SRYAHWA PUBLICATIONS

Open Access Journal of Nursing
ISSN: 2639-1783 | Volume 6, Issue 1, 2023
https://doi.org/10.22259/2639-1783.0601005

RESEARCH ARTICLE

Determinants of Online Game Addiction Among Indonesian Adolescents

Samsidar[1], Marthoenis[2], Teuku Tahlil[3]*

[1,2,3]Nursing Faculty, Universitas Syiah Kuala, Indonesia

Received: 30 May 2023 Accepted: 12 June 2023 Published: 15 June 2023

Corresponding Author: Teuku Tahlil, Faculty of Nursing Lecturer, Universitas Syiah Kuala, Indonesia.

Abstract

Background: The advent of globalization has integrated technology into our lives, and one aspect of it is the internet, which has introduced easily accessible forms of entertainment for people of all backgrounds. Online gaming has gained immense popularity worldwide, including in Indonesia, as demonstrated by the growing number of individuals engaging in online gaming activities. Online game addiction refers to a psychological state characterized by maladaptive patterns of behavior, similar to Obsessive Compulsive Disorder (OCD), involving repetitive actions within online gaming that lead individuals to neglect important obligations. This research aims to investigate the factors associated with online game addiction among adolescents.

Materials and Methods: The research design utilized in this study is cross-sectional. A total of 135 respondents were included, employing a complete sampling method. Data collection involved administering questionnaires in various sections, including a demographic questionnaire, a questionnaire assessing factors related to online game addiction, and the Game Addiction Scale (GAS) questionnaire. The validity of these questionnaires was assessed by comparing the calculated correlation coefficient (r) against the critical value (0.361), demonstrating a satisfactory level of validity. Additionally, the reliability of the questionnaires was evaluated using Cronbach's Alpha, which surpassed the acceptable level of 0.6. Data analysis was conducted utilizing the Chi-Square test.

Results: The research findings indicate significant associations between various factors and online game addiction. Gender was found to be significantly related to online game addiction (p=0.001). No significant relationship was observed between hope (p=0.691) and self-control (p=0.741) with online game addiction. Factors such as the desire to achieve high scores (p=0.001), feelings of boredom (p=0.001), peer environment (p=0.01), poor social competence (p=0.001), and parental expectations/supervision (p=0.001) were all found to be significantly associated with online game addiction. These findings highlight the importance of considering multiple factors in understanding and addressing the issue of online game addiction among adolescents. with males being more susceptible to addiction compared to females (Odds Ratio 14.556[95% CI: 2,490-85,079]), as evidenced by logistic regression analysis.

Keywords: Factors of online game addiction, Indonesian Adolecent.

1. Introduction

Playing online games is becoming increasingly popular worldwide, including in Indonesia, as evidenced by the growing number of online game players (Association of Indonesian Internet Service Providers [APJII], 2020). Statistical data from 2019 revealed that the number of online game players reached 699.6 million globally. In Indonesia, there were approximately 43.7 million online game players, with 56% of them being males (Newzoo, 2017). According to a survey conducted by the Entertainment Software Association (ESA) in 2019, 21% of online game players were children below the age of 18, while 40% fell within the productive age range of 18-35 years.

Citation: Samsidar, Marthoenis, Teuku Tahlil, Determinants of Online Game Addiction Among Indonesian Adolescents. Open Access Journal of Nursing. 2023;6(1):32-41.

In Indonesia, based on a survey conducted by the APJII in 2020, online gaming ranked as the second-highest entertainment activity with a percentage of 16.5% (APJII 2020). In 2021/2022, the use of the internet for accessing entertainment content (online games) has continued to increase, scoring 2.87 on the rating scale and occupying the second position with a rating of 77.25% on the "top 2 boxes" scale, indicating its high popularity (APJII 2020). The number of online game users in Indonesia is estimated to reach 34.6 million by 2023 (Zulfianda et al., 2020). Online game addiction has become a recognized international concern. The American Psychiatric Association (APA) classified Internet Gaming Disorder (IGD) in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), as repetitive and continuous behavior that can have an impact on mental health. In 2018, it was included as a gaming disorder, a mental health issue, in the International Statistical Classification of Diseases, 11th Edition (ICD-11) by the World Health Organization (WHO, 2020).

