	women	24	28.6
Total		84	100

Source: primary data

Based on table 1 above, it explains that more than half of the respondents were male, 60 people (71.4%), while almost half were female, 24 people (28.6%), where there were more males than females

Table 2 Frequency Distribution of Respondents by Age

No	Age	Frekuensi (f)	Presentase (%)
1	12-13 years	24	28,5
2	14-17 years	60	71,5
Total		84	100

Source: primary data

Based on table 2, it explains that the average age of respondents is between 12-17 years with a percentage of almost half being 12-13 years old, 24 people (28.5%), while more than half are 14-17 years old, 60 people (71.5%).

Table 3 Frequency Distribution of Respondents Based on the Level of Online Game Addiction at SMP 45 Pekanbaru

No	addicted to online games	Frekuensi (f)	Presentase (%)
1	heavy	6	7.1
2	medium	40	47.6
3	Ringan	38	45.2
	Total	84	100

Source: primary data

Based on table 3, it shows that the level of online game addiction is at a high level, a small proportion is 6 people (7.1%), while almost half of the addiction level is moderate, 40 people (47.6%) and almost half are at a low level, 38 people (45.2%).

Table 4 Frequency Distribution of Respondents Based on the Level of Violent Behavior at SMP 45 Pekanbaru

No	Violent Behavior	Frekuensi (f)	Presentase (%)
1	high	52	61.9
2	medium	32	38.1
	Total	84	100

Source: primary data

Based on table 4, the frequency distribution of respondents based on the level of violent behavior is high, with more than half being 52 people (61.9%), while almost half are low, with 32 (38.1%).

Table 5 Cross-tabulation of online game addiction with aggressive behavior of adolescents at SMP 45 Pekanbaru

Game Online	Violent Behavior			P-			
	high	medium	Total				
heavy	4	7,7	2	6,3	6	7.1	
medium	26	50	14	43.8	40	47.6	0.787
light	23	42.3	16	50	38	45.2	
Jumlah	52	100	32	100	84	100	

Source: primary data

Based on table 5, it shows that half of the respondents have a moderate level of online game addiction and 26 students (50%) have a high level of online game addiction. Data analysis was carried out using the Chi Square test with the variable of online game addiction and violent behavior at SMP 45 Pekanbaru, obtained p value = 0.787 where p value > 0.05, so it can be interpreted that there is no relationship between online game addiction and violent behavior at SMP 45 Pekanbaru

INTRODUCTION

Elementary school (SD) is the most fundamental level of formal education in Indonesia and plays a crucial role in the continuity of subsequent educational processes (P. Y. A. Dewi, 2020). Among today's youth, many deviant behaviors occur due to a lack of moral education. Sadly, these deviant behaviors are often considered normal and not serious. However, if these deviant behaviors begin at a young age, they become habits that persist into adulthood and can become character traits that are very difficult to change. A common example of deviant behavior is bullying. This deviant behavior is a result of weak moral character education and environmental conditions that allow bullying to occur (Purnaningtias et al., 2020).

Bullying in schools has become a global problem. Many parents and schools believe that bullying only occurs among junior high and high school students. However, in fact, it also occurs in children between the ages of 3 and 12. It is at this age that bullying cases receive less attention because they are considered normal (Ramadhanti & Hidayat, 2022).

Bullying in schools has become a global problem. Many parents and schools believe that bullying only occurs among junior high and high school students, when in fact, it also occurs in children between the ages of 3 and 12. It is at this age that bullying cases receive less attention because they are considered normal (Ramadhanti & Hidayat, 2022).

Research conducted by Pratiwi et al., 2021, found that 53% of school children and adolescents in Pekanbaru had experienced bullying. 52.8% of children experienced physical bullying, 51.8% experienced verbal bullying, and 62.3% experienced psychological/mental bullying. The majority of bullying incidents frequently occur among school-aged children, including verbal bullying, such as name-calling, name-calling, insulting, and body-shaming, as well as physical bullying, such as hitting, spitting, and kicking.

