

Early Detection of Mental Emotional Disorders in Adolescent Online Game Users in Ogan Komering Ulu District

Handry Darussalam¹, Fitriani Agustina², Toto Harto³, Aldi Setiyawan⁴

^{1,2,3,4}STIKes Al-Ma'Arif Baturaja

Email address: handrydmsc10@gmail.com

Abstract— A very prominent development in the current era of increasingly rapid technological knowledge is the internet. One of the negatives is playing online games which can disturb the mental and emotional state of teenagers. The aim of the research is to find out the early detection of emotional mental disorders among teenagers who use online games in Ogan Komering Ulu Regency in 2022. This research includes research that uses descriptive methods and a population of 65 respondents. The sample obtained in this study was 49 respondents. It is known that the majority of respondents' Emotions and Behavior are Abnormal, namely 27 respondents (55.10%). Behavioral Problems, it is known that the majority of respondents are in the Abnormal Category, namely 17 teenagers (34.70%). The research results showed that there were 27 people (55.10%) teenagers who experienced abnormal emotional disorders, there were 17 people (34.70%) teenagers. The highest hyperactivity (Abnormal) was 42 respondents (85.71%) in the Abnormal category. Peer problems in this study were the greatest in the Abnormal category, namely 20 respondents (40.82%). The score for Adolescent Difficulties was found to be Abnormal, totaling 41 respondents. (83.67%). The Strength Score in Adolescents was found to be Normal with 18 respondents (36.73%) and Abnormal with 31 respondents (63.27%).

Keywords— Mental Disorders, Emotional, Online Games.

I. INTRODUCTION

The increasingly rapid development of science and technology in this era simultaneously brings changes in all walks of life. One of the results of developments that are very prominent in the current era is the internet. The internet has become one of the main means of fulfilling human needs. Until now the internet has produced multiple benefits for humans (from children to adults). The highest internet users by age are 12 -17 years old, 97% in Indonesia use the internet for playing online games (Safitri. A. et al, 2020). Teenage life is a life that is very determining for their future lives, where adolescence makes teenagers relatively independent socially. Based on the results of the 2018 Databoks survey, the number of teenagers aged 15-19 years is 603 million out of the world's population of 7.53 billion. An increase in the number of adolescent population is occurring in various countries in the world. One of the characteristics is growing with technology that is very easy to access (Elsa. E. A. et al, 2023).

According to survey results by Wearesocial and Hootsuite (2020), it is known that around 59% of internet users in Indonesia use online game applications every month. Study results from Pokkt, *Decision Lab* and *Mobile Marketing Association* (MMA) also noted that the number of gamers (online game players) in Indonesia reached 60 million. This number is expected to continue to increase to 100 million in 2021, making Indonesia the country with the most gamers in Southeast Asia and sixth in Asia (Mira. R. et al, 2023). Based on this data, it can be seen that the number of online game players in Indonesia is quite large. Internet usage in Indonesia, especially on the island of Sumatra, is 21.6%. The online gaming industry is increasingly developing, making its

features and technology increasingly portable so that online games can be accessed anywhere and anytime (Asep Sardi, 2022).

The development of the number of online game players is in line with the use of internet networks. According to data from the Indonesian Internet Service Providers Association, the largest number of internet users are on the island of Java at 55.2%, then the next largest internet users are on the island of Sumatra at 21.6%. The highest Internet users on the island of Sumatra are in the province of North Sumatra at 6.3%, followed by the province of South Sumatra at 4.9% which is ranked 2nd (second) with the highest internet network users on the island of Sumatra. Based on a survey conducted by the South Sumatra Communication and Information Service in 2017, the number of online game players in South Sumatra continued to increase along with the number of internet users, namely 45.21%. The highest internet users are also in the 15-19 year age range, namely 91%, where this category falls into teenagers, while internet users in teenagers aged 10-14 years are 66.2%. The phenomenon of online games can be seen from the rise of various types of game applications which attract the attention of young people, especially the teenage age group, making them compete to download online game applications presented on the internet (Play Store and App Store). There are many online games that are often played by teenagers, including Mobile Legend, PUBG, Free Fire and many other games. The Statista report in 2021 shows that the majority of time spent by game players is online (*gamers*) in Indonesia to play video games for 4 to 7 hours per week. The percentage reached 17.4%. Then, as many as 15.8% of gamers spend 7 to 12 hours playing games per week (Rahman & Kembaren, 2023).