Online gaming is a familiar and well-established phenomenon in Indonesia(Irawan and Siska W, 2021). According to surveys conducted in 2020, the global population of online game players is estimated to reach 2.7 billion individuals (Newzoo, 2017). The research by Jap et al. (2013) highlights the significant growth of internet users in Indonesia, which has subsequently led to an increase in the number of online game players. With a worldwide gamer population of 3.5 billion, it is noteworthy that Indonesia houses approximately 52 million gamers, positioning it as the sixth highest in terms of gamer population in Asia and the 16th globally (Antara et al., 2022).

Online gaming addiction is characterized as a maladaptive psychological state with an obsessive-compulsive pattern, similar to obsessive-compulsive disorder (OCG), involving repetitive behaviors in online gaming that lead individuals to sacrifice essential activities (Janzik et al., 2020). The DSM-5's recognition of gaming addiction provides the initial formal depiction of gaming-related disturbances, confirming its existence. Internet Gaming Disorder (IGD) refers to persistent and repetitive engagement in online gaming, often involving interactions with other players, resulting in clinically significant impairment or distress (APA, 2013). The DSM-5 identifies various factors influencing online gaming addiction, including environmental support in the form of internet-connected devices, as well as age and gender (with male adolescents exhibiting greater susceptibility to online gaming addiction) (APA, 2013). Furthermore, online gaming addiction is also influenced by gender, age, the desire to achieve high scores in games, feelings of boredom, and a lack of self-control (Pramudia and Wardani, 2018). These factors play a role in the development of addictive behaviors in online gaming. Other external factors, such as the influence of peers, poor social relationships, and parental expectations and supervision, also contribute to the likelihood of experiencing online gaming addiction.

According to the DSM-5, online gaming addiction (IGD) can be characterized by the presence of specific criteria, including preoccupation, tolerance, withdrawal, persistence, escape, problems, deception, displacement, and conflict. If at least five of these criteria are present, the condition can be diagnosed as Internet gaming disorder, indicating an individual's inability to control their strong desire to play online games (APA, 2018). Online gaming addiction can result in negative consequences such as depression, behavioral issues, low self-esteem, and diminished life satisfaction. Therefore, it is crucial to identify protective or risk factors associated with online gaming addiction to prevent its adverse effects (Chang and Kim, 2020).

Previous research (Novrialdy, 2019) has shown that adolescents are often more vulnerable to online gaming addiction compared to adults. The adolescent period is characterized by instability and a tendency to be easily influenced by new things. School-age children spend around 20-23 hours per week playing online games. Individuals who excessively engage in online gaming may experience internet gaming disorder, where excessive and prolonged gaming patterns lead to individuals spending 8-10 hours per day sitting in front of a computer screen and playing online games (Dwi and Wardhani, 2022).

The research conducted by Meutia, Fahreza, and Rahman (2020) with a group of 24 students revealed that all the students had a daily preference for playing online games. Upon further examination, it was found that 20 students (83%) experienced a sense of incompleteness if they did not engage in online gaming for a day. The researchers highlighted that some students showed excessive dependence on online games, which led to decreased focus during classroom learning and occasional absenteeism due to oversleeping. According to the students' parents, online gaming had a detrimental effect on their children academic achievements as it diminished their interest in studying. The primary factor contributing to online gaming addiction was

attributed to the freedom granted by family/parents to play mobile games without supervision, resulting in negligence of responsibilities. The second factor was the influence of the social environment, where the presence of peers engrossed in online gaming created a desire to participate in such activities. Based on the aforementioned issues, the researchers were interested in identifying the factors associated with online gaming addiction among Indonesian adolescents.

