Amid Covid-19: The Rise of Gaming Addiction

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Abstract

The COVID-19 pandemic has had a huge impact on the social lifestyles of millions of people all over the world. It is a serious threat to public health and has spread rapidly around the world. The World Health Organization (WHO) confirmed the first reported case, which originated in Wuhan, on January 12, 2020. Meanwhile, on January 25, 2020, the first case in Malaysia was reported. To break the Covid-19 chain, the Malaysian government imposed a Movement Control Order (MCO) on March 18, 2020. The purpose of this study was to determine the impact of the covid-19 outbreak on the gaming addiction situation among Malaysian adolescents through the implementation of MCO. **METHODOLOGY:** This study focuses on Malaysian adolescents aged 18 to 21 who engage in online gaming, either mobile gaming or desktop gaming. The study's methodology includes an online survey via Google Forms and an online focused group (FG) session. Before being invited to the focused group discussion, participants were asked to complete an online screening survey using Dr. Kimberly S. Young's Young - Internet Addiction Diagnostic Questionnaire (IADQ; 1998). (FGD). The FGD result is recorded and transcribed for the analysis process. **RESULT:** Participants reported spending 4 to 5 hours on weekdays and more than 6 hours on weekends playing Mobile Legend (ML), their preferred online gaming platform. Furthermore, it was reported that siblings and friends influenced respondents to participate in online gaming.
Keywords: Addictive Behaviours, Compulsive Behaviours, Online Gaming Disorder, Adolescence

Introduction

On December 31, 2019, Wuhan, China, was the first to report an outbreak of coronavirus disease (COVID-19; World Health Organization Portal, 2022). The first reported case in Malaysia was on January 25, 2020, involving three Chinese tourists (Hashim et al., 2021). These confirmed cases were classified as imported cases because the travellers were infected first and were identified as close contacts from the Singapore case (Ariffin et al., 2021). On January 23, 2020, they arrived in Malaysia via Johor from Singapore (Elengoe, 2020;

Ariffin et al., 2021). Covid-19 is a virus caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and has a higher mortality rate than other viral infectious diseases. The government has taken numerous precautions to prevent or mitigate the effects of the covid-19, not only on health but also on economics and the implementation of new norms. Such measures to reduce the spread of the virus include the need to stay at home during lockdown, wear a mask on a regular basis, hand wash with soap or sanitizer (Elengoe, 2020), and maintain a social distance in public places (Elengoe, 2020; Ariffin et al., 2021). Schools and higher education institutes have also been forced to close their doors, and online studies have been introduced as part of new ways of learning during this pandemic era. According to Ariffin et al. (2021), outbreak control measures such as the Movement Control Order (MCO), social distancing, and increased hygiene are effective in reducing number of daily cases.

In this pandemic era, the presence of ICT plays an important role in helping us combat and deal with this new norm more concisely. However, every good thing comes at a price. This situation also contributed to an increase in internet use especially among adolescents. According to the Communications and Multimedia Ministry secretary-general, Datuk Seri Mohammad Mentek, who told Bernama (2021) that, due to the current pandemic situation, which required people to stay at home most of the time, internet usage has been on the rise since the implementation of MCO. Statistics from the Malaysian Communications and Multimedia Commission's official portal (MCMC, 2021) on statistics users compared between 2018 and 2020 show a significant increase in users between two consecutive years. In general, the recorded number of internet users in 2020 is 88.7 percent, a 1.3 percent increase from the recorded number of users in 2018. Among those figures, a total of 47 percent of children aged 5 to 17 use the internet on a daily basis, compared to a total of 28.5 percent in 2018. Furthermore, the duration of daily internet use shows an increase in the number of hours spent online. In 2018, 39.2 percent of daily internet users spent between 1 and 4 hours on the internet. Meanwhile, in 2020, 28.6 percent of users have increased their daily internet usage from 5 to 8 hours. To make matters worse, the proportion of internet users who spend more than 18 hours per day is set to increase to 11.5 percent in 2020, up from 8.1 percent in 2018, implying that people spend more time online than offline. This should cause concern and prompt authorities to promote healthy internet usage in order to mitigate the negative consequences.

