INTERNET GAMING DISORDER AMONG INDONESIAN MUSLIM UNDERGRADUATE STUDENTS

Wahidah Fitriani [1], Diyana Kamarudin [2]
[1]Universitas Islam Negeri Mahmud Yunus Batusangkar
[2]Lincoln University, New Zealand
Corresponding Email: wahidahfitriani@uinmybatusangkar.ac.id

ABSTRACT

Internet Gaming Disorder Scale was originally developed to measure Internet Gaming Disorder (IGD) based on the nine criteria proposed by the Diagnostic and Statistical Manual of Mental Disorders, 5th ed. (DSM-5). The absence of research studies on the topic to understand internet gaming disorder among Indonesian Muslim undergraduate students motivated researchers to conduct this study. The objective of this study was to gain a deeper understanding of Internet Gaming Disorder among Indonesian Muslim undergraduate students and to explore what factors cause IGD and the effects of IGD for Indonesian Muslim undergraduate students. A case study approach was utilized to gain insight into the experience of six Muslim undergraduate students in *Batusangkar*. Data were collected through semi-structured interviews, and analyzed through coding, categorization, and identification of key data concepts. The findings indicated that the intensity of the use of several games could influence the prevalence of internet gaming disorder among Muslim undergraduate students. Disrupted conduct, social withdrawal, aggression, and poor academic performance are among many problems that result from excessive gaming use. This research contributed to ongoing discussions about internet gaming disorder and its impacts on both students' psychology and physical wellbeing or health in the field of Islamic education.

Keywords: Internet Gaming Disorder, Game Addiction, Muslim Undergraduate Students

INTRODUCTION

The discovery of various internet-integrated technological devices or gadgets has transformed the conventional world into a digital one. Digitalism has penetrated various aspects of life since the introduction of the 5G and *the Internet of Things* (Li et al., 2018). In early 2019, Japan also introduced the concept of Society 5.0 as an ideal way of life that integrated the Internet of things (IoT), big data, Artificial Intelligence (AI), robots, and sharing economy into every industry and aspect of life (An-Nisa et al., 2021). Currently, corona virus disease 2019 (COVID-19) pandemic also played a role in strengthening the existence of digital culture in various aspect of human life (Fam, 2018: Fernandes et al., 2022)

Penetration of internet-based technology as a trademark of human digital lifestyles during a pandemic can be seen from the growing internet user data. In July 2022, 76.63 or 212.35 million people out of a total population of 278.26 million people in Indonesia were active internet users (Internetworldstats.com. 14/09/2022). The interpretation of this data led to the understanding that only 23.37% of people in Indonesia were not affiliated with the internet in their lives. This data is directly proportional to the number of smartphone users in Indonesia, which ranks fourth in the world after China, India and the United States.

The surge in data on active internet users and gadgets was actually also triggered by a distance learning policy which appealed to people to work from home, study from home, and worship from home to prevent

transmission of the Covid-19 virus (Kompas. com, 14/10/2021). Since then, people had started competing to buy smartphones, laptops, notebooks, internet data, and even installing WI-FI at home to keep working and studying from home. As a result, the way of working of various lines of life began to shift, from ways of working which so far tended to be manual and conventional to completely digital and online (Fitriani et al., 2022).

Ironically, the need to have a gadget that was connected to the internet also applied to school-age teenagers even though they were not eligible to own these digital devices because they were still at the stage of the search for identity and instability (Sari et al., 2017: Saputra, 2019: Salsabila Putri & Zakaria, 2020). However, because of the demands of the learning system from home, parents, whether they wanted it or not, had to buy digital devices for their children who were not mature enough so that they could study at the same time when their parents were working. Finally, many teenagers experienced internet addiction because they had full digital devices without parental control (Rathi et al., 2022). They used it so excessively that they forgot the time and forgot that they had accessed contents that had nothing to do with learning activities.

The results of research conducted by Fernandes (Fernandes et al., 2022) revealed the fact showing that teenagers were vulnerable to excessive internet use, especially when the covid-19 pandemic hit. The findings in this study noted that as many as 35.8% of teenagers used the internet to access online classes, as many as 64.9% of teenagers used it to access social media, as many as 34.3% of teenagers used the internet to play online video games, and as many as 78.0% of teenagers used the internet to watch movies. and recreation. This data showed that teenagers use their gadgets more for social media activities, playing online games, and watching movies and only a few use them for learning activities (Koronczai et al., 2011).