2. Material And Methods

This research was a cross-sectional study conducted from April 4th to April 14th, 2023. The sample size for this study was 135 respondents, aged 12-18 years from classes VII, VIII, and IX at oneof Islamic junior high schools in the western region of Aceh Province, Indonesia.The sampling technique employed was total sampling. Data collection was carried out using two questionnaires: (1) the self-developed questionnaire on the factors of online gaming addiction, comprising 18 questions with response options of Yes ≥ 1 and No = 0, and; (2) the adapted Game Addiction Scale (GAS) questionnaire from the previous research, consisting of 21 questions with response options of Never (N) score 1, Rarely (R) score 2, Sometimes (S) score 3, Often (O) score 4, and Very often (V) score 5. Before commencing the study, both questionnaires underwent face validity and logical validity tests. The validity and reliability tests were conducted on a sample of 30 adolescents, resulting in an obtained r-value that exceeded the critical r-value (n=30, r-table=0.361), indicating the questionnaires' validity. The Cronbach's Alpha coefficients obtained for the factors questionnaire were 0.913, while for the Game Addiction Scale (GAS) questionnaire, it was 0.899. The study sample consisted of male and female adolescents who were voluntarily participated as respondents.

2.1 Procedure Methodology

The researcher coordinated and obtained approval from the School Principal before approaching potential participants. The researchers introduced themselves, explained the purpose and objectives of the study, and highlighted the potential benefits of participation. Informed consent forms were provided to the participants, which they were requested to take home and have signed by their parents or guardians, indicating their agreement for the participants to take part in the study. Once consent was received, data collection took place in the participants' classrooms, where they were asked to complete the research questionnaire, with an estimated time of around 60 minutes.

2.2 Statistical Analysis

Once the data was collected, a thorough review was conducted to ensure the completeness of all sections of the research instrument. Each piece of gathered data was carefully examined, and no missing data were identified. The data was then encoded and analyzed using computerized software. Descriptive statistics, including frequencies and percentages for each variable, were employed for data analysis. Statistical significance testing, including the Chi-square test, was used to explore potential relationships.Additionally, multivariate analysis was performed using logistic regression, with a bivariate significance level set at $p < 0.25$.

3. Result

Sociodemographic characteristics of the respondents are described in Table 1 as follow.

Table 1. *The Sociodemographic Characteristics of Respondents*

Characteristics	Frequency (f)	Percentage (%)
Gender		
Male	70	51.9
Female	65	48.1
Age		
12-14 years	73	54.1
15-18 years	62	45.9
Class		
VII	41	30.4
VIII	45	33.3
IX	49	36.3

Having a WA group among players		
Yes	28	20.7
No	107	79.3
Online game playing time		
Never play	18	13.3
Morning	25	18.5
Afternoon	41	30.4
Evening	51	37.8
The Place to play online game		
Never play	18	13.3
School	25	18.5
House	80	59.3
Coffee Shop	12	8.9

Based on Table 1, it can be observed that out of 135 adolescents, the majority of them were male with 70 respondents (51.9%). In terms of age, the majority fell in the 12-14 years old category with 73 respondents (54.1%). Regarding their school grade, most of the respondents were in Grade IX with 49 respondents (36.3%). Regarding having a WhatsApp (WA) group with fellow players, the majority did not have a WA group with 107 respondents (79.3%). As for the usual time of playing online games, the majority played in the evening with 51 respondents (37.8%), and the preferred location for playing online games was mostly at home with 80 respondents (59.3%).

Students' online game behaviors are classified in Table 2 as follows.

Table 2. *The Online Game Addiction among Adolescents*

Addiction to online games	Frequency (f)	Percentage (%)
Addicted	52	38.5
No	83	61.5

Table 2 shows that among the 135 adolescents, in relation to the variable of online game addiction, 52 respondents (38.5%) demonstrate signs of online game addiction, while 83 respondents (61.5%) do not exhibit online game addiction.

Table 3. *Reasons for the Online Game*

Variable	Frequency (f)	Percentage (%)
Desire to achieve high scores in online games.		
Yes	69	51.1
No	66	48.9
Feeling of boredom		
Yes	101	74.8
No	34	25.2
Lack of self control		
Yes	126	93.3
No	9	6.7
Influence of peer environment		
Yes	75	55.6
No	60	44.4
Poor social relationship		
Yes	49	36.3
No	86	63.7
Parental expectation/supervision		
Yes	107	79.3
No	28	20.7

The data from 135 adolescents reveals that a majority of respondents, accounting for 51.1%, express a strong desire to attain high scores in online games. Boredom is prevalent among 74.8% of the respondents, while a significant portion, specifically 93.35%, admit to lacking self-control. The influence of peer environment is observed in 55.6% of the respondents, whereas 36.3% report unsatisfactory social relationships. Moreover, 79.3% of the respondents mention parental expectations and supervision as influential factors.

