

The Intensity of Playing Online Games as a Predictor of Emotional Regulation in Elementary School Students in the Context of the Digital Era

Alya Rahmi Ihsan¹, Eva Suriyaningsih², Fathor Rosi³,
Arman Nauli Nasution⁴, Surawan Surawan⁵

¹²³⁴⁵Islamic Religious Education, State Islamic University, Palangka Raya, Indonesia
alvarahmi0808@gmail.com*

Article history

Received March 30, 2026

Revised April 23, 2026

Accepted May 30, 2026

Keywords: Online Games,
Emotional Regulation,
Elementary School Students,
Digital Era,
Gaming Intensity

ABSTRACT

The rapid development of digital technology has significantly influenced children's daily activities, including the increasing intensity of playing online games among elementary school students. This study aims to analyze the intensity of online gaming and its relationship with emotional regulation among elementary school students. This research employed a quantitative approach using a survey method. The sample consisted of 17 elementary school students selected through purposive sampling. The research instrument used a Likert-scale questionnaire consisting of 10 items for each variable. Data analysis was conducted descriptively by calculating the mean scores and percentages. The results show that the average score of online gaming intensity among students is 26.6 or 66.5% of the maximum score, which falls into the high category. Meanwhile, the students' emotional regulation ability is in the moderate category with an average score of 25.3 or 63.3%. These findings indicate a tendency that higher intensity of online gaming is associated with lower emotional regulation ability among students. Therefore, parental and teacher supervision is necessary to regulate children's gaming activities in order to support their emotional development.

I. INTROUCTION

The development of digital technology has brought significant changes to people's lives, including the activities of elementary school children. One form of entertainment that is becoming increasingly popular among children is digital games or online games [1][2]. Online games have become very appealing to children because they offer challenges, enjoyment, and interaction with other players thru the internet. As internet access in Indonesia increases, the use of online games is also becoming more widespread. Children not only play games for entertainment, but also spend most of their free time playing games [3][4][5]. This condition raises various concerns regarding its impact on children's psychological development, particularly in terms of their ability to manage emotions. Emotion regulation is the individual's ability to control and express emotions appropriately according to the situation faced [6]. In elementary school children, this ability is still in the developmental stage, so it is greatly influenced by their environment and experiences. If children play online games too often, especially those that are competitive or contain elements of conflict, it can affect their emotional condition [7][8].

Several studies show that excessive use of online games can impact children's behavior, such as increased aggressiveness, decreased concentration in learning, and difficulty controlling emotions when experiencing defeat in the game. However, on the other hand, online games can also provide benefits such as improving strategic thinking skills and motor coordination if used wisely. Based on these issues, this study aims to determine the level of intensity of online gaming among elementary school students and to observe the tendency of its relationship with students' emotional regulation abilities in the current digital era.

II. METHODS

This research uses a quantitative approach with a descriptive survey method. [9]. The quantitative approach is used to understand the level of intensity of online gaming and students' emotional regulation abilities based on numerical data collected from respondents. The research subjects consisted of 17 elementary school students selected using purposive sampling. The sample selection was conducted by considering students who have experience playing online games.

Table 1. Characteristics of Research Respondents

No	Characteristic	Explanation
1	Number of respondents	17 students
2	Education levels	Elementary School
3	Tekhnik Sampling	Muestreo intencional
4	Respondent Criteria	Students who have experience playing online games

The research instrument uses a Likert scale questionnaire with four response options: strongly agree, agree, disagree, and strongly disagree. The questionnaire includes two research variables: the intensity of playing online games and emotion regulation. Each variable is measured using 10 statement items. The data analysis technique was conducted descriptively by calculating the average score of respondents and the percentage of the maximum score that can be achieved. The calculation results are then categorized to determine the level of gaming intensity and the students' emotional regulation abilities.