The impact of playing online games is decreased health,

mental disorders, hampering the process of self-maturation. Based on the 2018 Basic Health Research (Riskesdas) report, the prevalence of emotional mental disorders in the Indonesian population aged >15 years is 62.8%. In 2017, mental disorder data was obtained at 74%, in 2022 it will increase to 83.5% and it is predicted that in 2023 it will be 100% (Nyoman. A. et al, 2023). The problem of children's aggressive behavior is not a new problem for parents and Teacher. But behavioral problems are a very important problem for a child's growth, development and future. If not handled properly and correctly, aggressive behavior can have a negative impact on the child's life in the future (Nyoman. A. et al, 2023).

Emotional mental disorders are symptoms of people who suffer because they have mental or mental problems, then if the condition is not treated immediately it will become a more serious disorder (Arif. T. et al, 2023). In certain circumstances, this disorder can be suffered by everyone but can recover to its original condition if the individual can overcome it or visit a health service facility, but if it cannot be overcome it will continue to become a more serious disorder (Ria. S. S & Rasmi, 2023). According to Gofar, (2023), the factors that cause emotional mental disorders in teenagers arise from many things, such as a lot of pressure and a lack of support system from the family, deviant social influences from friends, pressure from the demands of school lessons given by teachers to students and addiction to online games. Emotional mental disorders are characterized by a decline in individual function in the areas of family, work or education, and society or community, apart from that this disorder originates from subconscious conflicts that cause anxiety. Depression and anxiety disorders are types of emotional mental disorders that are commonly found in society (Sahid & Azhar, 2023).

Research conducted by Said et al., (2023) explained that the age of respondents was more dominant in middle teenagers, namely 155 respondents (35.07%). This is also in line with the results of Joshua's research. F. R. et al, (2023) showed that the average age of respondents was 16.34 years. The youngest is 15 years old and the oldest is 20 years old. Every individual is at risk of experiencing mental disorders in living their lives, especially when facing the challenges, pressures and conflicts they face (Ngesti, Kasih, & Adison, 2023). Early detection is an effort to determine mental health conditions, symptoms and factors and triggers that cause mental conditions to experience disorders early (Khairani & Yusri, 2023).

From the explanation above, researchers are interested in researching "Early Detection of Mental Emotional Disorders in Adolescent Online Game Users in Ogan Komering Ulu Regency in 2022"

II. RESEARCH METHODS

This research design uses descriptive. The research was carried out in January 2022 in Ogan Komering Ulu Regency. The sample in this research was 65 teenagers in Ogan Komering Ulu Regency. Samples were taken by method *Accidental Sampling*. In this research the independent and dependent variables are online games, emotions and behavior in adolescents, behavioral problems, hyperactivity,

peer problems, difficulties, strengths. Data was collected using instruments in the form of questionnaires and check lists. The collected data is then presented in table form and then analyzed using SPSS *Wood Square* with a significant level of α 0.05.

III. RESEARCH RESULT

TABLE 1. Frequency Distribution of Respondents Based on Age, Gender, Frequency of Playing Games and Type of Online Game

No	Variable	Number (n)	%
1	Age	48	97,95
	Early Adolescence (11 – 16)	1	2,04
	Late Adolescent (17 – 25)		
2	Gender	40	81,63
	Man Woman	9	18,36
3	Frequency of Playing Online Games	9	18,37
	1 – 2 Times	17	34,69
	3 – 4 Times	15	30,61
	5 – 6 Times	8	16,33
	>7 Times		
4	Types of Online Games	35	71,43
	Mobile Legends	14	28,57
	PUBG		

The age frequency distribution obtained by the research results is that the largest number is early adolescence (11 - 16) amounting to 48 (97.95), The gender frequency distribution obtained by the research results is that the largest number is male, amounting to 40 (81.63), Frequency distribution The highest number of research results for playing online games was 3 - 4 times, totaling 17 (34.69), and the frequency distribution of types of online games, the highest number of research results, was mobile legends games totaling 35 (71.43).