Table 4. *Students'Online game and its related factors*

	Online Game Addiction			*P*	*OR*
	Addicted	**No**	**Total**		
Gender					
Male	50(71.4%)	20(28.6%)	70(100%)	0.000	14.750
Female	2(31%)	63(96.9%)	65(100%)		
Total	52(38.5%)	83(61.5%)	135(100%)		
Age					
12-14 years	27(37,0%)	46(63,0%)	73(100%)	0,691	0,869
15-18 years	25(40,3%)	37(59,7%)	62(100%)		
Total	52(38,5%)	83(61,5%)	135(100%)		
Desire to achieve high scores in online games					
Yes	44(63,8%)	25(36,2%)	69(100%)	0,000	12,760
No	8(12,1%)	58(87,9%)	66(100%)		
Total	52(38,5%)	83(61,5%)	135(100%)		
Feeling of boredom					
Yes	52(51,5%)	49(48,5%)	101(100%)	0,000	0,1456
No	0(0,0%)	34(100,0%)	34(100%)		
Total	52(38,5%)	83(61,5%)	135(100%)		
Lack of self control					
Yes	49(38,9%)	77(61,1%)	126(100%)	0,741	1,273
No	3(33,3%)	6(66,7%)	9(100%)		
Total	52(38,5%)	83(61,5%)	135(100%)		
Influence of peer environment					
Yes	49(65,3%)	26(34,7%)	75(100%)	0,000	35,808
No	3(5,0%)	57(95,0%)	60(100%)		
Total	52(38,5%)	83(61,5%)	135(100%)		
Poor social relationship					
Yes	31(63,3%)	18(36,7%)	49(100%)	0,000	5,331
No	21(24,4%)	57(75,6%)	86(100%)		
Total	52(38,5%)	83(61,5%)	135(100%)		
Parental expectation/ supervision					
Yes	49(45,8%)	58(54,2%)	107(100%)	0,001	7,040
No	3(10,7%)	25(86,3%)	28(100%)		
Total	52(38,5%)	83(61,5%)	135(100%)		

Based on the data presented in Table 4, it is evident that among the male respondents, 50 individuals (76.5%) were found to be addicted to online gaming, while among the female respondents, 63 individuals (96.9%) did not exhibit online gaming addiction. The p-value of 0.000, which is less than the significance level of 0.05, leads to the rejection of the null hypothesis (Ho), indicating a significant association between gender and online gaming addiction among adolescents. The odds ratio (OR) of 78.750 (95% CI: 17.568 - 353.004) suggests that male adolescents have a substantially higher likelihood of developing online gaming addiction compared to their female counterparts.

Among the surveyed adolescents, 27 respondents (37.0%) in the age group of 12-14 years were found to have online gaming addiction, while 37 respondents (59.7%) in the age group of 15-18 years were identified as non-addicted to online gaming. The statistical analysis yielded a p-value of 0.691, which is greater than the predetermined significance level of 0.05. Therefore, the null hypothesis (Ho) is accepted, indicating no significant correlation between age and online gaming addiction among adolescents. The calculated odds ratio (OR) of 0.869 (95% CI: 0.433-1.741) suggests that adolescents in the 12-14 years age group have a slightly higher probability of being addicted to online gaming compared to those in the 15-18 years age group, but this difference is not considered statistically significant.

The desire to achieve high scores was found in 44 respondents (63.8%) with online gaming addiction, while 58 respondents (87.9%) were not addicted to online gaming. $P = 0.000 < 0.05$, rejecting the null hypothesis (Ho), indicating that there is a relationship between the desire to achieve high scores and online gaming addiction in adolescents. The odds ratio (OR) is 12.760 (95% CI: 5.254-30.990), meaning that adolescents who have a desire to achieve high scores are more likely to be addicted to online gaming compared to those who do not have a desire to achieve high scores.

Feeling of boredom was found in 52 respondents (51.5%) with online gaming addiction, while 34 respondents (100.0%) were not addicted to online gaming. $P = 0.000 < 0.05$, rejecting the null hypothesis (Ho), indicating that there is a relationship between boredom and online gaming addiction in adolescents. The odds ratio (OR) is 0, which means that adolescents who experience boredom are more likely to be addicted to online gaming compared to those who do not experience boredom.