Earlier in January 2022, Gaming Disorder (GD) is included as a new diagnosis among "disorders due to addictive behaviours" in the 11th revision of the International Classification of Diseases (ICD-11; Paschke et al., 2020). The World Health Organization (WHO, 2020) in ICD-11 defined gaming disorder as a pattern of gaming behaviour ("digital-gaming" or "video-gaming") characterised by impaired control over gaming, increasing priority given to gaming over other activities to the extent that gaming takes precedence over other interests and daily activities, and continuation or escalation of gaming despite the occurrence of negative consequences. In explaining the rationale behind the inclusion of gaming disorder in the ICD-11, Billieux et al. (2021) stated that it is an important step toward meeting global challenges related to the harmful overuse of digital technologies. Furthermore, statistics show that the popularity of online gaming is increasing. More than 2 billion people worldwide play video games (Game Quitters, 2018; The Recovery Village, 2021), and this figure is expected to rise to three billion by 2023. According to Stevens et al (2021) in Global prevalence of gaming disorder: A systematic review and meta-analysis, gaming disorder affects 3.05 percent of total

users, or 60 million people, or possibly more. Children aged 8 to 18 account for 8.5 percent of that total.

Online gaming becomes problematic when it interferes with people's relationships and daily functioning, resulting in gaming disorder. It not only affects one social lifestyle, but it is also linked to certain mental health conditions, which affect their health either physically or psychologically in both short and long-term consequences. Dopamine release aids in the maintenance of people's interest and attention, resulting in more time for individuals to experience the behaviours and the development of a strong desire to seek out that same pleasure again and again. Dopamine is released by the brain's reward centre in response to the pleasure that people feel while playing online games (Mayo Clinic Health System, 2021). Furthermore, it is believed that the characteristics or features of online gaming itself contribute to compulsive behaviour, which drives online gamers to engage in that behaviour again (Deutrom et al., 2022). To be diagnosed with Gaming Disorder, the following criteria regarding online or offline gaming behaviour ("digital gaming" or "video-gaming") must be present for at least 12 months: (1) loss of control over gaming, (2) prioritisation of gaming over other activities, and (3) continuation or escalation of gaming despite negative consequences (World Health Organization, 2018). According to survey studies and clinical case reports, some people have difficulty regulating their gaming activities and play excessively, resulting in mental and physical symptoms as well as functional impairment (Saunders et al., 2017; Rumpf et al., 2018; Billieux et al., 2021).

To summarise, the presence of ICT and the advancement of technology is beneficial during this lockdown period, but it may also have negative consequences if used without limits. Some may use gaming as a tool to keep them insane during the pandemic, but others may overuse it without even realising it. This is a warning sign for authorities to begin paying attention to this type of addiction, especially in this pandemic era, to ensure that the effects do not worsen. Thus, the relationship between covid-19 situations and the increase in the number of gaming addicts was examined throughout this study to better understand the spike in this issue. The study also recommended precautions to help adolescents use technology in a healthier manner.

Methodology
Research design
Due to the Movement Control Order (MCO) imposed during the COVID-19 pandemic, an online survey was conducted rather than face-to-face. The online survey was supplemented by focused group discussions with selected adolescents with potential online compulsive behaviour. Before being invited to participate in the focused group session, students were asked to complete a screening survey via Google Forms. Students who met the inclusion criteria were contacted to participate in a focused group session. The main criteria for selecting the adolescents were that they be between the ages of 18 and 21 and that they play online gaming, either mobile gaming or desktop gaming. In addition, to be eligible as a focused group participant, the adolescent must select the 'YES' answer five or more times in the screening survey administered via Google Form.