TABLE 2. Frequency Distribution of Mental Emotional Disorders, Behavioral Problems, Hyperactivity, Peer Problems, Difficulties in Adolescents and Adolescents' Strengths in Online Games

No	Variable	Number (n)	%
1	Normal Emotional Mental Disorders	7	14,29
	Threshold/Boderline	15	30,61
	Abnormal	27	55,10
2	Behavioral Problems	16	32,65
	Normal	16	32,65
	Threshold/Boderline Abnormal	17	34,70
3	Hyperactivity	7	14,29
	Normal	0	0,0
	Threshold/Boderline Abnormal	41	85,71
4	Peer Problems	14	28,57
	Normal	15	30,61
	Threshold/Boderline Abnormal	20	40,82
5	Difficulties in Adolescents	8	16,33
	Normal	0	0,0
	Threshold/Boderline Abnormal	41	83,67
6	Strength	18	36,73
	Normal	0	0,0
	Threshold/Boderline Abnormal	31	63,27

The frequency distribution of emotional mental disorders found that the highest number of research results

was abnormal, numbering 27 (55.10), the frequency distribution of behavioral problems, the highest number of research results, was abnormal, numbering 17 (34.70), the frequency distribution of hyperactivity, the highest number of research results, was abnormal. 41 (85.71), The distribution of the frequency of problems with peers obtained by the highest number of research results was abnormal, amounting to 20 (40.82), The distribution of the frequency of problems in adolescents, the highest research results obtained were abnormal, amounting to 41 (83.67), and Distribution The frequency of strength in adolescents found that the highest number of research results was abnormal was 31 (63.27).

IV. DISCUSSION

1. Emotional Mental Disorders

Distribution of Frequency of Playing Games for 24 Hours with Mental Emotional Disorders of Students in Ogan Komering Ulu Regency obtained the highest results in the 3-4 Times category with 17 respondents and the lowest in the >7 Times category with 8 respondents.

Emotional mental disorder is a condition that identifies a person experiencing psychological changes which may be a normal condition, but can also be a pathological condition. A person who experiences mental emotional disorders is people who have physical, mental, social, growth and development problems so that they are at risk of having mental disorders (Ministry of Health of the Republic of Indonesia, 2021) research results (Adelia Wirawan, 2021) which state that teenagers who play online games have had emotional symptoms. This is also strengthened by research conducted by Rahmawati, Astuti, Utaminingtyas, & Sya, (2023) which stated that 70% of teenagers' emotional symptoms were bad after playing online games.

2. Behavioral Problems

Frequency Distribution of Behavioral Problems in Adolescents obtained the most results in the Abnormal category with 17 respondents and the Normal and Borderline categories with 16 respondents in each category.

The results of this research are strengthened by research (Pembronia. N. F. et al, 2022) that there is a change in behavior in teenagers playing online games for the worse due to the characteristic factors of the roles played in online games. The factor that also influences the aggressive behavior of teenagers in this study is that the average student who plays online games has a high frequency of 3.77x/day and the duration is also long, 7.34 hours/day for 1 person. So, it can be said, a student spends a quarter of the day playing online games every day. According to Sarwono (2010) in (Sirken, Maryorita, & Agussalim, 2020), there are several factors that cause someone to behave aggressively, including social (environmental), personal (the individual's personality), cultural, situational, mass media and domestic violence.

3. Hyperactivity

Frequency Distribution of Hyperactivity in Adolescents

obtained the highest results in the Abnormal category with 42 respondents and the lowest in the Normal category with 7 respondents.

In accordance with research results from (Nila Hayati and Herlia. S N, 2020) it is stated that 87% have difficulty concentrating due to curiosity and a strong desire to complete level challenges -next level of online gaming.

In line with research conducted by Fadillah, it can cause mental disorders and relationships with peers and people around them can feel disturbed. The characters in game play are sometimes antagonistic so they show violence and utter harsh words (Fadillah and Iqbal 2019) in (Sari, Faridah, Kertapati, & Chabibah, 2022) similar thing

also conveyed by Cris Rowan, a pediatrician from the United States, quoted by Kompas.com, who explained that there needs to be a ban on the use of gadgets for early childhood, one of which is the emergence of mental illness, aggression and digital dementia (Pagestu 2017) in (Sari et al., 2022).