Internet abuse by teenagers which leads to addiction is caused by its ability to make human life easier. This ability becomes a magnet that sucks the user's attention so that it

is difficult to look away and they are always glued to the screen (Poon et al., 2021). Now, almost all the needs of teenagers can be met with just one touch of a finger on the screen of the gadget they have. All the information needed can be accessed without having to bother visiting libraries and other sources of information. When it comes to studying, today's youth don't have to bother going to school to learn face-to-face with the teacher. One thing they need is a gadget connected to the internet.

Likewise, when teenagers want to interact with other people, the constraints of distance and limited time are not obstacles to developing social interaction through social media applications that keep mushrooming in the rainy season. There are even teenagers who have thousands of friends in cyberspace but do not have a single friend in the real world. They already feel comfortable with the interactions on social media so they do not have the passion to build a social relationship in the real world. Today's youth are known as the generation Z who have characters that are able to unite the physical world with the digital world, tend to be hyper-customized, be realistic, experience fear of missing out (FOMO) syndrome, like to do things alone, and motivated in living their lives (Nadzirah et al., 2022; Herawati et al., 2022).

The attractiveness of the internet for teenagers is extraordinary and naturally addictive (Gomez et al., 2019). Many people can forget the time when they are on it. When a user accesses the required information, other information related to the search keyword will also be displayed. When users access social media, advertisements will appear offering items with attractive designs and arousing appetite for shopping or playing games (Rehbein et al., 2015). That's how the internet works, by sucking all of the user's attention into the virtual world that is connected directly to the real world so that the user loses track of time because he/she is carried away with searching, googling and scrolling various information that is not really needed (Harrer et al., 2021).

The activity of using the internet without a clear and meaningful purpose has

trapped teenagers into a vortex of "digital brutalism". A term that is very appropriate to describe how greatly internet addiction undermines the owner of the device. Users brutally and thoughtlessly forget their common sense when accessing all the content offered. In fact, the actual information contained is not significant and relevant to their needs. When he sees an advertisement, his hand automatically clicks and accesses it without knowing what it is for. When users wants to get entertainment by playing games, advertisements for other games with similar characteristics will appear, thus luring users to download and play them (Dang et al., 2019: Kim & Ko, 2020). The brutality in using digital devices is a futile act that is prohibited in Islamic teachings. As Allah says in the Al-Qur'an surah al-Mu'minun [23] verse 1-3, which means "Successful indeed are the believers. Who are humble in their prayers. And who shun vain conversation". Buya Hamka in Tafsir Al-azhar said, "al-laghwi" came from the word "laghoo", meaning actions or words that are useless and have no value. Either joking or playing games that have no end in sight (Buya Hamka, 2007)

In the end, internet addiction comes after many benefits that can be taken from the internet (Argiropoulou & Vlachopanou, 2021). This loss threatens the survival of humans, especially teenagers, and raises concerns if those who will become the nation's next generation will no longer be masters, but become slaves who spend their time playing gadgets and forgetting other obligations (Ali et al., 2022: Zhang et al., 2022). This concern is increasing with the release of We Are Social research data (2021:22) which stated that on average, Indonesians spend 8 hours 52 minutes a day on internet. This duration increases in teenagers. Research conducted by Siste revealed that the duration of digital device use in adolescents is 11.6 hours a day (mediaindonesia.com, 14/10/2021).

The numbers revealed through the research results above are clear evidence of the brutality of many Indonesians, especially teenagers, in using digital devices and the internet. Therefore, an effort is needed to reduce this brutality so that there is no more internet addiction which is bad for its users. Internet addiction, especially related to game addiction is well known as Internet Gaming Disorder (IGD). IGD is a form of internet addiction that has been included in the DSM-5 and ICD-11 diagnostic manual. IGD is defined as the persistent and recurrent use of internet games that leads to clinically significant impairment or distress, as indicated by five (or more) of nine criteria within a 12-month period (T'ng & Pau, 2020; Pontes & Griffiths, 2015). The effort to reduce IGD is urgent to do because number by number the research results presented previously are not stagnant, but dynamic. This number is always fluctuating. It can get higher if left unchecked and can be lower if the right intervention is carried out.