Insufficient self-control was observed in 49 respondents (38.9%) who exhibited online gaming addiction, while 6 respondents (66.7%) without online gaming addiction demonstrated adequate self-control. The statistical analysis yielded a p-value of 0.741, which is greater than the significance level of 0.05. Therefore, the null hypothesis (Ho) is accepted, indicating that there is no significant association between insufficient self-control and online gaming addiction among adolescents. The odds ratio (OR) was reported as 1273, with a 95% confidence interval (CI) of 0.304-5.326. This suggests that adolescents with insufficient self-control do not have a significant relationship with online gaming addiction.

The influence of peer environment was observed in 49 respondents (65.3%) who exhibited online gaming addiction, while 57 respondents (95.0%) without online gaming addiction were not influenced by their peers. The statistical analysis yielded a p-value of 0.000, which is less than the significance level of 0.05. Therefore, the null hypothesis (Ho) is rejected, indicating that there is a significant association between peer environment influence and online gaming addiction among adolescents. The odds ratio (OR) obtained was 35.808, with a 95% confidence interval (CI) of 10.212-125.558. This suggests that adolescents who are influenced by their peer environment have a higher likelihood of developing online gaming addiction compared to those who are not influenced by their peer environment.

Poor social relationships were found in 31 respondents (63.3%) with online gaming addiction, while 57 respondents (75.6%) without online gaming addiction had satisfactory social relationships. The statistical analysis resulted in a p-value of 0.000, which is less than the significance level of 0.05. Therefore, the null hypothesis (Ho) is rejected, indicating a significant association between unfavorable social relationships and online gaming addiction among adolescents. The odds ratio (OR) obtained was 5.331, with a 95% confidence interval (CI) of 2.490-11.412. This implies that adolescents with unfavorable social relationships have a higher likelihood of developing online gaming addiction compared to those with satisfactory social relationships.

Insufficient parental expectations/supervision were found in 49 respondents (45.8%) who were associated with online gaming addiction, while 25 respondents (89.3%) without online gaming addiction had sufficient parental expectations/supervision. The statistical analysis yielded a p-value of 0.001, which is less than the significance level of 0.05. Therefore, the null hypothesis (Ho) is rejected, indicating a significant relationship between parental expectations/supervision and online gaming addiction among adolescents. The odds ratio (OR) obtained was 7.040, with a 95% confidence interval (CI) of 2.004-24.733. This means that adolescents with insufficient parental expectations/supervision are more likely to develop online gaming addiction compared to those who have sufficient parental expectations/supervision.

Table 5. *Multivariate Analysis*

Predictors	OR	*P*	95%CI	
			Lower	Upper
Gender	14,556	0,003	2,490	85,079
Desire to achieve high scores in online games.	4,202	0,016	1.303	13,570
Influence of peer environtment	2,773	0,997	0,492	15.639
Poor social relationship	2,288	0,248	0,776	6.745
Parental expectation/supervision	2,234	0,134	0,323	15.457

Based on Table 5, the results of the final step logistic regression analysis indicate that the predictor most associated with online gaming addiction is gender. Specifically, males show a significant association with online gaming addiction (p = 0.003) with an odds ratio (OR) of 14.556. Additionally, the desire to achieve high scores in online games also shows a significant association with online gaming addiction (p = 0.016) with an OR of 4.202. The logistic regression analysis further reveals that gender is the most dominant predictor related to online gaming addiction among adolescents (OR = 14.556). The conclusion drawn from this research is that being male has the strongest influence on online gaming addiction, as evidenced by the results of the Logistic Regression test.

4. Discussion

4.1 Gender of Adolescents with Online Gaming Addiction

Based on the bivariate analysis, it is found that there is a significant relationship between gender and online gaming addiction among adolescents (P=0.001). The tabulation results indicate that males have a higher influence on online gaming addiction (71.4%) compared to females.