Purposive sampling was used as part of the non-probability sampling types, which are also known as judgemental, selective, or subjective sampling (Black, 2010). According to Patton (2014), this sampling technique is commonly used in qualitative research to identify and select information-rich cases in order to make the best use of limited resources. The sampling strategy was chosen by identifying and selecting individuals or groups of individuals

who are specifically related to the purpose or research interest (Cresswell & Clark, 2011) and are also willing to participate in the research (Bernard, 2017).

Population
The World Health Organization (WHO) defines adolescents as people aged 10 to 19 years old, and youth as people aged 15 to 24 years old. In general, 'Young People' refers to people aged 10 to 24 (WHO, 2021). The WHO definition of adolescent age is similar to the Malaysian United Nations Children's Fund (UNICEF, 2010). Malaysian adolescents were defined by UNICEF as being between the ages of 10 and 19, while Malaysian youth were defined as being between the ages of 15 and 25.

Adolescents in our society are neither children nor adults. Adolescents may be sexually mature and as large as their parents, but they are required to attend school until the age of 16 or 17. Adolescence is a transitional period between childhood and adulthood, typically defined as being bounded at the lower end by puberty and at the upper end by the assumption of adult responsibilities (Rathus, 2014).

Adolescents are defined in this study as people aged 18 to 21 years old. When it comes to academic age, most people in this range have just finished secondary school and have begun pre-university courses, either foundation or matriculation. Aside from that, at this age, some adolescents may begin working as part-time or full-time employees. As a matter of fact, it is safe to assume that this stage is a critical transition period in human development as they need to explore their identities (Erikson, 1982). Thus, this age group is deemed to be an ideal group to represent the adolescents who meet the study's requirements.

To summarise, this study's population consisted of pre-university students from various Malaysian states. Pre-university students were the most representative group of young adolescent respondents. This is because they are a group of people who have graduated from high school and are preparing to enter university.

Instruments
The screening survey questions were adapted from Dr. Kimberly S. Young's Young - Internet Addiction Diagnostic Questionnaire (IADQ) (1998). Dr. Kimberly S. Young also founded the Internet Addiction Test (IAT), which was preceded by the IADQ. The IADQ lists eight addiction criteria, which are as follows: (1) the person is preoccupied with the internet; (2) there is a need to spend more and more time on the internet to achieve satisfaction; (3) attempts to control, reduce, or interrupt the use of the internet are unsuccessful; (4) feels anxiety and depression in reducing or stopping the use of the internet; (5) remains on the internet much longer than intended; (6) endangers personal contacts, job, study, and career; and (7)

If the participants choose the 'Yes' answer at least five times out of eight questions, they have met the inclusion criterion and are considered eligible to participate in the focused group session. Participants who met the inclusion criteria will be contacted later to schedule an online-focused group session.

Participants in the focused group sessions were interviewed using a semi-structured technique to obtain feedback on the prevalence, factors, and causes. The semi-structured interviews will assess compulsive gaming characteristics and behaviours such as compulsivity, escapism, and dependency. Questions also assess issues related to personal, occupational, and social functioning that arise as a result of gaming use. This process involves all of the researchers.

Results/Findings

Research Question 1: Why are adolescents addicted to online gaming?
The study measured the following components to answer the first research question about the aetiology of gaming addiction among adolescents: (1) Daily time spent on online gaming platforms, (2) preferred online gaming platforms, and (3) factors influencing online gaming. The outcomes are shown below.

 i. *Time consumes per day on the online gaming platform*
Table 1 shows how much time each participant spends per day on an online gaming platform. This is to assess the impact of online gaming on the participants' daily lives.

