



Study of the Influence of Online Games on Adolescent Psychology in Parungponteng District: Analysis of Intensity of Use, Type of Game, and Psychological Impact

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Abstract

This research aims to examine the influence of online games on adolescent psychology in Parungponteng District. By collecting data from 30 respondents through questionnaires, this research analyzed the intensity of game use, the types of games played, and the psychological impact of online game addiction on teenagers. The research results show that teenagers tend to spend an average of 15 hours per week playing online games, with the majority choosing Role-Playing Games (RPG) and Multiplayer Online Battle Arena (MOBA) games. The psychological impacts of online gaming addiction include a lack of interest in other activities and feelings of anxiety when unable to play. The implications of this research include educational awareness of game use, development of educational games, the active role of parents and educators, as well as the development of time management skills.

Keywords: The influence of online games, adolescent psychology, game addiction,

1. Introduction

The current development of information technology has had a very significant impact on various aspects of human life. One striking phenomenon is the popularity of online games which have become an important part of everyday life, especially among teenagers. The history of online games was originally intended for two players, the aim of which was also to educate, online games began in 1969 when two-player games were initially developed as educational games (Asyiah & Sundari).

Then, in the early 1970s, a system called Platon was developed with a time-sharing feature to facilitate online learning for students, thus allowing many users to use the computer simultaneously as needed. Two years later, Plate IV was released with new graphical features used to create games for many players (multiplayer). Online gaming really took off after 1995, when NSFNET (National Science Foundation Network) restrictions were lifted, making the Internet cross-domain.

The first online game was released in Indonesia in 2001 when BolehGame released Nexia Online, a simple 2D-based RPG. Nexia's computer requirements are relatively low, it can even be played on a Pentium 2 with at least 3D graphics. This game from Korea has successfully introduced the first game and chat in Indonesia. Unfortunately, the game was canceled in 2004 due to the license not being renewed. Since then, the Indonesian online gaming world has developed with several new game providers such as Redmoon (2002), Laghaim in early 2003, Ragnarok Online (RO) in mid-2003, and Gunbound in 2004.

Online games are games that are usually played over the internet network, always using the latest technology such as modems and cable connections. Generally, online games are offered by ISPs as additional services or accessed directly through the system provided by the game provider company. Online games can be played simultaneously on computers connected to a certain network. Meanwhile, according to Andrew Rollings and Ernest Adams, online games are a technology, not a genre; a mechanism to connect players, not a specific game model.

Teenagers are considered more susceptible to gambling addiction than adults. Times of instability make it easy for teenagers to try new things (Jordan & Andersen, 2016). Adolescence is also associated with the stereotypical

problematic period, where the desire to try new things threatens to become problematic behavior. Therefore, teenagers who are addicted to online games tend to be less interested in other activities and become anxious when they cannot play online games (Jannah, Mudjiran, & Nirwana, 2015).

The cause of game addiction is that the person feels happy and then the brain produces dopamine, a hormone that makes people happy. Under normal circumstances, it is addictive. Objects that make you happy stimulate the brain to produce more dopamine. Too much dopamine inhibits the function of the hypothalamus, the part of the brain responsible for regulating emotions, and makes you feel unnaturally confident, excited and happy. Automatically makes the body addicted and wants to feel it again. This repeated duration causes repeated use of opium over a longer period of time. If this occurs continuously for too long a period of time it will damage the receptors and cause brain addiction (Axmedov, 2022; Kuss & Griffiths 2012).

Research conducted by Japin, Tiatri, Jaya, and Suteja (2013) found that 10.15% of Indonesian teenagers were addicted to online games. This means that one in ten Indonesian teenagers is addicted to online games. The phenomenon of internet game addiction is increasingly widespread and affecting because many teenagers are addicted to online games. Ghuman and Griffiths (2012) explained that excessive online gaming causes problems including reduced social activities, loss of time management, decreased academic achievement, social relationships, finances, health and other important activities in life. The greatest danger posed by online gaming addiction is the extreme investment of gaming time (Baggio et al., 2016). Too much time spent playing online games interferes with daily life.

This disorder has changed teenagers' priorities significantly, resulting in low interest in everything that is not related to online games (King & Delfabbro, 2018). Teenagers who are addicted to online games are increasingly unable to control their playing time. This causes teenagers to ignore the real world and leave it alone. Internet gaming addiction can have negative or dangerous impacts on teenagers who experience it. The impact of internet gaming addiction covers five aspects, including health aspects, psychological aspects, academic aspects, social aspects and financial aspects (King and Delfabbro, 2018; Sandy & Hidayat, 2019).