This study is consistent with previous research findings. According to Lee et al. (2017), it was found that a higher percentage of males engage in online gaming compared to females. In their study with a sample size of 3,568 respondents, 72.6% were males. Similarly, a study conducted by Gros et al. (2020) based on a national sample of gamers revealed that 62.7% were male gamers, while 37.3% were female gamers. Another study by Cahyana, Rohaeti, and Suherman (2020) conducted in Finland indicated that game addiction occurred among children aged 12 to 18, with 4.7% of females and 5.3% of males being involved in online gaming. Males are more susceptible to online gaming addiction due to their tendency to engage in competitive and high-risk games, such as multiplayer or shooting games (Pramudia and Wardani, 2018). Additionally, many online games are designed with appealing features and visuals that attract the interest of males, particularly adolescents (Pramudia and Wardani, 2018).

4.2 Age of Adolecents with Online Gaming Addiction

Based on the results of bivariate analysis, it is found that there is no significant relationship between age and online gaming addiction in adolescents (P=0.691). The tabulated data also indicate that age does not have a significant influence on online gaming addiction.

This study contradicts the research conducted by Ginige (2017), which indicates that online gaming addiction is more prevalent in Asian countries and primarily affects males aged 12-20. Several pieces of evidence suggest that internet addiction tends to emerge during late childhood/early adolescence. The age of 13-34 years represents the middle stage of adolescence, where at this age teenagers are more inclined to try new things, become more sensitive, start searching for their identity, and are easily influenced by their environment, contributing to a higher risk of online gaming addiction.

4.3 The Desire to Achieve High Scores Among Adolescents with Online Game Addiction

Based on the results of bivariate analysis, it is known that there is a relationship between the desire to achieve high scores among adolescents and online game addiction (P=0.001). The tabulation results show that the desire to achieve high scores among adolescents has a significant influence on online game addiction (63.8%).

Online games that offer numerous challenges can make adolescents never able to complete the game entirely. Furthermore, due to the inherent nature of humans, they always strive to become winners and take pride in their increasing skills, including in gaming. In online games, as the points increase, the objects or characters being played become more powerful, and many people enjoy this aspect, which can lead to addiction (Masya and Candra, 2016).

4.4 The Feeling of Boredom of Adolescents with Online Game Addiction

Based on the bivariate analysis, it is known that there is a relationship between adolescents' boredom and online gaming addiction (P=0.001). The tabulation results indicate that adolescents' boredom has a significant influence on online gaming addiction (51.5%).

The lack of ability to prioritize important tasks and the desire to escape or avoid real-life problems are factors that contribute to the development of online gaming addiction. Playing online games serves as a way to find solace and entertainment, gradually becoming the primary focus in the lives of adolescents, influencing their thoughts, emotions, and actions. Typically, adolescents who are unproductive and have limited social interactions seek other activities to alleviate their boredom (S, Suriansyah, and Novianti 2012).

4.5 Lack of Self Control of Adolescents with Online Game Addiction

Based on the bivariate analysis, it is found that there is no relationship between the lack of self-control and online gaming addiction among teenagers (P=0.741). The tabulation results indicate that the lack of self-control does not have a significant influence on online gaming addiction.

The lack of self-control in adolecents leads to a lack of anticipation of the negative impacts that arise from excessive online gaming (Pramudia and Wardani, 2018). Without being aware of it, to teenagers may not realize that excessive gaming activities can have negative effects on themselves and others. Online games are known to be emotionally draining and time-consuming (Pramudia and Wardani, 2018). They explain that "Online games are essentially focused on the virtual world, causing a loss of sensitivity towards time" (Masyita, 2016). However, this study did not find a relationship between online gaming addiction and the lack of self-control in adolecents.

4.6 The Influence of Peer Environment of Adolecents with Online Game Addiction

Based on the bivariate analysis, it is evident that there is a significant relationship between peer influence and online gaming addiction in adolecents (P=0.000). The tabulation results indicate that peer influence has a strong impact on online gaming addiction among adolecents (65.3%).

The uncontrolled environment, influenced by observing peers who engage in online gaming, can contribute to online gaming addiction. Seok et al. (2018) found that the motivation for playing online games in teenagers arises from imitating family members or friends, being alone at home, and having permission from parents and other family members. Playing online games is seen as enjoyable, a way to relieve stress, and a good way to spend time. Additionally, the relationships with parents, peers, and school life can serve as driving factors for online gaming addiction.