The impact of bullying on victims can have both physical and psychological consequences, with some victims even experiencing depression and social isolation. Bullying can lead to children feeling threatened, feeling low and worthless, having difficulty concentrating on their studies, having difficulty socializing, being unwilling to go to school, having difficulty socializing, and developing a lack of self-confidence, difficulty thinking, and ultimately declining academic performance (Oktaviani & Ramadan, 2023).

Addressing this problem requires collaborative efforts between schools, parents, and the community (Rahim, 2024). Education aims to provide a comprehensive understanding of bullying, its types, its impact on victims and perpetrators, and effective ways to prevent and handle bullying cases. Bullying education plays a crucial role. Bullying education can reduce incidents of violence in schools. Bullying education is crucial not only for preventing bullying itself but also for understanding the psychological consequences experienced by victims, perpetrators, and witnesses (Hidayatullah & Najib, 2024).

This education can be delivered in several ways, one of which is using audio-visual media. Audio-visual media can be used to carry out health promotion activities that have been prepared. In such a way that the message's content is easily understood by the recipient (Abdullah & Ilmiah, 2023).

The purpose of using audio-visual media in learning is to reconstruct students' knowledge by providing stimuli in the form of moving images and sound and to clarify the presentation of the message the educator wants to convey. One of the goals of using audio-visual media is to attract students' interest in the delivery of learning materials, to enable learning to take place without being limited by space, time, or the senses, to motivate students

to learn, and to provide learning experiences through conclusions from the audio-visual media presented (Alti et al., 2022).

Based on a field study conducted by the author using interviews with the principal and teachers at SDN 108 Pekanbaru, located on Jalan Merak, Tengkerang Labuai, Bukit Raya District, on October 28, 2024, it was stated that at SDN 108 Pekanbaru. This school has never received bullying education, so no research has been conducted on bullying education in this school regarding students' knowledge and attitudes. The author also interviewed and observed 10 students at SDN 108 Pekanbaru. The author asked the 10 students about their attitudes and behaviors if a friend was bullied. Seven (70%) students said they didn't know what to do, two (20%) students said they would report the incident to a teacher, and one (10%) student said they would immediately defend a friend who was being bullied.

Based on the above background, the author is interested in conducting the study "The Effect of Bullying Education Using Audio-Visual Media on Students' Knowledge and Attitudes at SDN 108 Pekanbaru. The purpose of this study was to determine the effect of bullying education on students' knowledge and attitudes at SDN 108 Pekanbaru.

RESULTS

A. Univariate Analysis

1. Respondent Characteristics

a) Age

Tabel 1. Frequency Distribution of Respondents Based on Age

Age Category	Frequency (f)	Age Category
10 Year	17	28,8
11 Year	30	50,8
12 Year	11	18,6
13 TYear	1	1,7
Total	59	100

Source: Primary Data Analysis 2025

Table 1. shows that of the 59 respondents, more than half (30 respondents) were 11 years old.

Table 2. Frequency Distribution of Respondents Based on Gender

Gender	Frequency (f)	Percentage%
Man	28	47,5
Woman	31	52,5
Total	59	100

Source: Primary Data Analysis 2025

Table 2 shows that of the 59 respondents, more than half were female (31 respondents (52.5%).

2. Specific Data

a. Average Bullying Knowledge Score Before and After Bullying Education

Table 3. Distribution of Average Bullying Knowledge Scores Before and After Bullying Education

	N	Mean	SD	Min	Max
Pre-Test	59	10,73	2,734	4	16
Post-Test	59	12,37	3,782	2	17

Source: Primary Data Analysis 2024

Table 3 shows the average pretest bullying knowledge score of 10.73, with a standard deviation of 2.734, a minimum score of 4, and a maximum score of 16. Meanwhile, the average posttest bullying knowledge score was 12.37, with a standard deviation of 3.782, a minimum score of 2, and a maximum score of 17.