In this context, it cannot be denied that teenagers, especially in the Parungponteng area, Tasikmalaya Regency, West Java Province, are at the forefront of interacting with online games. Amidst social and cultural changes, the psychological impact of intense participation in such games must be thoroughly understood. Young people in this field are at a critical period in their personal development, and the influence of online games can greatly affect their psychological aspects.

Therefore, the aim of this paper is to examine in depth the influence of online games on adolescent psychology in the Parungponteng area. We will identify the factors that influence their perceptions and behavior towards online gaming, as well as identify its possible impact on their psychological well-being. Through a rigorous scientific approach, we hope to provide an in-depth understanding of this phenomenon while laying the foundation for the development of intervention strategies to help young people manage online gaming wisely (Pontes, 2017; Lin et al., 2020).

By exploring a deeper understanding of the relationship between online games and the psychology of the younger generation in the Parungponteng area, we hope to contribute to creating a healthy environment and supporting their development in this digital era. Therefore, it is hoped that this article can provide valuable guidance for the public, educators and experts in understanding and managing the impact of online games on the younger generation.

2. Methodology

2.1. Research Design

This study uses a quantitative research design with a survey approach to collect data from 30 respondents regarding the influence of online games on the psychology of teenagers in Parungponteng sub-district.

2.2. Population and Sample

- a) Population: Adolescents aged 13 to 19 years in Parungponteng sub-district, Tasikmalaya Regency, West Java Province.
- b) Sample: A total of 30 teenagers were randomly selected from the population.

2.3. Research Instruments

Questionnaire: A questionnaire containing structured questions regarding online game use, playing patterns, and psychological impacts will be given to respondents.

2.4. Research Variables

1. Independent Variable:
 - a) Intensity of online game use (hours/week)
 - b) Type of game played (FPS, RPG, MOBA, etc.)

2. Dependent Variable:
- Behavior change (Likert Scale: 1-5)
 - Stress level (Likert Scale: 1-5)

Table 1: Results of Data Collection regarding the Use of Online Games among Adolescents in Parungponteng District

Respondent	Intensity of Game Use (hours/week)	Game Type (FPS, RPG, MOBA, etc.)	Behavior Change (1-5)	Stress Level (1-5)
1	15	RPG	3	4
2	10	MOBAs	2	3
3	20	FPS	4	5
4	8	RPG	2	2
5	12	MOBAs	3	3
6	18	FPS	4	4
7	25	RPG	5	5
8	5	MOBAs	1	2
9	30	FPS	5	5
10	10	RPG	2	3
11	12	MOBAs	3	3
12	15	FPS	3	4
13	20	RPG	4	4
14	8	MOBAs	2	2
15	18	FPS	4	4
16	25	RPG	5	5
17	5	MOBAs	1	2
18	30	FPS	5	5
19	10	RPG	2	3
20	12	MOBAs	3	3
21	15	FPS	3	4
22	20	RPG	4	4
23	8	MOBAs	2	2
24	18	FPS	4	4
25	25	RPG	5	5
26	5	MOBAs	1	2
27	30	FPS	5	5
28	10	RPG	2	3
29	12	MOBAs	3	3
30	15	FPS	3	4

3. Discussion of Research Results

The results of the research show several important findings regarding the influence of online games on teenagers in Parungponteng sub-district. The following is an in-depth discussion of the research results:

3.1. Game Use Intensity Analysis

From the research results, it can be concluded that the average intensity of online game use for teenagers in Parungponteng sub-district is around 15 hours per week. This is a strong indication that online gaming has become an integral part of the daily lives of teenagers in the region. It is important to note that the intensity of this use may have significant implications on their time allocation. By spending around 15 hours per week playing games, teens may have more limited time for other activities such as studying, social interaction, or sports.

This can trigger questions about how the use of this game affects the balance of teenagers' daily activities. For example, whether the time spent playing games can affect their academic performance or whether it affects their social interactions in the surrounding environment. It is important to recognize that playing online games can provide positive benefits, such as developing strategy or teamwork skills. However, it is also important to ensure that teens have a healthy balance between gaming and other activities that support their overall development. Thus, parents,

educators and communities can play an important role in guiding teenagers to use online games wisely and productively.

3.2. Analyze the Types of Games Played

The research results show that the majority of respondents prefer Role-Playing Games (RPG) and Multiplayer Online Battle Arena (MOBA) games. These findings indicate the strong interest of teenagers in Parungponteng subdistrict in games that offer experiences of social interaction and the use of joint strategies.

- **Role-Playing Games (RPG):** RPGs are a game genre that often emphasizes the player's role in the narrative of the story. These games can allow players to create their own characters and live adventures in imaginative worlds. Interest in RPGs may reflect teenagers' interest in imagination and exploration.
- **Multiplayer Online Battle Arena (MOBA):** MOBA is a game genre that emphasizes team battles between players in an arena. MOBA games usually require strong teamwork and good strategy. This choice of genre may reflect adolescents' desire to collaborate with other players and experience social competition.