On what level does the seriousness of the participants connect with online gaming?
Table 1
Time consumes per day on an online gaming platform

CODE	FOCUSED GROUP 1 (FG1)		FOCUSED GROUP 2 (FG2)	
	WEEKDAYS	WEEKEND	WEEKDAYS	WEEKEND
P1	7	Unlimited	4	5++
P2	5	8 - Unlimited	3	8
P3	5	Unlimited	3	6++
P4	6	Unlimited	6	Unlimited
P5	4	5	5	Unlimited
P6	3 - 4	6++	4	Unlimited

Table 1 displays the results of time spent per day on online gaming platforms for all participants in Focused Groups 1 and 2. During the weekdays, almost all of the participants spent 4 to 5 hours per day on online gaming, according to the findings of this study. However, the frequency of these numbers has increased from 6 hours to unlimited time on weekends.
 "Kalau dah masuk hujung minggu, bila kita ada banyak masa free, saya pun tak terkira.." (FGP2)
 "…kalau macam hari minggu ke hari cuti, saya macam main tak terkira lah..haha macam kalau malam tu kadang sampai subuh.." (FG1P4)
 "Saya start main dalam pukul 9 lebih pastu habis pukul 1 lebih ke 2 lebih ke tengok lah. Kalau dah ngantuk saya tidur lah.." (FG2P2)

 ii. *Preferred online gaming platforms*
Table 2 lists all of the online gaming platforms that the participants frequently use. This is to comprehend the various online gaming platforms, features, and activities that participants frequently engage in. Understanding the features of gaming platforms can help us understand the underlying reasons that lead to compulsive behaviour in online gaming.

Table 2
Preferred online gaming platforms

CODE	FOCUSED GROUP 1 (FG1)	FOCUSED GROUP 2 (FG2)
P1	- Mobile Legend (ML) - DOTA - The Frozen Throne - Clash of Clans (COC)	- Mobile Legend (ML) - Valorant - PUBG - FIFA
P2	- Mobile Legend (ML) - DOTA - FIFA	- Mobile Legend (ML) - Facebook: Game Pool, Dragon City - Playstore - Moonton - DOTA - PS1
P3	- Mobile Legend (ML) - The Frozen Throne - DOTA 2 - Counter-Strike: CS Go	- Mobile Legend (ML) - Clash of Clans (COC) - PlayerUnknown's Battlegrounds (PUBG) - Playstations 2 (PS2) - MOBA Games: Vainglory - FIFA - WWE
P4	- Mobile Legend (ML) - Blackshot - Game WarCraft - Frozen Throne	- Mobile Legend (ML) - Clash of Clans (COC) - FIFA - DOTA
P5	Mobile Legend (ML)	- Mobile Legend (ML) - Valorant
P6	Mobile Legend (ML)	- Mobile Legend (ML) - PES 2002

Table 2 shows which online gaming platforms were preferred by all participants in both focused groups, FG1 and FG2. According to the table, all participants prefer Mobile Legend (ML) as their preferred online gaming platform. Some participants, including FG1P1, FG2P3, and FG2P4, prefer the online gaming platform Clash of Clans (COC).

> *"Ada. Saya ada Mobile Legend dengan COC je. Tapi lg banyak main Mobile Legend lah." (FG2P4)*
>
> *"Ye betul. Focus dekat Mobile Legend, PES.. "(FG2P6)*

iii.   *Influencing factors of playing online gaming.*
Table 3 describes the factors that influence participants to participate in online gaming. This is to better understand the aetiology as well as the participants' interest in online gaming.

Table 3
Influencing factors of playing online gaming.

CODE	FOCUSED GROUP 1 (FG1)	FOCUSED GROUP 2 (FG2)
P1	Siblings - brothers	• Self–interest, curiosity • Family – cousins • Friends
P2	• Siblings – brothers • Friends	• Siblings – brothers • Friends • Self - interest
P3	• Siblings – brothers • Self–curiosity, financial • Friends – team members	Self–interest, curiosity
P4	• Siblings – brothers (SK) • Friends (smk)	Friends
P5	Siblings - brothers	Self–curiosity, explore
P6	• Friends • Self–curiosity, own interest	Siblings - brothers

Table 3 shows the findings on the factors that influence participants to play online gaming. According to the findings, the majority of the participants were influenced by their siblings, specifically their brother, to begin playing online gaming. Some claimed to have been influenced by their school friends as well as their interest in online games.