Table 4. Distribution of Average Bullying Attitude Scores Before and After Bullying Education

	N	Mean	SD	Min	Max
Pre-Test	59	75,27	16,873	37	105
Post-Test	59	81,53	17,000	39	105

Source: Primary Data Analysis 2024

Table 4 shows the average pretest bullying attitude score of 75.27, with a standard deviation of 16.873, a minimum score of 37, and a maximum score of 105. Meanwhile, the average posttest bullying attitude score was 81.53, with a standard deviation of 17.000, a minimum score of 39, and a maximum score of 105.

B. Bivariate Analysis

A bivariate analysis was conducted to examine the effect of bullying education using audiovisual media on students' knowledge and attitudes at SDN 108 Pekanbaru. The results of this study were considered effective if the P-value was <0.05 .

1. Normality Test

The normality test is used to determine whether the data is normally distributed. To determine whether the data is normally distributed, the Kolmogorov-Smirnov test can be used analytically. The Kolmogorov-Smirnov test requires a p-value >0.05 . If the normality test results are normally distributed, then this study uses statistical testing Using the Paired T-Test. If the normality test results are not normal, the study uses the Wilcoxon and Man-Whitney statistical tests. In this study, normality tests were conducted on the pre- and post-tests. The results of the normality test are as follows:

Table 5. Results of the Normality Test for Bullying Knowledge

Kolmogorov-Smirnov				
	Frekuensi	Statistik	Df	P Value
Pretest	59	0,124	59	0,025
Posttest	59	0,210	59	0,000

Source: Primary Data Analysis 2025

Table 5 shows that the data is normally distributed if the p-value is >0.05 . In this study, the pre-test value was 0.025 and the post-test value was 0.000. Therefore, it can be concluded that the data is not normally distributed.

Table 6. Results of the Normality Test for Bullying Attitudes

Kolmogorov-Smirnov				
	Frekuensi	Statistik	Df	P Value
Pretest	59	0,080	59	0,200
Posttest	59	0,123	59	0,027

Source: Primary Data Analysis 2025

Table 6 shows that the data are normally distributed if the p-value is >0.05 . In this study, the pre-test value was 0.200 and the post-test value was 0.027. Therefore, it can be concluded that the data are not normally distributed.

2. Wilcoxon Test

Based on the results of the normality test, which indicated that the data were not normally distributed, the bivariate analysis used in this study was a non-parametric Wilcoxon test. The Wilcoxon test results were used to determine the effect of bullying education using audio-visual media on the knowledge and attitudes of students at SDN 108 Pekanbaru. The Wilcoxon test results obtained in this study are as follows:

Table 7. Distribution of Wilcoxon Signed Ranks Test Results for Bullying Knowledge

	N	Mean Rank	Sum of Ranks	P Value
	Negative Ranks	11	27,18	299,00
Posttest- Pretest	Positive Ranks	42	26,95	1132,00
	Ties	6		0,000
	Total	59		

Source: Primary Data Analysis 2025

Table 7 explains that the Wilcoxon signed ranks test results showed changes in posttest and pretest scores. Negative ranks with an N value of 11 indicate that 11 respondents had posttest scores lower than their pretest scores, while positive ranks with an N value of 42 indicate that 42 respondents had posttest scores higher than their pretest scores, and ties with an N value of 6 indicate that 6 respondents had identical posttest and pretest scores. This indicates that many respondents experienced an increase in knowledge after being educated about bullying using audiovisual media. The results of the pretest and posttest statistical tests showed a p-value of $0.000 < 0.05$, indicating that H_0 was rejected, indicating that bullying education using audiovisual media had an effect on student knowledge at SDN 108 Pekanbaru.