4.7 Poor Social Relationship of Adolescent with Online Game Addiction

Based on the results of bivariate analysis, it is known that there is a significant relationship between poor social relationships among adolescents and online gaming addiction (P=0.000). The tabulation results indicate that poor social relationships among adolescents have a significant influence on online gaming addiction (63.3%).

Social competence refers to the ways in which adolescents learn to interact effectively with others, engage in appropriate social behaviors and responses such as sharing, listening, cooperation, initiating interpersonal relationships, being sensitive in interactions with others, and effectively managing conflicts. Adolescents with poor social competence often choose online gaming as a pleasurable alternative activity. Research conducted by Wanto (2020) revealed a significant relationship between online gaming addiction and social interaction among adolescents based on bivariate analysis (P=0.000). Online gaming addiction is characterized by excessive and repetitive engagement in online gaming for a minimum of six months, leading to negative impacts on both social and emotional aspects of a player's life.

4.8 Parental Expectation / Supervision of Adolescents with Online Game Addiction

Bivariate analysis reveals that there is a significant relationship between parental expectations/ supervision and online gaming addiction among adolescents (P=0.000). Tabulated results indicate that the lack of parental expectations/supervision has a significant influence on online gaming addiction (45.8%).

Excessive parental expectations for their children to participate in various activities such as courses or lessons can result in neglecting the child's primary needs, such as spending quality time and playing together as a family. The family plays a significant role in shaping adolescent behavior, including their internet usage patterns that may lead to internet addiction. The presence of a dysfunctional family

environment and high levels of conflict can increase the likelihood of developing various maladaptive behaviors in adolescents, including online gaming addiction (Pramudia and Wardani 2018).

4.9 The Most Associated Factor to Online Game Addiction

The logistic regression analysis reveals that gender is the most dominant predictor associated with online gaming addiction (p= 0.003) and (Exp (B) 14.556). This implies that gender has a higher correlation with online gaming addiction among adolescents compared to other variables.

The findings of this research suggest that among the two factors related to online gaming addiction, the male gender has the greatest influence on online gaming addiction among adolescents in MTsN Aceh Barat. This can be attributed to the fact that male adolescents are more inclined to engage in competitive and risky games, such as multiplayer or shooting games. Furthermore, the appealing features and visuals of many online games tend to attract the interest of males, particularly teenagers, to indulge in online gaming (Immanuel, 2009 as cited in Pramudia & Wardani, 2018).

5. Conclusion

Based on the findings of this research, it can be concluded that there is a correlation between gender (p=0.001), no correlation with age (p=0.691), a correlation with the desire to achieve high grades (p=0.001), boredom (p=0.001), no correlation with self-control (p=0.741), a correlation with peer influence (p=0.01), lack of good social competence (p=0.001), and parental expectations/supervision (p=0.001) with online gaming addiction. Among these factors, gender is the most dominant factor associated with online gaming addiction based on logistic regression analysis, where males are more susceptible to online gaming addiction with a significance value of *odds ratio 14.556* (95% CI: 2,490-85,079*)*.