"Kalau macam saya lain sikit lah sebab saya belajar main game daripada abang-abang saya so darjah 1, 6 tahun macam tu dah start main." (FG1P5)

"Tak silap saya waktu darjah 3. Masa tu Abang saya bawak balik game PES 2002. Game tu lah yang masa mula-mula saya main." (FG2P6)

"Yang banyak mendorong main game ni kawan-kawan lah. Kawan lah yang banyak ajak." (FG2P4)

"Time tu kawan-kawan sekolah lah yang tanya, "kau tak main ke game Mobile Legend?" pastu dorang ajak-ajak pastu saya pun main. Saya balik saya try lah install." (FG2P2)

Research Question 2: What are the potentials and concerns related to gaming addiction?
To answer this question, the potentials and concerns associated with gaming addiction are classified into three categories: (1) health concern, (2) financial concern, and (3) social development concern. The study's findings are as follows.

i. *Health Concerns*

Table 4 shows the health effects of online gaming as experienced by participants in focused groups 1 and 2.

CODE	FOCUSED GROUP 1 (FG1)	FOCUSED GROUP 2 (FG2)
P1	• Tired eyes (red, hurts)	• Hand numb, cramp • Pain in ears – wearing headphones for too long
P2	• Sleeping habits	• Self- hygiene • Sleeping habits • Meal's timing
P3	• Sleeping habits • Hand cramp • Lost in the online world – not aware of time	• Sleeping habits
P4	• Sleeping habits • Eyes sight problem	• Headaches • Sleeping habits
P5	• Body tired	• Sleeping habits • Eyes sight problem
P6	• Hand cramp • Blurry eyes (not clear eyes sight) • 'Panda eyes' • Sleeping habits	• Sleeping habits • Eyes sight problem • Hand cramp

Table 4: Health Concerns Regarding Online Gaming

According to Table 4, the most common health concerns experienced by online gaming participants are sleep disruption and vision problems.

"Tapi kalau tangan cramp, tangan kebas tu mungkin biasa kalau dah main lebih 5 jam tapi kalau dari segi kesihatan tu haa apa yang saya boleh Nampak. Mata tu ada nampak macam kesan mata panda macam tu lah sebab tak tidur malam kan." (FG1P6)

"..kalau main PC ni saya akan pandang PC lama, mata saya akan jadi macam sakit, mata merah." (FG1P1)

Aside from that, some players reported hand cramps or numbness, particularly when playing for an extended period of time.

"…tapi tulah kalau saya main dengan kawan saya memang kadang-kadang tu sampai tangan saya cramp." (FG1P3)

"Kadang tu kebas lah juga kat tangan.." (FG2P1)

ii.   Financial Concerns

Table 5 depicts the financial concerns expressed by participants in focused groups 1 and 2 as a result of playing online gaming.

Table 5

Financial Concerns Regarding Online Gaming

CODE	FOCUSED GROUP 1 (FG1)	FOCUSED GROUP 2 (FG2)
P1	• Country income through tournament organizations	• Extra income • Career opportunities
P2	• Never spent money on gaming	• Never spend money on gaming but need to complete various tasks
P3	• Source of income – extra pocket money, joining tournaments	• Money spending on games characters – skin, upgrade characters
P4	• Update new gadgets	• Company advertisement through sponsorship – increase sales, branding
P5	• Source of income	• Open for career opportunities – improve financially (Streamer, professional player, Youtuber)
P6	• Money spent (RM200+-) • Country income: tournaments, tourists/players from different countries come • Self-income: reward from the tournament, money prize, free entrance fee • Career opportunity	• Money investment in gaming – buy skin • Career opportunities

According to the findings above, none of the participants have a financial problem as a result of their participation in online gaming. Some did spend money on online gaming but were able to keep it under control.

"Tapi kalau kira dari zaman sekolah sampai sekarang saya rasa below daripada RM300 laa bawah RM300. Tak lebih lagi lah.." (FG1P6)

Most participants agreed that online gaming could become a source of income for them, either through tournament participation or as a career as a professional player.