DISCUSSION

A. Univariate Analysis

1. Respondent Characteristics

a. Age

The results show that of the 59 respondents, more than half (30 respondents) were 11 years old. This study aligns with research conducted by Wasito & Fauziah (2023), which found that out of 86 respondents, bullying was most frequently experienced by 11-year-old students, with 38 incidents. At school age, children spend most of their time at school, so incidents often occur at school, often during recess, while playing with friends, and after school. This occurs due to a lack of supervision from teachers and the school. Elementary school students at higher levels, such as 5th grade, already have concrete lives, so an interest in group activities becomes an important need at this age. Children face developmental tasks in play. During play, they begin to reconnect with established rules. Poor social relationships with peers and distrust can contribute to bullying. Children who are targets of bullying usually have internal characteristics such as low self-confidence and self-esteem which makes them targets. They are vulnerable to bullying (Arif & Novrianda, 2021).

School-age children enter the psychosocial development stage of industry versus inferiority. At this stage, children face and complete tasks or actions that ultimately lead to a result. At this stage, children develop judgments about others in various ways. Children who are rejected or unpopular may exhibit aggressive, hyperactive, inattentive, or immature behavior, often leading to behavioral and academic problems at school. This aggressive behavior can lead to bullying in school-age children, especially those in fifth grade.

According to researchers, there is a relationship between the age of 11 and bullying incidents because at this age, children begin to form friendships in groups, giving them more power to bully others they perceive as weaker. Furthermore, at this age, children are more often in the school environment with their peers, sometimes outside the supervision of teachers and parents.

b. Gender

The results showed that of the 59 respondents, more than half were female (31 respondents (52.5%). This research aligns with research conducted by Novitasari et al. (2023), which found that there were 21 more female respondents than male respondents (56.8%). Boys and girls exhibit different forms of bullying; girls tend to engage in physical bullying and are often involved in aggression. Relational bullying, such as avoiding, excluding friends, backbiting, spreading rumors, and cheating, is common.

Girls are more likely to experience verbal bullying because gender can directly or indirectly influence their character, personality, and emotions. Social environments also demand that boys be more assertive and active, which in turn makes them appear bolder and more confident (Pratiwi et al., 2021).

Boys experience and perpetrate verbal and physical bullying more often, while girls experience and perpetrate relational bullying more often than physical or verbal bullying. This difference is more related to the socialization of boys and girls in our culture than to physical prowess and size. Furthermore, boys' tendency to bully is due to the perception of bullying as a mechanism for interacting with peers, unlike girls, who perceive bullying as harmful and therefore tend to avoid such behavior (Kristika & Lestari, 2021).

According to the researcher's assumption, there is a relationship between women and bullying incidents because sometimes in female friendships, if one person doesn't like another person, the rest of the group will also dislike that person, so they have the courage to bully that person because many friends support them. In addition, women are more likely to spread rumors or slander about other people, which makes them The person becomes a victim of bullying.

2. Specific Data

a. Average Bullying Knowledge Score Before and After Bullying Education

The results of the study showed an average bullying knowledge score before the pretest of 10.73, while the average bullying knowledge score after the posttest was 12.37. This study aligns with research conducted by Widhawati et al. (2024), which found that the average score before education about bullying in the KKR was 8.2 and the average score after education was 8.77, indicating an increase in the average score before and after education and training on bullying of 0.57.

Knowledge is an important domain in shaping a person's actions (overt behavior). Knowledge is the result of human curiosity about anything through specific means and tools. There are six sources of knowledge: sensory experience, reasoning, authority, intuition, revelation, and belief. Of these six sources of knowledge, sensory experience is considered the most vital means of acquiring knowledge, as it is through these senses that individuals can connect with various external objects. Individuals are able to recognize objects in their surroundings. Through sound knowledge, deviant behavior can be prevented (Izaac & Violita, 2025).