Table 2. Research Instruments

Variable	Indicator	Item number	Amount
Intensity of Playing Online Games	Frequency of playing games	1, 2, 3	3
	Duration of playing games	4,5,6	3
	Involvement in the game	7, 8	2
	The habit of playing online games	9, 10	2
Number of Items			10
Emotion Regulation	The ability to control emotions	1, 2, 3	3
	The ability to manage anger	4, 5	2
	Emotional response regulation	6, 7, 8	3
	Emotional adjustment to the situation	9, 10	2
Jumlah Item			10

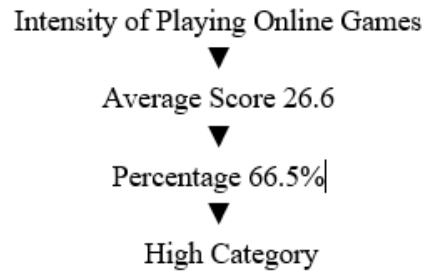
Data collection was carried out thru the distribution of questionnaires to respondents who met the research criteria [10]. The data obtained were then analyzed using descriptive statistical techniques by calculating the average score, percentage, and score categorization to determine the level of intensity of online gaming and the students' emotional regulation abilities. The results of the

analysis were subsequently interpreted to explain the tendency of the relationship between the two research variables.

III. RESULTS AND DISCUSSION

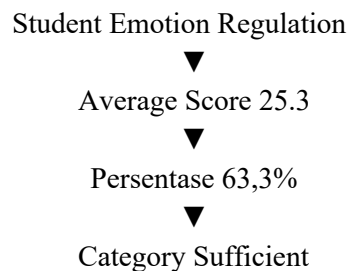
3.1. Intensity of Playing Online Games Among Students

Based on the results of the questionnaire data processing given to 17 respondents, the average score for online gaming intensity was 26.6 out of a maximum score of 40. When converted into a percentage, this value is equivalent to 66.5% of the maximum score. This result shows that the level of intensity of online gaming among students falls into the high category. The high intensity of online gaming indicates that digital games have become a part of children's daily activities in the digital era [11] The ease of access to technological devices such as smartphones and the availability of internet networks allow students to play various types of games online anytime. This has caused online games to become one of the most frequently used forms of entertainment by children during their free time [12]. In addition, online games are usually designed with various interesting features such as leveling systems, rewards, and interaction with other players [13]. These features make players feel challenged to keep playing, resulting in longer time spent in the game. Result data: •Average score = 26.6 Percentage = 66.5% Category = High



3.2. Emotion Regulation of Elementary School Students

The research results on the emotion regulation variable show that the average student score is 25.3 out of a maximum score of 40, or about 63.3% of the maximum score. This score falls into the adequate category, indicating that most students still have relatively good abilities in managing their emotions. According to the emotion regulation theory developed by James J. Gross, emotion regulation is the process by which individuals monitor, evaluate, and control the emotions they feel to align with the situations they face. In elementary school children, this ability is still in the developmental stage, so they are still learning to control the emotional reactions that arise in various conditions. In the context of digital games, students often encounter various situations that trigger emotions, such as joy when winning and disappointment or anger when losing. These emotional experiences can affect a child's ability to manage their feelings if not balanced with good self-control. Result data: Average score = 25.3 Percentage = 63.3% •Category = Sufficient



3.3. The Relationship Between the Intensity of Playing Online Games and Emotion Regulation

Based on the data trends obtained in this study, students with higher intensity of online gaming tend to show lower emotional regulation abilities compared to students who play games with lower intensity. This indicates that excessive gaming activity can affect children's emotional conditions.[14]. This finding can be explained thru the social learning theory proposed by Albert Bandura. In this theory, it is explained that individual behavior can be learned thru the processes of observation, imitation, and experiences obtained from the surrounding environment.[14]. In the context of online games, children can imitate various behaviors they see in the game, including how to respond to conflicts, competition, or pressure that occurs during the game. Additionally, online games often present competitive situations that trigger various emotional responses. If children are too often involved in such situations without adequate supervision, it can affect their ability to control their emotions [15]. Nevertheless, online games do not always have a negative impact. To some extent, digital games can also provide benefits such as enhancing strategic thinking skills, training motor coordination, and developing problem-solving abilities [11]. Therefore, the role of parents and teachers is very important in supervising children's gaming activities so that the use of technology can provide more positive benefits for their development. The research results show that the intensity of online gaming among elementary school students falls into the high category. This condition shows that digital games have become a quite dominant part of children's daily activities in the current digital era. The ease of access to technological devices such as smartphones and the availability of internet networks allow students to play games anytime and anywhere.