It is important for mental health professionals, teachers, and educators to be knowledgeable about the psychopathology of internet gaming disorder and internet addiction, as well as the potential consequences that may arise from these conditions (Rahmawati et al., 2022). In-depth research on Internet Gaming Disorder (IGD) among Muslim undergraduate students in Indonesia is still very rare. Therefore, the researchers are interested in exploring in-depth investigation on the tendency of IGD among them and tracing its causes and impacts on their mental and physical conditions.

RESEARCH METHODS

This study used qualitative case study approach, employing interviews as the primary data collection technique. The study was conducted at UIN *Mahmud Yunus Batusangkar*, with 6 Muslim undergraduate students as the selected respondents. Snowball sampling technique was applied in selecting the respondents, with the criteria of undergraduate students who showed signs of Internet Gaming Disorder after they had filled out the IGD Scale short form and got IGD score in the high category. Informed consent was obtained from the respondents, and the researcher explained the purpose of the study

and the questions that would be asked to gather data. Respondents agreed to participate under the condition of anonymity and for scientific purposes only.

Over a four-month observation period, the respondents shared their experienced of IGD and how it affected them. Semi-structured interviews were used, with questions developed based on the initial responses of the respondents and following guidelines related to the aspects being studied. Semi-structured interviews were conducted for a more comprehensive understanding of the respondents' experiences. The aspects examined in this study were determined based on the following guidelines:

Table 1. List of Question Items

No	Question
1	What media do you use to access game?
2	How many hours per day do you spend to access game?
3	Is there a special schedule for accessing game?
4	Do you use the internet for study purposes?
5	What do you feel about your gaming behavior?
6	Do you keep thinking about your previous game activities or look forward to your next game session?
7	In your opinion, has gaming occurred as the primary activity in your daily life?
8	Why do you experience increased levels of irritability, anxiety or sadness when attempting to decrease your gaming?
9	What if you discontinue your gaming activities?
10	Do you have the urge to spend more and more time gaming in order to experience satisfaction or enjoyment? How and Why?
11	Do you find it difficult to control or stop your gaming activity, despite making efforts to do so?
12	Does your involvement with the game cause you to lose interest in your previous hobbies and other forms of entertainment? Why?
13	Have you persisted with your gaming activity even though you are aware that it is creating issues in your relationships with others?
14	Have you misled any of your family members, lecturers, or other individuals regarding the extent of your gaming activity? How and why?
15	Do you engage in gaming as a means of temporarily escaping or alleviating negative emotions such as helplessness, guilt, or anxiety?
16	What are the factors that cause you to suffer from IGD and what are the effects of IGD on you? Is it the physical, mental or motivational aspects of your study?

The qualitative data analysis involved the creation of codes, categories, and data concepts to organize and understand the data. To ensure the credibility of the data, member checking was conducted in which respondents were given the interpretation of the data to confirm that it aligned with their experiences. This was done to ensure the accuracy of the data provided by the respondents.

RESULTS AND DISCUSSION

Regarding Internet Gaming disorder, the researchers discovered that the average time spent on gaming activities was approximately 6 hours per day, with Respondents 2 and 5 spending up to 8 hours per day. Respondents 2 and 5 spent time to play not only Free Fire and Mobile Legend game to alleviate feelings of loneliness, but also Slot High Domino to get money from the slot. All respondents used smartphones to access games.

According to 6 respondents in this study, the percentage of internet access for study-related matters was lower when compared to playing games and *Slot High Domino* access. They only used the internet for learning purposes when they had assignments

to write paper or presentation for class. The capacity for free internet on campus was still insufficient because only few locations had internet access. Therefore, all respondents generally used their personal data packages or Wi-Fi from their renting houses to access the internet. Even respondent 6 admitted to illegally accessing Wi-Fi from his neighbor next to his renting house to obtain internet access because he did not have enough money to buy a data package.