Audiovisual presentations enable the audience to To improve concentration, videos can provide visual and auditory stimulation, adhering to psychomotor, behavioristic, and cognitive principles. Respondents can receive information through their sense of hearing (ears) and their sense of sight (eyes). This allows for optimal understanding of the information conveyed (Widhawati et al., 2024).

According to the researchers' assumption, providing audiovisual education can improve knowledge because information delivered using videos is easier to understand due to the presence of images and sound, making it easier to grasp the information provided.

b. Average Bullying Attitude Score Before and After Bullying Education

The results showed an average bullying attitude score in the pre-test of 75.27, while the average bullying attitude score in the post-test was 81.53. This study aligns with research conducted by Zakiah Zulfa et al. (2023). The results showed that the

majority of students' attitudes improved, from 28.6% to 54.3%, due to the role of health education in changing individual attitudes, which includes elements of communication. One factor that influences a person's attitude is their knowledge. The more knowledgeable a person is, the more positive their attitude will be toward an object. Furthermore, other factors influence a person's attitude. A child's perception of a particular object is a personal experience with the object in question (Fitiriana et al., 2022).

Education about bullying behavior in children is crucial to help children who bully become better socializers, and children who are victims of bullying develop positive social interactions and assertiveness in the face of potentially disruptive behavior and resolve their own problems (Nita et al., 2024).

According to the researchers' assumptions, providing audiovisual education can lead to positive attitude change because increased knowledge about bullying can lead to positive changes.

B. Bivariate Analysis

The results of the pretest and posttest statistical tests showed a p-value of 0.000 <0.05. This means that H_a is accepted, indicating that bullying education using audiovisual media has an effect on the knowledge and attitudes of students at SDN 108 Pekanbaru. This research aligns with research conducted by Nafisah, Rini Julistia, and Dwi Iramadhani (2024), which found that the significance value of the results obtained was Asymp.Sig. (2-tailed), which was 0.000 <0.5. Therefore, it can be concluded that providing psychoeducation through video media is effective in improving students' knowledge and attitudes about bullying after treatment.

This research also aligns with research conducted by Abdillah & Rusman (2024), which showed that the analysis of the test results. The hypothesis was confirmed using a paired sample t-test, resulting in a t-test result of -23.853 with a significance level of 0.000. Based on these results, H_a is accepted and H_0 is rejected. Therefore, it can be concluded that the treatment of providing audiovisual media-based information services through video has an impact on increasing students' understanding of the dangers of bullying at MTs Parmiyatu Wassa'adah.

Message delivery in health education can be done not only face-to-face but also through video. With increasingly advanced technology, video has become an alternative method for disseminating health information. Video is an intermediary medium where material is absorbed through the senses of sight and hearing, thus creating conditions that enable students to acquire knowledge and skills. The material in the video is presented in moving image effects with an engaging storyline and sound, making the video media more realistic. Educational video material can also facilitate students' understanding of concepts and their ability to absorb material, and can help present material in a focused and engaging manner. Exposure to information or mass media also influences positive behavioral changes. Good knowledge possessed by students will enable positive changes in attitudes within the individual (Keni Novanto Mira Higa et al., 2024).

Visual media has several functions as a learning medium: attentional, emotional, cognitive, and compensatory. The attention-getting feature allows video media to capture attention and direct viewers' focus on the video material. The emotional function refers to video media's ability to stimulate viewers' emotions and attitudes. The cognitive function accelerates the achievement of learning objectives: understanding and

remembering messages and information contained in images and symbols. Furthermore, its complementary function is to provide context for audiences with weaker abilities in organizing and remembering the information they receive. Thus, video media helps audiences, especially students with weak and slow learning abilities, to more easily accept and understand the innovations presented. This is because video can combine visual (image) and audio (sound) elements (Sulistyowati, et.al, 2024).

According to the researchers' assumptions, providing bullying education through audiovisuals is effective for knowledge and attitudes because educational video materials can facilitate students' understanding of concepts and absorption of material in receiving information, and can help present material in a focused and engaging manner.

