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High School Students Understanding of the Risks of Online Game Addiction

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ABSTRACT

Adolescents are currently in the midst of technological sophistication, which is very helpful for its development. On the other hand, many adolescents are trapped in the problem of technology addiction. Adolescents are the most age group who experience problems with the use of technology, including online games. Online game addiction is the loss of control over the use of online games, which makes other daily activities are disrupted. Online game addiction in adolescents have an impact on several aspects of life, such as health aspects, psychological aspects, academic aspects, social aspects, and financial aspects. Lack of understanding about the risks of online game addiction can get adolescent stuck in online game addiction. This research aims to describe high school students understanding about the risks of online game addiction. The sample consisted of 255 high school students selected by proportional random sampling technique. Data was collected using a scale measuring understanding of the risks of online game addiction. Data analysis used a quantitative approach with descriptive methods. The results showed that high school students understanding about the risks of online game addiction was included in the moderate category with an average score of 198,48 and an achievement score level of 55,14%. Therefore, school counselors must to improve high school students understanding of the risks of online game addiction.



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Introduction

Adolescence is transition from childhood to adulthood. Adolescence is in the age range of 12-18 years (Hurlock, 2010). Adolescence is often associated with perceptions and stereotypes about deviations (Netrawati, Khairani, & Karneli, 2018). Some deviations that are shown by adolescents often start from the online world (Ifdil & Ardi, 2013). In the current millennium era, adolescents will be presented with a lot of technological sophistication that makes it easy to get various information. This information is needed by adolescents to increase their knowledge and understanding to be capable of developing optimally (Wulandari, Nirwana, & Nurfannah, 2012). Adolescents today can be called post-millennials generation (Oblinger & Oblinger, 2005), which one of its characteristics is developing with technology that is very easily accessible, so that today's adolescents can also be regarded as the most technologically literate generation.

Electronic technology that a trend and fun for adolescents is a game (Jannah, Mudjiran, & Nirwana, 2015). Games are one of the most extensive recreational activities regardless of culture, age, and gender, especially since the development of the internet. Games can be divided into two groups, namely online games

and offline games (Kiraly, Nagygyörgy, Griffiths, & Demetrovics, 2014). Offline games are usually (but not always) played alone, have clear start and end, game objectives can usually be achieved by the player itself without help from other players. The online game is a game that is played with computer or smartphone and is connected through the internet network (Rini, 2011). Online games are usually played simultaneously by players who can communicate with each other in real-time (Griffiths, 2004). Therefore, online games differs from offline games in terms of the nature and characteristics of each game (Charlton & Danforth, 2007; Choi & Kim, 2004).

Adolescents are the most age group experiencing problems with the use of online games, which these problems are closely related to online game addiction (Hussain, Griffiths, & Baguley, 2012; Strittmatter et al., 2015). In fact, online games should be used for entertainment (Adams, 2014), where all fatigue and stress can be reduced by playing online games (Russoniello, O'Brien, & Parks, 2009). However, in reality online games are played in excess which can lead to online gaming addiction.

Peng & Liu (2010) define online game addiction as a psychological condition that is characterized by psychological discomfort experienced when they are unable to play online game as they wish. Online game addiction can make other daily activity are disrupted. In adolescents, online game addiction will harm their life. According to Young (2009) the inability of someone to control the use of online games has an impact on physical and psychological harm to its users. Online game addiction is characterized by the extent to which a person plays excessively which can negatively affect the game player (Weinstein, 2010). The negative influence that will arise due to excessive online gameplay includes 5 aspects, such as health aspects, psychological aspects, academic aspects, social aspects and financial aspects (Ghuman & Griffiths, 2012; King & Delfabbro, 2018).

The current phenomenon shows that many adolescents are addicted to online games. Based on research conducted by Jap, Tiatry, Jaya, & Suteja (2013) revealed 10,15% of adolescents in Indonesia indicated experiencing addiction to online game, Hong Kong 15,6% (Wang et al., 2014), Netherlands 3% (van Rooij, Schoenmakers, Vermulst, van den Eijnden, & van de Mheen, 2011), Singapore 8,7% (Choo et al., 2010), Finland 9,1% (Männikkö, Billieux, & Kääriäinen, 2015), Spain 7,7% and Great Britain 14,6% (Lopez-Fernandez, Honrubia-Serrano, Baguley, & Griffiths, 2014). This condition is similar to what happened to some high school students in Kuala Tungkal. Based on preliminary studies, some students play online games for more than 3 hours every day. However, online games should only be played 2 hours every day (Smart, 2010). In addition, some students show signs of online game addiction, such as always thinking about online games, preferring to interact with fellow online game players and often fall asleep in class. This problem must receive attention from the school. Moreover, data from Asosiasi Penyelenggara Jasa Internet Indonesia (APJII) revealed that internet users in Indonesia increased, in 2016 as many as 132 million users to 143 million users in 2017. The data also revealed that 54.13% of services used using the internet, is a service for playing games. In addition, data also show that online game players are increasing 33% every year (Hindarto, 2010). The phenomenon of online game addiction is increasingly widespread and increasingly worrying, especially because of the many adolescents who become addicted to online games.