Feeling occupied with Gaming Behavior

Almost all respondents admitted that their behavior was truly occupied by gaming and slot activities. As a result, after finished playing game, their minds were usually preoccupied with what strategy they had done wrong, resulting in their lost. The feeling and curiosity in their minds made them constantly think about what they would do in the next gaming session. It made respondent 2 unable to concentrate on learning and his academic performance significantly decreased. On the other hand, the other respondents were still able to maintain their academic achievements.

Respondent 2 said: "I don't like to participate in class discussions, my mind was always on playing game. In fact, when lectures become boring, I would sit at the back so I can play slots. I do not want to engage in discussion because it feels pointless. Unless, I am required to answer a question, I will only provide a brief response from the assigned readings or by searching on google. If there is a group paper assignment, I never want to be the one who makes the paper. I only get the task to print the paper and make photocopies because my renting house is close to campus".

Not much different from respondent 2, respondent 1 said that "since he started playing Slots frequently, he had been wasting more time playing slots because he had 113 slot accounts on his smartphone. Currently, respondent 3 was in the process of writing his

thesis, and this habit quite distracted him from concentrating on writing his thesis.

In contrast to respondent 2, respondent 1 stated that even though his mind was occupied with playing games, he still tried to actively engage in class so that his academic performance would not be poor.

Experiencing Heightened Level of Irritability, Anxiety, or Sadness when Attempting to Decrease or Stop Gaming Activity

The researchers found that Muslim undergraduate students who suffered from Internet Gaming Disorder had experienced feelings of irritability, anxiety, and sadness when trying to reduce or stop their gaming activities on their mobile phones.

Respondent 5 stated that: "If I have to reduce my gaming time, especially uninstall the game from my mobile phone, then I will be confused and feel meaningless in life. It feels like something is missing in my life. It seems that when I lose a game, I feel extremely angry, frustrated, and disappointed with my gaming partner who is not skilled enough. Sometimes, I even use harsh words towards them due to their incompetence which makes us lose game. If I am the one who cause the loss in the game, my partners will also typically do the same things I do". In addition, Respondent 4 stated that "if I don't play games, I feel as if I lived in ancient time"

Respondent 2 also stated that: "I have repeatedly uninstalled games from my mobile phone to stop playing, but on the same day I usually install them again because I do not know what else to do. Gaming has become my daily routine, if I do not play games, it is like a confusing life".

From the above quotation, it is clear that respondents found that it was difficult for them to control or stop their gaming activities, even though they had tried to get rid of this bad

habit. They felt their life became empty if they did not play games.

Being Occupied in a Game Could Potentially Lead to a Decrease in Interest in One's Previous Hobbies and Other Forms of Entertainment

This research showed that playing a game results in a person losing interest in their previous hobbies and other sources of entertainment that they used to enjoy. From respondent 1, it was known that before suffering from this internet gaming disorder, he used to play badminton and football with his friends. However, these positive activities decreased dramatically because of playing games.

In addition, Respondent 6 mentioned that: "Before getting addicted to playing games, I used to love playing traditional Minangkabau music, such as: *talempong*, *rabab*, *bansi* and gendang. Unfortunately, after suffering from internet gaming disorder I have no time to play music anymore".

The Factors that Cause IGD and the Effects of IGD among Muslim Undergraduate Students.

This research explored data on the factors that caused the respondents to suffer from IGD. Respondents 2 and 5 said that they had suffered from IGD since their girlfriend unilaterally ended their romantic relationship. Feeling disappointed and lonely, they eventually needed an escape and sought entertainment by playing games. Respondent 2 added that he played games to seek entertainment by playing *Slot High Domino*, hoping to win. However, in reality, he had often experienced defeat in the game and suffered losses because he frequently purchased chips and lost them. While respondents 1 and 6 admitted that their motivation to play games was the desire to

increase their financial income by playing *Slot Domino*, respondent 4 stated that he liked to play a game because of boredom, and thus he sought entertainment by playing *Mobile Legends*. Unlike all previous respondents, respondent 3 stated that the factor that caused his addiction to games was because his parents treated him unfairly compared to his younger sister. His younger sister had always been the top priority and received full attention from both parents, while respondent 3 had always been asked to give in and be patient to get what he needed. He was first introduced to play a game by his older sibling, who also experienced injustice in their upbringing in the family. Due to sadness and disappointment with the way his parents raised him, he sought solace by playing games.