C. Research Limitations

This research certainly faces limitations and constraints. A limitation of this research was the postponement of the scheduled implementation due to the proximity of exams and semester breaks.

CONCLUSION

This study showed that more than half of the respondents (60 respondents) were male, while almost half were female (24 respondents) (28.6%). Males outnumbered females. This study showed that the average age of the respondents was between 12 and 17 years, with almost half (24 respondents) being 12-13 years old, while more than half (60 respondents) were 14-17 years old. There was a moderate level of online game addiction of 10 respondents (11.9%), while 37 respondents (44%) were moderate and low, representing the highest level of addiction. There were 52 (61.9%) high levels of violent behavior, while 32 (38.1%) low levels. Data analysis was conducted using the Chi-Square test with the variables of online game addiction and violent behavior at SMP 45 Pekanbaru, obtaining a p-value of 0.455 where $p\text{-value} > 0.05$, thus it can be interpreted that there is no relationship between online game addiction and violent behavior at SMP 45 Pekanbaru.

REFERENCES

- [1] M. B. Birri, M. Muhajir, and I. Listyarini, "Pengaruh Game Online Terhadap Minat Belajar Siswa Kelas V Sd Muhammadiyah 11 Semarang," *Dwijaloka J. Pendidik. Dasar Menengah*, vol. 3, no. 2, pp. 239–243, 2022, [Online]. Available: <http://jurnal.unw.ac.id/index.php/dwijaloka/index>
- [2] Hanis *et al.*, "Dampak game online mobile legends terhadap perilaku remaja usia 17-21 tahun di desa sekura kabupaten sambas," pp. 109–122, 2024.
- [3] N. S. Hawi, M. Samaha, and M. D. Griffiths, "Internet gaming disorder in Lebanon: Relationships with age, sleep habits, and academic achievement," *J. Behav. Addict.*, vol. 7, no. 1, pp. 70–78, 2018, doi: 10.1556/2006.7.2018.16.
- [4] J. Hasibuan and A. Anggreni, "Fenomena Kecanduan Game Online pada Remaja di Desa Deli Tua Kecamatan Namorambe," *J. Progr. Stud. Pendidik. Masy.*, vol. 3, no. 1, pp. 20–28, 2022.
- [5] A. Putri and Y. T. Ningsih, "Hubungan Antara Kesepian dengan Kecanduan Game Online pada Mahasiswa yang Bermain Game Online X di Kota Padang," *J. Pendidik. Tamusai*, vol. 4, no. 3, pp. 2760–2766, 2020.
- [6] A. Mubarok and Suklani, "DAMPAK GAME MOBILE LEGEND TERHADAP

PERILAKU SOSIAL EMOSIONAL DAN SPIRITUAL ANAK USIA REMAJA KELURAHAN KARYAMULYA KOTA CIREBON,” *AT-TAWASSUTH J. Ekon. Islam*, vol. VIII, no. I, pp. 1–19, 2023.