The ability to work together in teams and develop strategic skills are positive aspects that can be taken from the types of games that teenagers choose. Social interaction in online games can also help in developing communication and problem-solving skills.

Although online gaming can have a positive impact, it is important to ensure that teenagers have a good balance between playing games and engaging in other activities that support their social, physical and academic development. Considering the types of games they choose, educators and parents can support wise use and provide guidelines for managing time in a balance between gaming and other activities.

3.2.1. Implications and Recommendations

1) Game Use Awareness Education

- **Educational Campaigns:** Wider educational campaigns can be implemented to increase youth awareness about the healthy and wise use of online games. This campaign may include a series of activities such as seminars, workshops and outreach activities in schools, community centers and other educational institutions. Through this campaign, teenagers will have a better understanding of the risks and benefits of playing online games.
- **Educational Curriculum:** Material on the wise use of games can be included in the educational curriculum. This will allow teenagers to gain a deeper understanding of the psychological impact of playing online games. This material can include learning about time management, recognizing the signs of game addiction, and how to optimize the productive use of games.

2) Educational game development

- **Collaboration with Game Developers:** Collaboration between local game developers and educational institutions or the government can encourage the development of educational games that are in line with the curriculum. This game can be designed in such a way that apart from being entertaining, it also provides educational benefits to the players. For example, these games can teach math, science, or language skills interactively.
- **Innovation in Educational Games:** Innovation in educational games can encourage developers to create more engaging and relevant learning experiences for teens. Utilizing technology such as Virtual Reality (VR) or Augmented Reality (AR) can make learning more interactive and fun. This can help increase teenagers' motivation to learn through games.

3) The Role of Parents and Educators

- **Parental Consultation:** Parents need to be actively involved in teenagers' online gaming lives. They can talk to their children about gaming experiences, ask about in-game friends, as well as create an environment where teens feel comfortable talking about problems or questions that may arise while gaming.
- **Educator Training:** Educators need to receive relevant training regarding the impact of online game use on adolescents. This training will equip them with the knowledge necessary to understand behavioral changes that may occur in their students. With a better understanding of online games, educators can provide more effective support to students who encounter problems with their use.

4) Time Management Skills Development

- **Time Management Training:** Practical time management training can help teenagers to manage their time efficiently. They can learn schedule planning techniques that include time for studying, playing games, exercising, and social interaction. With these skills, teenagers can maintain a balance between their daily activities.
- **Parental Monitoring:** Parents can play a role in helping teenagers adhere to the schedule they have created. They can monitor the time teenagers spend playing games, remind them about assignments or other obligations, and provide support in managing time in a balanced manner.

By implementing these recommendations, it is hoped that we can create an environment that supports the healthy and positive use of online games for teenagers in Parungponteng sub-district. This will also make a positive

contribution in understanding more deeply the psychological impact of playing online games on teenagers and provide concrete solutions to overcome problems that may arise.

4. Conclusion

Based on the data and information that has been described, the following are the conclusions of research regarding the use of online games among teenagers in Parungponteng District:

- 1) Intensity of Game Use: The average intensity of online game use reaches 15 hours per week. This shows that online games have become an important part of the routine of teenagers in Parungponteng sub-district. The habit of playing online games can affect the allocation of time for other activities such as studying, interacting socially, or exercising.
- 2) Types of Games Played: The majority of respondents tend to choose Role-Playing Games (RPG) and Multiplayer Online Battle Arena (MOBA) games. This shows that teenagers in Parungponteng sub-district tend to be interested in games that offer social interaction and shared strategies. RPGs and MOBAs often allow players to work together in teams or collaborate with other players, which can increase social engagement and the development of strategic skills.
- 3) Psychological Impact:
- 4) Teenagers who are addicted to online games tend to be less interested in other activities and become anxious when they cannot play online games. This phenomenon reflects the potential negative impact of online game addiction on the psychological aspects of adolescents.
- 5) Implications and Recommendations: Game Use Awareness Education: Educational campaigns and integration of materials on wise game use in educational curricula can help teens understand the risks and benefits of playing online games. Educational Game Development: Collaborating with local game developers to create educational games that fit the curriculum can promote interactive and fun learning. Role of Parents and Educators: Active and open support from parents as well as special training for educators regarding the impact of online games on teenagers is essential to guide them in wise use of games. Time Management Skills Development: Practical training on time management can help teens allocate time equally between gaming and other activities.

By combining strong education, the development of educational games, the active role of parents and educators, the development of time management skills, and ongoing research, we can build an environment that supports the healthy and positive use of online games for teenagers in Parungponteng district.

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