4. Peer Problems

Frequency of Peer Problems that stated Abnormal was 20 respondents and Normal 14 respondents.

research results from Arnidah. K. et al, (2023) who stated that there were no problems with peers because teenagers played games together and helped each other to win online games. Abnormal symptoms of problems with peers can include tending to be alone, preferring to play alone, not having one good friend, not being liked by other children, being bullied/moved by other children, getting along better with adults than children (Ministry of Health RI, 2021)

In every game there are challenges, which make the addict continue to feel challenged, so that in the end, people who are addicted to games will feel continuously dependent and cannot be separated from the game, if the player cannot control himself, he will forget himself and forget to learn, even Even when studying, he even remembers playing games. Online games will reduce the positive activities that children should undertake at their developmental age. Children who are dependent on gaming activities will affect their motivation to learn, thereby reducing study time and time for socializing with their peers. If this continues for a long time, it is estimated that children will become attracted to social interactions, be insensitive to the environment, and can even form an asocial personality, where Children do not have the ability to adapt to their social environment.

5. Difficulties in Adolescents

The Difficulty Score for Adolescents obtained Normal results with 8 respondents and Abnormal with 41 respondents.

In accordance with research by Nila Hayati and Herlia. S N, (2020) who stated that emotional symptoms had a negative impact, namely lots of worries, often complaining of body aches, easily losing self-confidence, easily afraid, often unhappy. Negative impacts are also shown in behavioral problems such as frequent anger, frequent fighting, frequent lying, frequent cheating. Hyperactivity results in restlessness and concentration scattered, not thinking before acting,

continuing to move restlessly. Peer problems include tending to be alone, not having one good friend, not being liked by other children, often being bullied by other children, hanging out with adults rather than children (Ministry of Health of the Republic of Indonesia, 2021). This is also strengthened by research by Sri Wahyuni, (2021) which states that playing online games has an effect on student deviant behavior. In Novilia's research. A. et al, (2021) stated that there are also behaviors that appear in a higher category than the at risk level, namely at the problematic use level. The gaming behavior shown in the problematic level category in this research is that gaming behavior does not stop at just playing when invited by friends, but they more often play alone. The impact felt is that it is wasteful to have to buy a quota that exceeds the set limit. Another impact is that the subject complains that his eyes are starting to blur, and he forgets his daily activities or responsibilities, such as studying, worshipping, and even eating. All of these impacts are often felt by the subject and tend to occur continuously. The subject ignores and continues to play when receiving reprimands and expressions of concern from other people. Physical and social responses are stimuli that have the opportunity to reduce the recreational effects of playing online games.

6. The Power of Teenagers in Online Games

The Strength Score in Adolescents obtained Normal results totaling 18 respondents and Abnormal totaling 31 respondents. The results of this research are also in accordance with Cahyana. et al, (2020) who stated that online games had the greatest abnormal impact on the strength category. Strengthened by the results of Yustina's research. P. M. et al, (2021) online games reduce teenagers' prosocial behavior, which makes teenagers less willing to share, less likely to help others and not think about other people's feelings.

Researchers assume that students who play online games are more likely to experience emotional mental disorders than teenagers who do not play online games. Therefore, the influence of playing online games on adolescent psychology is very important because it can change the emotional and psychological state of adolescents. With moderate intensity, he can still control his emotions by occasionally venting his frustration when he loses or does not achieve a win as a goal in playing the online game. Aggressive behavior occurs because the more often students play online games, the more students tend to imitate the behavior violence in online gaming. The negative impact of playing online games with students' aggressive behavior is that children will spend more time in vain, lose their sense of sympathy and empathy due to the influence of violent games, psychological problems if they think too much, lack of sleep, be indifferent to the environment, become addicted to playing games with a nature that is easily anxious and more easily angered.

V. CONCLUSIONS AND RECOMMENDATIONS

Researchers concluded that all the symptoms of teenagers who experienced emotional mental disorders were mental emotional disorders, behavioral problems, hyperactivity, peer

problems, difficulties in teenagers and the strengths of teenagers in online games. Researchers suggest the importance of online gaming education for teenagers