- [7] I. A. Rahman, D. Ariani, and N. Ulfa, “Tingkat Kecanduan Game Online Pada Remaja,” *J. Mutiara Ners*, vol. 5, no. 2, pp. 85–90, 2022, doi: 10.51544/jmn.v5i2.2438.
- [8] Trimawati and A. Wakhid, “Gambaran Perilaku Agresif Pada Remaja yang Mengalami Kecanduan Game Online,” *J. Ilmu Keperawatan Jiwa*, vol. 3, no. 4, pp. 567–570, 2020.
- [9] H. Masya and D. A. Candra, “Faktor-Faktor yang Mempengaruhi PerilKing, D. L., & Delfabbro, P. H. (2018). Internet Gaming Disorder : Theory, Assessment, Treatment and Prevention. Academic Press.aku Gangguan Kecanduan Game Online pada Peserta Didik Kelas X Di Madrasah Aliyah Al Furqon,” *KONSEL J. Bimbing. dan Konseling*, vol. 3, no. 2, pp. 97–112, 2016.
- [10] S. Safitri and Fikri, “Hubungan Antara Kecanduan Game Dengan Perilaku Agresif Verbal Pada User Game Online,” *J. Bimbing. dan Konseling Pandohop*, vol. 2, no. 1, pp. 28–33, 2022, doi: 10.37304/pandohop.v2i1.4396.
- [11] R. Anggreyani *et al.*, “GAME ONLINE BERHUBUNGAN DENGAN PERILAKU AGRESIVITAS PADA REMAJA : SEBUAH STUDI DI GAME CENTER SEMARANG,” vol. 14, pp. 1–6, 2020.
- [12] A. Azis and N. Nasir, “Hubungan Antara Kontrol Diri dengan Kecanduan Game Online Pada Remaja di Kota Bekasi,” vol. 4, no. 01, pp. 29–38, 2024.
- [13] I. Isnaini *et al.*, “Intensitas bermain game online berhubungan dengan perilaku agresif verbal remaja,” vol. 9, no. 1, pp. 235–242, 2021.
- [14] A. A. A. Rondo, H. I. S. Wungouw, and F. Onibala, “Hubungan Kecanduan Game Online Dengan Perilaku Agresif Siswa Di Sma N 2 Ratahan,” *J. Keperawatan*, vol. 7, no. 1, 2019, doi: 10.35790/jkp.v7i1.24324.
- [15] Y. Fahrizal and B. Y. Pratama, “Intensity Of Violent Behavior In Adolescents Addicted To Violent Online Games In Yogyakarta Indonesia Intensity Of Violent Behavior In Adolescents Addicted To Violent Online Games In Yogyakarta Indonesia,” no. April 2021, 2022, doi: 10.20527/dk.v9i1.9448.
- [16] J. P. Malahayati *et al.*, “Dampak Game Online: Studi Fenomena Perilaku Trash-Talk pada Remaja,” *J. Psikol. Malahayati*, vol. 2, no. 2, pp. 72–85, 2020, [Online]. Available: <https://core.ac.uk/download/pdf/353678409.pdf>
- [17] F. N. Khairiyah, Firman, and Netrawati, “A STUDY OF LITERATURE ON GAME ADDICTION WITH VIOLENT CONTENT AMONG ADOLESCENTS AND THE ROLE OF COUNSELLORS,” vol. XXIII, no. 1, pp. 43–53, 2023.
- [18] O. K. Saputri, R. Widiastuti, and M. J. Pratama, “Analisis Bentuk-bentuk Perilaku Agresif Siswa Pengguna Game Online,” *Bimbing. Konseling*, vol. 7, no. 5, pp. 1–16, 2019.
- [19] A. W. Adani, N. Y. Triana, and Murniati, “The Relationship of Online Game Addiction with Aggressive Behavior for Teenagers at SMP Negeri 3 Banyumas,” vol. 7, no. 1, pp. 1–5, 2024, doi: 10.32832/pro.
- [20] S. D. Andini and U. Subroto, “Hubungan Kecenderungan Kecanduan Game

Online Dengan Perilaku Agresif Pada Remaja Perempuan,” *Sos. Dan Hum.*, vol. 1, no. 3, pp. 224–229, 2024.

[21] S. Nisrina, D. R. Lestari, and K. Rachmawati, “Hubungan Kecanduan Game Online dengan Perilaku Agresif Remaja di SMP Negeri ‘X’ Banjarbaru,” *J. Keperawatan Jiwa*, vol. 11, no. 2, pp. 247–260, 2023.

[22] Suci Aulya, Linda Fitria, and Yuliawati Yunus, “Perbedaan Tingkat Kecanduan Game Online Antara Siswa Laki-laki dan Perempuan di SMA Negeri 6 Padang,” *SOSMANIORA J. Ilmu Sos. dan Hum.*, vol. 3, no. 3, pp. 328–334, 2024, doi: 10.55123/sosmaniora.v3i3.4099.