The high intensity of playing online games can also be influenced by the characteristics of the games themselves, which are designed with various attractive features, such as game level systems, challenges, and interactions with other players. [16]. This makes children feel interested in continuing to play, so the time spent playing games becomes longer. On the other hand, the research results indicate that students' emotional regulation abilities fall into the adequate category. This shows that some students are still able to manage their emotions, although in certain situations they still have difficulty controlling their emotions, especially when facing conditions that cause stress or frustration [17]. According to the emotion regulation theory proposed by James J. Gross, emotion regulation is the process by which individuals monitor, evaluate, and control the emotions they feel in order to adapt to the situations they face [18]. In elementary school children, this ability is still in the developmental stage, so they are still learning to control their emotional reactions. If linked to research findings, high intensity of playing online games can affect students' emotional experiences [3]. In online games, children often face competitive situations that elicit various emotional reactions such as excitement when winning and disappointment or anger when losing. If these conditions occur continuously, they can affect the way children manage their emotions [18]. The findings of this research can also be explained thru the social learning theory proposed by Albert Bandura. This theory explains that individual behavior can be learned thru the process of observation and interaction with the environment [19]. In the context of online games, children can imitate various behaviors they see in the game, including how to respond to conflicts, competition, and pressure that arise during the game. However, online games do not always have a negative impact on children's development. To a certain extent, digital games can also provide benefits such as enhancing strategic thinking skills, training motor coordination, and developing problem-solving abilities [20][21]. Therefore, it is important for parents and teachers to provide supervision and guidance in children's gaming activities so that the use of technology can have a more positive impact on their development.

IV. CONCLUSION

Based on the research results that have been conducted, it can be concluded that the intensity of playing online games among elementary school students falls into the high category with an average score of 26.6 or about 66.5% of the maximum score. This indicates that online games have become one of the activities frequently engaged in by students in their daily lives. Meanwhile, the students' emotional regulation ability falls into the sufficient category with an average score of 25.3 or about 63.3% of the maximum score. The results of this study indicate that some students are still able to manage their emotions well, although in certain situations they still show difficulty in controlling their emotions. This study also shows a tendency that students with higher intensity of online gaming have lower emotional regulation abilities. These findings highlight the importance of the role of parents and teachers in supervising children's gaming activities to ensure they do not disrupt their emotional development. Therefore, it is necessary to regulate gaming time and provide guidance in the use of digital technology so that children can gain positive benefits from digital games without disrupting their emotional development.

V. REFERENCES

- [1] F. Ahmadsyah, "... Perubahan Perilaku Nakal Pada Anak Laki-Laki Dalam Bermain Game Online Mobile Legend (Studi Pada Pelajar Di Sekolah Menengah Pertama X Kota Pekanbaru)," 2022.
- [2] P. S. Ibrahim, Seray B, Predrag Klasnja, James J. Gross, "Designing Daily Supports For Parent-Child Conversations About Emotion: Ecological Momentary Assessment As Intervention," in *Dalam Proceedings Of The 2025 Chi Conference On Human Factors In*, 2025. doi: 10.1145/3706598.3713848.
- [3] S. Syahmidi, N. N. A'ini, K. N. Khasanah, and S. Surawan, "Pendampingan Kegiatan Pembelajaran Akidah Berbasis Game Open the Box Pada Santri TPA Al-Firdaus," *Progresif*, vol. 5, no. 1, pp. 49–60, 2025.
- [4] M. J. P. Muhammad Arsyad, Ririanti Rachmayani Jamain, "Analisis Perilaku Imitasi Pada Remaja Pemain Game Mobile Legends Online Di Tinjau Dari Pendekatan Kognitif Sosial," *G-Couns J. Bimbing. Dan Konseling*, vol. 8, no. 3, pp. 1349–55, 2024, doi: 10.31316/Gcouns.V8i3.4927.
- [5] D. E. N. P. W. Ramadhaniansyah, Ilham Akbar, Jayaning Sila Astuti, Triyo Utomo, Rafi Nugraha Nusantara, Yassir Amrulhaq, Shofiana Syamsudin, "Hubungan Regulasi Emosi Dengan Kecanduan Game Online Mobile Legends," in *Prosiding Seminar Nasional(Sinopsi)3, No. 1 (28 Januari 2026)*, 2026. [Online]. Available: <https://prosidingsinopsi.unmer.ac.id/Index.Php/Sinopsi/Article/View/125>
- [6] R. S. Najah and W. Nuryono, "Efektivitas Konseling Individu Menggunakan Latihan Regulasi Emosi Untuk Mengurangi Adiksi Game Online Peserta Didik," *Help. J. Bimbing. Dan Konseling*, vol. 40, no. 2, pp. 43–54, 2023, doi: 10.36456/Helper.Vol40.No2.A7493.
- [7] K. Rohman, "Agresifitas Anak Kecanduan Game Online," *Martabat J. Peremp. Dan Anak*, vol. 2, no. 1, pp. 155–72, 2019, doi: 10.21274/Martabat.2018.2.1.155-172.
- [8] R. Syahrani, "Ketergantungan Online Game Dan Penanganannya," *J. Psikol. Pendidik. Dan Konseling*, vol. 1, no. 1, pp. 84–92, 2015, [Online]. Available: <https://www.neliti.com/Publications/126509/>
- [9] Sugiyono, "Metode penelitian kualitatif, kuantitatif, dan R&D," Bandung: Alfabeta, 2022.
- [10] A. Putri and S. Murhayati, "Teknik analisis data dalam penelitian kualitatif kontemporer," *J. Penelit. dan Pengemb. Pendidik.*, vol. 9, no. 2, pp. 112–125, 2025.
- [11] Y. Yusnita and H. M. Syam, "Jurnal Ilmiah Mahasiswa FISIP Unsyiah Volume 2, Nomor 3, Agustus 2017 www.jim.unsyiah.ac.id/FISIP," *J. Ilm. Mhs. FISIP Unsyiah*, vol. 2, no. 3, 2017.
- [12] G. Sparkman, L. M. Hackel, J. R. Crosby, J. J. Gross, and B. M. Hard, "Connecting Introductory Psychology to Climate Change Can Empower Students," *Teach. Psychol.*, vol. 52, no. 1, pp. 76–85, 2025, doi: 10.1177/00986283231177949.
- [13] N. Nurajizah, A. A. Amalia, and P. N. Hasanah, "Hubungan Intensitas Penggunaan Gadget,"