One of the causes of adolescents who are addicted to online games is the lack of understanding about the risks of online game addiction (Irmak & Erdoğan, 2015; Yang & Tung, 2007). Understanding is often associated with reading, but actually understanding is related to a wider range of communication (Bloom, 1956). Understanding is the ability to capture the meaning of the material being studied (Winkel, 2004). Individuals can be said to understand when they can be able to construct meaning from instructional messages, including verbal, written and graphic communication (Anderson & Krathwohl, 2009). An understanding of the risks of online game addiction can be interpreted as the ability to interpret, model, classify, summarize, conclude, compare and explain matters related to the risks or dangers of online gaming addiction. Having an understanding of the risks of online gaming addiction will make adolescents able to make the right decisions in playing online games. Lack of understanding will make adolescents unable to interpret the consequences and predict the likelihood that will occur.

For this reason, authors are interested in seeing how high school students understanding of the risks of online game addiction. This becomes important because the low understanding the risks of online game addiction is one of the causes of online game addiction. Furthermore, the results of this research can be the basis for handling and preventing online game addiction.

Method

This study used a quantitative approach with descriptive method to describe high school students understanding of the risks of online game addiction. This research was conducted on high school students in

Kuala Tungkal, the students at SMA Negeri 1 Tanjung Jabung Barat and the students at SMA Negeri 2 Tanjung Jabung Barat. The research sample was 255 students selected by proportional random sampling technique. The research instrument used a scale to measure understanding of the risks of online game addiction, which included health aspects, psychological aspects, academic aspects, social aspects, and financial aspects. This research instrument consisted of 36 valid statement items with reliability 0,942. All statement items in the research instrument are favorable with a score range of 1-10. Data analysis in this study used percentage formula (Sudjana, 2002).

Results and Discussions

From the results of the study obtained data about high school students understanding of the risks of online game addiction in the form of scores analyzed descriptively. To determine the level of measurement of high school students understanding of the risks of online game addiction, five categories were used, which were very good, good, moderate, less and very less. The results of data processing can be seen in Table 1.

Table 1. High School Students Understanding of the Risks of Online Game Addiction

Category	Score Interval	Frequency	Percentage
Very Good	≥ 296	31	12,2
Good	231-295	57	22,4
Moderate	166-230	65	25,5
Less	101-165	83	32,5
Very Less	≤ 100	19	7,5

Based on Table 1, it can be seen that high school students understanding of the risks of online gaming addiction was 12,2% in the very good category, 22,4% in the good category, 25,5% in the moderate category, 32,5% in the category less and 7,5% in the very less category. Thus, it can be concluded that most high school students understanding of the risks of online game addiction is in a less category. This results indicate there are still many students who do not yet have a good understanding of the risks of online gaming addiction. Furthermore, a detailed description of high school students understanding of the risks of online game addiction based on sub-variables can be seen in Table 2.

Tabel 2. High School Students Understanding of the Risks of Online Game Addiction Based on Sub-variables

Sub-variables	Score		
	Mean	Percentage	Category
Health Aspect (8)	45,86	57,33	Moderate
Psychological Aspect (10)	53,52	53,32	Moderate
Academic Aspect (8)	45,71	57,14	Moderate
Social Aspect (6)	29,82	49,70	Moderate
Financial Aspect (4)	23,59	58,98	Moderate
Overall (36)	198,49	55,14	Moderate

From Table 2, the overall average score for understanding the risks of online game addiction was 198.49 (55,14%). Furthermore, the average score obtained by sub-variables is in the moderate category which covers health aspects 57,33%, psychological aspects 53,32%, academic aspects 57,14%, social aspects 49,70% and financial aspects 58,98 %. An understanding of the risks of online game addiction will affect the intention to use and make decisions in playing online games (Chen, 2010). Less understanding of the risks of online game addiction can lead individuals being trapped in online game addiction. The results of this study indicate that high school students understanding of the risks of online game addiction needs to be improved. In accordance with the research results of Ariati (2015) that there needs to be an intervention to increase adolescents knowledge and understanding of the risks of online game addiction.