[23] E. P. Oktaviani and S. Nurjanah, “Hubungan Intensitas Bermain Game Online Terhadap Perilaku Agresivitas Pada Remaja Di SMA Muhammadiyah Sokaraja,” *J. Hum. Care*, vol. 6, no. 2, pp. 295–301, 2021.

[24] S. Irawan and Di. Siska W., “Faktor-Faktor yang Mempengaruhi Kecanduan Game Online Peserta Didik,” *J. Konseling Gusjigang*, vol. 7, no. 1, pp. 9–19, 2021.

[25] N. I. Siregar and P. Muljono, “Pengaruh Perilaku Bermain Video Game Berunsur Kekerasan Terhadap Perilaku Agresi Remaja,” *J. Sains Komun. dan Pengemb. Masy. [JSKPM]*, vol. 1, no. 3, pp. 261–276, 2019, doi: 10.29244/jskpm.1.3.261-276.

[26] M. R. Almajid, “Tindak Verbal Abuse dalam Permainan mobile Legend di Indonesia: Kajian Sosiolinguistik,” *Estet. J. Bhs. Indones.*, vol. 2, no. 2, p. 171, 2019, doi: 10.29240/estetik.v2i2.1055.

[27] I. Subqi, “Perilaku Agresif Remaja dalam Tinjauan Pola Asuh Keagamaan Orang Tua di Desa Baleadi Pati,” *IJIP Indones. J. Islam. Psychol.*, vol. 1, no. 2, pp. 186–214, 2019, doi: 10.18326/ijip.v1i2.186-214.

[28] W. Anggraini, E. Rifani, and A. Prasetyo, “Faktor-Faktor Penyebab Perilaku Agresif pada Remaja : Studi Literatur,” *JAMBURA Guid. Couns. J.*, vol. 4, no. 1, pp. 39–44, 2023, doi: 10.37411/jgcj.v4i1.2246.

[29] H. Fujianingsih, I. Auliya, and I. D. Rifangga, “110.+2141-2151=+Hanii+Fujia,” vol. 3, no. 2, pp. 2141–2151, 2024.

[30] L. Lisana, H. Dinata, and gabriela V. Tanudjaja, “Playing to learn: Game-based approach to financial literacy for generation Z,” vol. 16, no. 1, pp. 1–23, 2024.

[31] putri rahmaning Sekar, “Faktor-Faktor Yang Mempengaruhi Agresivitas Remaja,” *J. Pendidik. Indones.*, vol. 3, no. 08, pp. 719–739, 2021, doi: 10.59141/japendi.v3i08.1115.

[32] A. A. Pitakasari, Kandar, and A. Pambudi, “Hubungan Paparan Game Online Berunsur Kekerasan Terhadap Kejadian Perilaku Agresif Pada Remaja di Kelurahan Bulustalan Semarang,” *J. Keperawatan*, vol. 5, no. 2, pp. 96–102, 2018.

[33] H. Wiyono and E. Ellisiya, “Hubungan Kecanduan Game Online Dengan Perilaku Agresif Pada Siswa Sekolah Menengah Pertama,” vol. 12, no. 1, pp. 138–145, 2024.

[34] F. R. Mais, S. S. J. Rompas, and L. Gannika, “Kecanduan Game Online Dengan Insomnia Pada Remaja,” *J. Keperawatan*, vol. 8, no. 2, p. 18, 2020, doi: 10.35790/jkp.v8i2.32318.

[35] A. B. Hawa, H. Sulistyoningsih, and W. R. Hidayani, “Faktor-Faktor Terjadi Tindakan Kekerasan dalam Hubungan Remaja,” *J. Genes. Indones.*, vol. 1, no. 02, pp. 66–78, 2022, doi: 10.56741/jgi.v1i02.81.