- JIKSA - J. Ilmu Keperawatan Sebel. April*, vol. 5, no. 2, pp. 106–114, 2023.
- [14] A. Bandura, “Human Agency In Social Cognitive Theory,” *Am. Psychol.*, vol. 44, no. 9, pp. 1175–84, 1989, doi: 10.1037/0003-066x.44.9.1175.
- [15] I. Syifa, “Tadrisuna Tadrisuna,” *J. Pendidik. Islam dan Kaji. Islam*, vol. 2, no. 1, pp. 1–13, 2019.
- [16] N. Kharisma, F. Andhika, M. Ismail Lagampung, R. Aditya Harsono, and A. Mondardo, “Pengaruh Portrayal Kekerasan Dalam Game Online Terhadap Perilaku Kekerasan Pelajar Di Yogyakarta,” *J. Media Akad.*, vol. 3, no. 11, pp. 3031–5220, 2025.
- [17] R. M. Sofa, “Pengaruh Intensitas Bermain Game Online Terhadap Regulasi Emosi Siswa: Tinjauan Literatur,” 2025, *UIN Sunan Gunung Djati Bandung*.
- [18] D. N. Nanda and W. Kurniawati, “Representasi Strategi Regulasi Emosi Tokoh Utama Dalam Film Systemsprenger (System Crasher) Representasi Strategi Regulasi Emosi Tokoh Utama Dalam Film Systemsprenger (System Crasher) Derisha Nova Nanda Mahasiswa Program Studi S1 Sastra Jerman , Faku!”.
- [19] N. Hanum and M. A. Baalwi, “Pengaruh Intensitas Penggunaan Smartphone terhadap Keterampilan Sosial dan Regulasi The Influence of Smartphone Usage Intensity on Elementary School Students ’ Social Skills and Emotional Regulation,” no. 76, 2025.
- [20] S. R. Nurrohma, “Korelasi Antara Intensitas Penggunaan Gadget dan Kemampuan Regulasi Emosi Remaja,” *JHIP - J. Ilm. Ilmu Pendidik.*, vol. 8, no. 12, pp. 13411–13420, 2025, doi: 10.54371/jiip.v8i12.9881.
- [21] L. F. Barrett, B. Mesquita, K. N. Ochsner, and J. J. Gross, “The experience of emotion,” *Annu. Rev. Psychol.*, vol. 58, pp. 373–403, 2007, doi: 10.1146/annurev.psych.58.110405.085709.