"maybe dia boleh masuk tournament-tournament kecil lah yang hadiah dia RM100 ke. So, dekat situ secara tak langusng dia boleh tolong ekonomi diri sendiri juga" (FG1P6)

"So, dengan kita main game ni dia akan buka satu kerjaya baru untuk pada budak-budak yang suka main game ni. Sebab dulu kan kita main game ni sebagai hobi so nanti kat Facebook, YouTube kita kan buka live kan, so nanti dorang akan dapat duit ke apa-apa lah so dia akan buka jalan kerjaya baru lah dekat rakyat kat Malaysia" (FG2P5)

iii.   *Social Development Concerns.*

Table 6 depicts the social development concerns expressed by participants in focused groups 1 and 2 as a result of their participation in online gaming.

Table 6
Social Development Concerns Regarding Online Gaming.

CODE	FOCUSED GROUP 1 (FG1)	FOCUSED GROUP 2 (FG2)
P1	• Plays together with his cousins • Play-time restrictions • Game with mic: can communicate with other players • Good activity for youngsters	• Tactical planning – brain practice for strategy plan
P2	• Upgrade social skills (communication online with gaming buddy) • Improve language skills (players from the outside country) • Gaming buddies' age variety – different age group	• Neglects other works – assignments, self-hygiene, others • Too immersed in gaming – not aware of timing
P3	• Too much time spent on gaming • Able to socialize with others (online friends, gaming buddies)	• Increase self-confidence
P4	• Easy to talk to via online (game) compared to real life, shy in reality • Academic problem	• New online friends • More online friends compared to offline
P5	• Have community groups for each region (Whatsapp group) – can socialize, communicate, update on upcoming tournaments	• Play with friends – easy to have communication • Brain practice for gaming planning – tactical • Limit time to socialize with family • Tendency to become introverts • Preferred to stay at home rather than mingle around
P6	• Time consumes to play	• Upgrade communication skills

- Time management – during the day: socialize with friends in the offline world, during the day: socialize in an online world
- If aiming to be a professional player: hard to focus on the outside world, need extra practice

The majority of participants agreed that online gaming helps them improve their communication skills. They had the opportunity to practise communication with players from various countries.

"..macam bagi saya lah, tujuan main game pun memang untuk bersosial dengan orang lain." (FG1P3)

"Sosial..kalau bagi saya untuk orang yang selalu main game ni lagi-lagi yang main dengan kawan-kawan dia tak jadi tak ada masalah. Even saya pun saya banyak kawan yang kenal maya." (FG1P2)

However, as a result of this, they have more friends in the online world than in the real world. Furthermore, FGP4 reported that he is having difficulty communicating with others in person but is doing well in online communication.

"Kalau macam orang yang saya baru kenal tu macam saya haa..tak tahu nak cakap apa. Tapi kalau dalam game tu saya okay je, maksudnya kalau depan-depan tu malu-malu lah dalam game ni okay lah" (FGP4)

Discussion/Analysis

The frequency of time spent per day on online gaming platforms is reviewed to understand the relationship between Covid-19 situations and the increase in the number of gaming addictions. Transitioning from a busy lifestyle to a sedentary lifestyle as a result of MCO implementation could be frustrating, especially for an adolescent in the process of discovering self-identity. They may look up various ways to stay insane while remaining at home, and online gaming may provide a good platform for them to escape from the numerous problems of daily reality, urging them to devote more and more hours to it (Hussain & Griffiths, 2009). Starting with recreation, they are obsessively repeating the use of online gaming as an underlining excuse to remain insane during a lockdown.