REFERENCES

- [1]. Adelia Wirawan. (2021). The Impact of Playing Online Games on Children's Morals (Case Study of Suak Buluh Village, Simeulue District).
- [2]. Wise. T. et al. (2023). Socialization of the Negative Impact of Online Games for Students. *Journal of Village Community Service and Empowerment*, 1(1), 5–8.
- [3]. Arnidah. K. et al. (2023). The Influence of Educational Rating Games as an Educational Media on Parental Understanding.
- [4]. Asep Sardi. (2022). The Impact of Online Games on the Religious Behavior of Adolescents in Semelinang Tebing Village, Peranap District, Indragiri Hulu Regency.
- [5]. Cahyana. et al. (2020). Description of Junior High School Students Who Experience Online Game Addiction. *Focus Journal*, 3(2), 40–45.
- [6]. Daheri, M., Sarnoto, A. Z., Riyadi, S., Rahmah, S., & Prastawa, S. (2023). The Impact of Violent Online Games on Children's Character: A Systematic Literature Review. *Journal on Education*, 05(04), 11791–11803.
- [7]. Desi. P. P. et al. (2023). Online Game and Smartphone Addiction Against Academic Procrastination at Martapura Vocational School. *Open Journal Systems*, 17(1978), 1213–1224.
- [8]. Dwi, I., Sari, N., Syafwar, F., Mahmud, U. I. N., Batusangkar, Y., Mahmud, U. I. N., ...Batusangkar, Y. (2022). The Impact of Online Game Addiction on Students and Implications for Counseling Services, 1, 1–14.
- [9]. Elsa. E. A. et al. (2023). Socialization of Research Results on Online Game Addiction Diagnosis Expert System Application Using the Certainty Factor Method. 3rd National Research and Community Service Conference (KNPP), Buana Perjuangan University, Karawang, 2355–2358.
- [10]. Gofar, M. (2023). The Impact of Online Games on the Mental Health of Generation Z, 19, 640–648.
- [11]. Cardinal. (2020). The Role of Parents in Minimizing Online Game Addiction in School Age Children in Palopo City.
- [12]. Indonesian Ministry of Health. (2021). Technical Instructions for the Prevention and Control of Mental Emotional Disorders.
- [13]. Khairani, W., & Yusri, F. (2023). Effectiveness of Peer Counseling to Reduce Online Game Addiction in Adolescents in Jorong Sungai Jariang Kanagarian Koto Panjang, IV Koto District, Agam Regency. *Journal of Islamic Educational Counseling*, 4(1), 45–60.
- [14]. Mega. S. S. et al. (2020). Study of Online Games on Minors in Bahu Village, Malalayang District, Manado City (Case Study on Children Under 12 Years of Age). *Holistic Journal*, 13(1), 1–12.
- [15]. Mira. R. et al. (2023). Interpersonal Communication Experiences of Parents and Children Aged 8-10 Years in Understanding the Impact of Playing Online Games on Achievement at School. *Journal of Universal Communication*, 5(1), 25–39.
- [16]. <https://doi.org/10.38204/komversal.v5i1.1171>
- [17]. Muchamad. M. S. (2020). Description of the Frequency and Duration of Playing Online Games among School-Age Children at SD N 1 Candimulyo, Temanggung Regency.
- [18]. Muhammad Darwin, Marianne Reynelda Mamondol, Salman A. S. (2021). Quantitative Approach Research Method. (Toman Sony Tambunan, Ed.). Bandung: Indonesian Science Media. Retrieved from
- [19]. https://www.google.co.id/books/edition/Metode_Penelitian_Pendasaran_Kuantitatif/Gy0EAAAQBAJ?hl=en&gbpv=1&dq=Method+Research+Education+Approach+Quantitative,+Qualitative,+and+R%26D&printsec=frontcover
- [20]. Nafisa, D. (2019). Multimedia-Assisted Discovery Learning Model to Improve Students' Critical Thinking Abilities. *National Unnes Journal*, 2, 854–861.
- [21]. Ngesti, I., Kasih, F., & Adison, J. (2023). Effectiveness of Behavioral Counseling Using Modeling Techniques to Reduce Online Game Addiction Behavior (Study of Class XI IPS 2 Students at SMA Negeri 1 Batang Anai, Padang Pariaman Regency). *Journal on Education*, 05(04), 13945–13952.