The result of this study indicated that IGD has a negative impact on low learning motivation, decreased learning concentration, low academic performance, disrupted conduct, social withdrawal, aggression, poor life satisfaction, low self-efficacy self-esteem, and self-control. In addition, IGD also has a detrimental effect on the physical health of the respondents, causing them to suffer from insomnia, eye strain, headaches, back pain, neck pain, and even respondent 6 experienced a shift in his little finger due to excessive gaming.

The researchers had confirmed the truthfulness of the data to other respected respondents who also suffered from internet gaming disorder, in order to validate the aforementioned statements.

DISCUSSION

Researchers found that Internet Gaming Disorder (IGD) has an impact on the decline of undergraduate students' motivation to learn, difficulty in focusing on learning, poor academic performance, behavioral issues such as misconduct and social withdrawal, aggressive tendencies, lower overall life

satisfaction, and lower levels of self-efficacy, self-esteem, and self-control. Based on the interviews to all respondents, the time they spent to play a game or a *Slot High Domino* ranging from 4 hours and some even reaches 20 hours a day during public holidays. The result of this study strengthened the study that had been conducted by (Chiang et al., 2021: Stevens et al., 2020). The factors that are highly linked to Internet Gaming Disorder, particularly maladaptive cognitions and motivation, are likely to be the most immediate correlations of the disorder, and therefore should be the main targets of interventions (Ji et al., 2021)

As technology continues to advance, there are both positive and negative effects on area of growing scientific interest in internet addiction, and specifically, pathological online gaming, which has gained attention in recent years (Baiumy et al., 2018). The Diagnostic and Statistical Manual of Mental Disorders 5th edition (DSM-5) has included Internet Gaming Disorder in section III as all conditions for further study (Ali et al., 2022: Pontes & Griffiths, 2015)

Nine criteria of Internet Gaming Disorder indicators on DSM-5 form, including preoccupation, withdrawal, tolerance, loss of control, loss of interests in other activities, continuation despite problems, deception, escape adverse mood, and negative consequences (Baiumy et al., 2018) can be seen in all of the respondents. Most of the respondents felt difficulty in controlling themselves from game addiction and were unable to stop playing games. Respondent 6 admitted that he had tried to stop playing games in the third semester because his academic performance had declined. However, this only lasted for one semester. In the fourth semester, he suffered from Internet Gaming Disorder again as he was invited by his friend to play games together. Until now, he wanted to stop playing games but could not do so.

According to him, life felt boring if he did not play games. He also suffered from insomnia because of IGD. This research finding is in line with a study conducted by (Verma et al., 2022) which showed that IGD has an effect on insomnia and loneliness. According to Mamun and Griffith (Mamun & Griffiths, 2021), Indian gamers who excessively engaged in online gaming experienced severe consequences, such as failing exams, hospitalization, suicide attempts, suicide and even death. Previous studies have shown that, similar to other countries, Indonesian Muslim males are more likely to experience IGD compared to females (Yuansyah et al., 2021; Pefbrianti & Sahidi, 2022)

CONCLUSION

This study found that Internet Gaming Disorder was prevalent among Muslim undergraduate students and had negative effects on their mental and physical health. The study identified factors such as boredom, loneliness, social isolation, social support, the need for fair and appropriate parenting patterns as the main reasons for IGD. IGD also led to a decrease in academic performance, misconduct behavior, aggression, social withdrawal, lower levels of self-efficacy, self-esteem, and self-control. Furthermore, IGD was found to have detrimental effect on physical health. The study suggests that interventions are necessary to address IGD among Muslim undergraduate students, such as promoting healthy strategies to cope with and limit excessive use of technology.

This research is considered as a case study, which means that although it explores a specific case, it is possible that similar cases have occurred in other locations. However, it is important to note that the findings of this study should not be applied to other cases without further research. This research's limitations serve as a call to action for conducting future studies with related themes.

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