Different platforms offer different gaming features, promising different gaming experiences to ease players. Personal computers (PC), mobile games, and game consoles are examples of platforms (PS, 2015). All participants in this study chose Mobile Legend (ML) as their favourite online gaming platform, followed by Clash of Clans (COC) and Player Unknown's Battlegrounds (PUBG) (PUBG). These three are referred to as mobile game platforms. Nowadays, smartphones have become a necessity in today's digitalized world, resulting in mobile gaming carving out a niche in the gaming ecosystem, which people prefer over PC gaming (ONMO, 2022). According to Emerson (2011), mobile games have become the most frequently downloaded of all mobile applications due to on-the-go gameplay, a diverse range of game genres, and constantly improving mobile technology (PS, 2015). The online games were also designed to keep players interested. It must be difficult enough to keep players interested, but not so difficult that they become frustrated and abandon the game.

Online gaming also promotes a feature that allows players to interact with one another. It will be difficult for an individual to have face-to-face social interaction during a lockdown, so virtual interactions are a better option. Interaction on social media platforms can normally occur on simple chit-chat and day-to-day communications, but on online gaming platforms, players are virtually connected in discussing the game's tactical plan, which can promote continued gameplay. Participants also stated that they can improve their communication skills and confidence level by interacting with other online gamers. Aside from the virtual interactions provided by online gaming, the mode of play is also one of the reasons why it can become so addictive. According to Chan and Vorderer (2006), MMOs (multiplayer online games) have the technological capability to host hundreds of thousands of players on the same game in a single persistent world. To summarise, MMOs can be addictive due to the promise of comfortable platforms for interacting with various people in a collaborative or competitive setting, as well as the amount of free time due to the need to stay at home.

Anything in excess can have a negative impact. Healthy technology usage, particularly among adolescents, must be promoted to prevent online addiction. In this study, the effects of online gaming are focused on health, financial, and social development concerns. Concerning health, participants did not report any mental-health concerns, but did mention hand cramps (Ayenigbara, 2017) if playing games for an extended period of time, distraction in sleeping habits (Wang & Zhu, 2013), and impaired vision due to long screening time (Wang & Zhu, 2013; Ayenigbara, 2017).

Because the participants in this study are of adolescent age, the best prevention strategy to prevent online gaming is parental intervention (Karapetsas, 2014). Parents should establish a clear limit for their children's daily screen time and encourage daily interaction with their children. This will allow children to take a break from their virtual lives on screens and their real lives. Aside from that, a user should take a 20-minute break from staring at the screen to give their eyes a rest. This will help to relax tired eyes and lessen the impact of eye problems. To summarise, parents play an important role in controlling their children's actions and encouraging them to explore new activities or goals outside of the screen or virtual world.

Conclusion

Most users begin playing online gaming as a form of recreation and a way to relieve stress, with no idea that it could become an addiction. However, the nature of the game itself, as well as current events, have contributed to such an increase in disorder in many cases. According to the findings of this study, the characteristics or features of online gaming such as game design, relationship or connection during gameplay, and mode of gaming have significant impacts on compulsive behaviour that drives online gamers to return to that behaviour. The amount of free time during movement control order implementation complements these addictive features, allowing players to play them indefinitely. As a result, users must be equipped with the necessary skills, such as self-control, to manage technological advancement. Furthermore, parents must monitor their children's daily digital usage so that they are aware of the limitations and any red flags that arise from excessive online gaming use. As a result, the proclivity for online gaming disorder could be reduced, and digital adaptations could be improved.

Motivation and Contribution of This Study
This study will provide new perspectives on how to approach digital addiction issues among Malaysian adolescents, and adolescents worldwide in general. This issue was exacerbated by the outbreak of pandemic covid-19.

This study will specifically benefit the following people:

Community – This study raises community awareness about recognising certain behaviours as a triggering factor that can lead to addiction. As a result, early detection of compulsive behaviours can be a helpful approach to alleviating them.

Academic Institutions and administrators – Academic institutions and administrators may use this study to promote programmes and campaigns to raise awareness about the importance of healthy internet usage.

Mental health advocates – The findings of this study will be useful for advocates in continuing their campaign to raise awareness about how to deal with behavioural issues, particularly gaming addiction.

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