- [22]. Nila Hayati and Herlia. S N. (2020). The Relationship between the Habit of Playing Online Games in School-Age Children and the Need for Rest and Sleep in SD Negeri 010083 Kisaran, Asahan Regency. *Journal of Global Health*, 3(3), 116–122.
- [23]. Novilia. A. et al. (2021). Description of Online Game Playing Behavior among Teenage Online Game Players in Jatinangor. *Journal of Psychological Research and Measurement*, 10(1), 5–17.
- [24]. Nyoman. A. et al. (2023). The Relationship Between Addiction to Playing Online Games and the Psychosocial Development of School Age Children at Sdn 1 Sesetan. *National Journal of Health Research*, 7(1), 7–12.
- [25]. Pembromia. N. F. et al. (2022). Addiction to Playing Online Smartphone Games on Sleep Quality of Students at SMPK Hewerbura Watublapi, Sikka Regency. *Scientific Journal of Educational Vehicles*, 8(September), 679–688.
- [26]. OKU Regency Government. (2023). OKU Regency Government Profile. Retrieved from <https://web.okukab.go.id/geografis/>
- [27]. Prasetyo, A., Rondli, W. S., & Ermawati, D. (2023). The Impact of Online Game Playing on Elementary School Students' Learning Achievement. *Journal of Education*, 9(1), 333–340. <https://doi.org/10.31949/educatio.v9i1.4733>
- [28]. Rahma, N. (2022). The Relationship between Peer Conformity and Intensity of Playing Mobile Legends Online Games. *Psychoborneo Scientific Journal of Psychology*, Volume 10 (p-ISSN: 2477- 2666e-ISSN: 2477-2674).
- [29]. Rahman, A., & Kembaren, E. T. (2023). Formation of Social Character by Creating a Children's Playground as an Alternative to Solving the Problem of Online Game Addiction in Children Aged 5-12 Years in Gampong Reuleut Timu, North Aceh. *Journal of Malikussaleh Serving*, 2(1), 188–200.
- [30]. Rahmawati, E., Astuti, A. D., Utamingtyas, S., & Sya, N. (2023). Behavioral Counseling to Reduce Online Game Addiction in Vocational School Students. *Journal of Community Service*, 4(2), 1574–1578.
- [31]. Rezita Annisa W; Yudha Wirawanda. (2023). Interpersonal Communication of Mothers and Children of Mobile Legend Online Game Players, 1–22.
- [32]. Ria. S. S., & Official. (2023). The Impact of Online Game Addiction on Teenagers. *Journal of Early Childhood Education*, 5, 6122–6128.
- [33]. Rinta. I.A.K and Tri. S. (2021). Description of the Characteristics of Children Who Are Addicted to Playing Online Games. *Aisyiyah Surakarta Journal of Nursing*, 2(2), 9–13.
- [34]. Safitri. A. et al. (2020). The relationship between the duration of time playing online games and personal hygiene practices among students at SMK Negeri 2 Surakarta. *Journal of Health Science and Technology*, 11(2).
- [35]. Sahid, N. H., & Azhar, A. A. (2023). Impact of the Online Game Mobile Legends on Elementary School Students in the Environment, 118–125.
- [36]. Said, A., Studi, P., Dan, B., Islam, K., Counseling, J., Development, D. A. N., & Dakwah, F. (2023). Psychological and Spiritual Impact on Abdi Ndalem Students Who Experience Online Game Addiction.
- [37]. Sari, C. A. P., Faridah, Kertapati, Y., & Chabibah, N. (2022). The Relationship between Peer Environment and Online Games with Children's Aggressive Behavior. *Journal of Obsession: Journal of Early Childhood Education*, Volume 6 I(ISSN: 2549-8959 (Online) 2356-1327 (Print)).
- [38]. Sirken, T., Maryorita, B., & Agussalim. (2020). The relationship between frequency, duration and level of attachment to online games with aggressive behavior in class 11 students at SMK Negeri 3 Jayapura. *Papuan tropical nursing journal*, volume 03 (ISSN 2654-5756).
- [39]. Sri Wahyuni. (2021). The Influence of Online Game Playing on Deviant Behavior in Children at SD Inpres Buttatianang II, Rappojawa, Kec. Tallo, Makassar.
- [40]. Alum. Casey M.A. (2023). The Communication Impact of Using the Call of Duty Online Game Application on the Learning Achievement of Class VIII Students at SMP Negeri 8 Manado. Introduction to several new discoveries in the field of technology, especially those that make or get addicted to playing them online. *Acta Diurna Journal of Communication*, 5, 1–4.
- [41]. Joshua. F. R. et al. (2023). The Influence of Online Games on Social Interaction Among Students at the Faculty of Social and Political Sciences, Sam Ratulangi University. *Journal of the Scientific Society*, 3(1), 1–11.
- [42]. Justina. P. M. et al. (2021). The relationship between online game addiction and sleep quality in state high school teenagers in Ruteng City. *JWK*, 6(2), 55–66.