Adolescents is considered more often and vulnerable to online game addiction (Brand, Todhunter, & Jervis, 2017). Griffiths, Davies, & Chappell (2004) revealed that adolescent players spend more time and have a stronger attachment to online games than adult players. Online games tend to be time-consuming and often

replace other activities such as sports, outreach (Bainbridge, 2010), disrupting school, work, and real-life (Grüsser, Thalemann, & Griffiths, 2007). Addiction to online games makes the behavior compulsive, indifferent to other activities and raises strange symptoms, such as discomfort when not playing games (Jannah et al., 2015). These things can make adolescents dropouts, reduced interaction and even ignore other things that are not related to online games.

The many cases of online game addiction that occur in adolescents is clear evidence of adolescents lack of understanding of the risks of online game addiction that should have been obtained from their parents. Parents don't just provide easy access to technology. However, parents must also instill a good understanding so that access to technology is not overused and misused. The results show that individuals who have easier access to play online games tend to play longer and more frequently (King & Delfabbro, 2018). Adolescents who have electronic media devices in the bedroom tend to have shorter duration of sleep, sleep more late and have less concentration of activities during the day, compared to those who do not have electronic media devices in the bedroom (Brunborg et al., 2011; Fossum, Nordnes, Storemark, Bjorvatn, & Pallesen, 2014; Shochat, Flint-Bretler, & Tzischinsky, 2010). In addition, adolescents who have access to parental credit cards, may be vulnerable to excessive spending on playing online games (King & Delfabbro, 2016). Buying items using parent credit cards usually non-refundable, and game developers do not include any other precautions or safeguards to prevent excessive spending (Gainsbury, King, Russell, Delfabbro, & Hing, 2017; Kalhour & Ng, 2016). Therefore, it is crucial for parents always to monitor the use of technology provided to their children.

The results of this study indicate that adolescents understanding about the risks of online game addiction needs to be improved. This requires integrative handling, not only involving adolescents but also schools, as formal institutions that educate students and parents as the first and closest educators and role models for children (Ariati, 2015). Schools as a means of education have a responsibility in increasing students understanding of the risks of online game addiction. This step is essential because adolescents also play a role as students in school. Guidance and counseling services are an important component of education in schools. School counselors need to increase students understanding of the risks of online game addiction through several guidance and counseling services to prevent students addicted to online games. One of the functions of guidance and counseling services in schools is to prevent students from behaving improperly (Ahmad, 2013; 2017; Prayitno & Amti, 2004). Because, bad behavior displayed by students in schools will disrupt the teaching and learning process which will have an impact on student learning outcomes (Yunika, Alizamar, & Sukmawati, 2013). This strategy can be called primary prevention (Gladding, 2012). With this strategy, students can reduce the level of play at low levels and can utilize information and skills to prevent related problems such as sleep disorders, relationship conflicts, academic disorders, negative moods and social isolation (King & Delfabbro, 2018). For this reason, guidance and counseling services play an important role in this problem by providing information services about the risks of online gaming addiction to adolescents, so these growing adolescent can obtain appropriate sources of information.

There are many ways to school counselors to improve students understanding of the risks of online game addiction, among others, by conducting socialization and seminars about the negative effects of online game addiction. In addition, school counselors can create modules on the risks of online game addiction. Modules are independent learning packages that include a series of learning experiences that are planned and systematically designed to help students achieve learning goals (Mulyasa, 2002). Students can learn independently without depending on the teacher and can learn without being bound by place and time (Putri, Neviyarni, & Daharnis, 2013). Modules can make students more active and independent in understanding information to improve their understanding of the risks of online game addiction. Furthermore, Lasmiyati & Harta (2014) revealed an increase in students understanding of concepts using the learning module with students who did not use the module. Through the use of modules, it is hoped that school counselors will be able to increase students' understanding of the risks of online game addiction. These efforts must be included in guidance and counseling program to be integrated with the curriculum.

In efforts to increase students understanding of the risks of online game addiction, it is important for counselors to involve parents. School counselors and parents should be able to remind and give awareness to students about the serious effects of online game addiction. Especially for parents, they should be able to pay attention and supervise the activities of their children which could pose risks. This is important because parents have the opportunity to nurture and shape a healthy lifestyle for their children (Gibson & Mitchell, 2010).

Conclusions

Online game addiction needs to take strict action as a preventative measure. One preventive step that can be done is by trying to increase adolescents understanding of the risks of online game addiction. Based on the results of the study, high school students understanding of the risks of online game addiction is included in the moderate category. However, there are still many students requires increased understanding of the risks of online game addiction. Students need help and support to improve their understanding to avoid being addicted to online games. School counselors can increase Students understanding on the risks of online game addiction with a variety of guidance and counseling services using various types of approaches. The ways that can be done by school counselors, namely by providing outreach, seminars, and modules about the risks of online game addiction and involving parents of students in this effort.

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