6. References

1. Antara, Hubungan et al. 2022. "Jurnal bimbingan dan konseling pandohop hubungan antara kecanduan game dengan perilaku agresif the relationship between game addiction and verbal aggressive behavior in online game users." 2.
2. APJII, Buletin. 2020. "Apjii." *Asosiasi Penyelenggara Jasa Internet Indinesia* 74: 1. https://apjii.or.id/content/read/104/503/BULETIN-APJII-EDISI-74---November-2020.
3. Cahyana, Cahyana, Euis Eti Rohaeti, and Maya Masyita Suherman. 2020. "Gambaran Siswa Sekolah Menengah Pertama Yang Mengalami Kecanduan Game Online." *FOKUS (Kajian Bimbingan & Konseling dalam Pendidikan)* 3(2): 40.
4. Chang, Eunbi, and Boyoung Kim. 2020. "School and Individual Factors on Game Addiction: A Multilevel Analysis." *International Journal of Psychology* 55(5): 822–31.
5. Dwi, Yuniar, and kusuma wardhani. 2022. "pengasuhan dan kecenderungan kecanduan game online pada remaja laki-laki pemain game online di game center." 11: 96–100.
6. Ginige, Pabasari. 2017. "Internet Addiction Disorder." *Child and Adolescent Mental Health*.
7. Gros, Lucio, Nicolas Debue, Jonathan Lete, and Cécile Van De Leemput. 2020. "Video Game Addiction and Emotional States : Possible Confusion Between Pleasure and Happiness ?" 10(January): 1–21.
8. Irawan, Sapto, and DIna Siska W. 2021. "Faktor-Faktor Yang Mempengaruhi Kecanduan Game Online Peserta Didik." *Jurnal Konseling Gusjigang* 7(1): 9–19.
9. Janzik, Robin, Lars-ole Wehden, Felix Reer, and Thorsten Quandt. *Gaming Addiction — Underdefined , Overestimated ?* Springer Fachmedien Wiesbaden. http://dx.doi.org/10.1007/978-3-658-28175-5_4.
10. Jap, Tjibeng, Sri Tiatri, Edo Sebastian Jaya, and Mekar Sari Suteja. 2013. "The Development of Indonesian Online Game Addiction Questionnaire." 8(4): 4–8.
11. Masya, Hardiyansyah, and Dian Adi Candra. 2016. "Faktor-Faktor Yang Mempengaruhi Perilaku Gangguan Kecanduan Game Online Pada Peserta Didik Kelas X Di Madrasah Aliyah Al Furqon Prabumulih Tahun Pelajaran 2015/2016." *KONSELI : Jurnal Bimbingan dan Konseling (E-Journal)* 3(2): 103–18.
12. Masyita, Alfin Riza. 2016. "Pengaruh Kontrol Diri Terhadap Kecanduan Game Online Pada Pemain Dota 2 Malang." *Pengaruh Kontrol Diri Terhadap Kecanduan Game Online Pada Pemain Dota 2 Malang* 3(1): 31–48. https://www.bertelsmann-stiftung.de/fileadmin/files/BSt/Publikationen/GrauePublikationen/MT_Globalization_Report_2018.pdf%0Ahttp://eprints.lse.ac.uk/43447/1/India_globalisation%2C society and inequalities%28lsero%29.pdf%0Ahttps://www.quora.com/What-is-the.
13. Meutia, Puji, Febry Fahreza, and Arief Aulia Rahman. 2020. "Analisis Dampak Negatif Kecanduan Game Online." *Genta Mulia* XI(1): 22–32.
14. Novrialdy, Eryzal. 2019. "Kecanduan Game Online

Pada Remaja: Dampak Dan Pencegahannya." *Buletin Psikologi* 27(2): 148.

15. Pramudia, Rischa, and Silvia Yula Wardani. 2018. Stop Kecanduan Game Online *Stop Kecanduan Game Online*.
16. S, Prita Dhyani, M Iqbal Suriansyah, and Suhenti Novianti. 2012. "Pendahuluan Metodologi Penelitian." : 329–34.
17. Vancampfort, Davy et al. 2019. "Sedentary Behavior and Anxiety-Induced Sleep Disturbance among 181,093 Adolescents from 67 Countries: A Global Perspective." *Sleep Medicine* 58: 19–26. https://doi.org/10.1016/j.sleep.2019.01.048.
18. Wanto, Armitasari Muhazir. 2020. "Kecanduan Game Online Ditinjau Dari Jenis Kelamin Laki-Laki Dan Perempuan." *Prosiding Seminar Nasional Bimbingan dan Konseling* (2009): 9.
19. WHO (World Health Organization). 2020. *Hal Yang Perlu Dilakukan Saat Stres: Panduan Bergambar*.
20. Zulfianda, Fahmi, Teuku Samsul Alam, Mahasiswa Program Studi Ilmu Keperawatan Fakultas Keperawatan Universitas Syiah Kuala Banda Aceh, and Bagian Keilmuan Keperawatan Komunitas Fakultas Keperawatan Universitas Syiah Kuala Banda Aceh. 2020. "Langkah-Langkah Pengawasan Orang Tua Terhadap Kebiasaan Bermain Game Online Pada Remaja Di SMP Negeri 2 Banda Aceh Steps Against of Parents Habits on Playing GamesOnline to Teens." IV(1): 177–84.