

Facebook Addiction, Game Online, Physical Health Among Indonesian Students

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ABSTRACT

This study is essential for students to know about Facebook addiction, Game online, and physical health. The study aims to describe the level of Facebook addiction, play online, and physical health and examine their relationship. The total sample was 206 people selected using the purposive sampling method. The research design was correlational; two hundred-six participants joined this study. Each participant filled out all of the questionnaires (demographic data, the Bergen Facebook Addiction (BFAS), Game Addiction (GAS), and Physical Questionnaire (PHQ)). All questionnaires were taken from the previous research and validated; the reliability test was high. Based on the Pearson correlation tests, relationships were shown between Facebook addiction, games online, and physical health. There is a significant positive correlation between Facebook addiction and physical health and games online and physical health. Facebook addiction has a positive impact on physical health. Facebook addiction will impact a student's physical health. This study findings that Facebook addiction is low level, game online moderate level, and moderate level of physical fitness. The best way to prevent students from Facebook addiction is to make them busy with school activities. Games online also have a positive impact on physical health. The longer we play the Game online, the more physical health problems we will have. Say no to Facebook addiction and games online.

Keywords: Facebook addiction, Game online, physical health

INTRODUCTION

In this era of information technology, there are many social web platforms. These platforms are social networking sites (i.e., Facebook, Twitter, Instagram, WhatsApp, Snapchat, etc.). Facebook is one of the most popular virtual social platforms and the highest social networking website; 2.1 billion people are using it, and 1.4 million are active users (Rahman & Ahmed, 2018). Furthermore, over 90% of active Facebook user accounts accessed that platform via mobile devices or smartphones. Every minute on Facebook, 510.000 comments are posted, 293.000 statuses are updated, and 136.000 photos are uploaded (Biolcati et al., 2018).

Mark Zuckerberg created Facebook as a student at Harvard University in 2004. In the beginning, Facebook became a virtual medium for Harvard students to identify with each other and make new social relationships. Later, Facebook was spread to other university students and became a public domain in 2006. Facebook addiction is the new term by psychiatrists as its

addiction will damage the sleeping habits, health, interest in studies, and interaction abilities of real life.

The addictive tendency is common among Facebook users (Ahamad & Das, 2018). Facebook addiction is a growing concern; having a solid motivation for logging onto Facebook so frequently impacts daily activities, real social life, interpersonal relations, and psychological well-being (Rahman & Ahmed, 2018). On the other hand, Facebook addiction may also impact physical health, such as carpal tunnel syndrome, eye problems, fatigue, and lack of exercise. In a study by Asante and Nyarko (2014), excessive Facebook use had physical and musculoskeletal health effects on students.

Some studies reviewed Facebook addiction on mental health where it found Facebook addiction associated with abnormal general mental health status (Hanprathet et al., 2015; Rahman & Ahmed, 2018). Another study by Busalim et al. (2019) found that self-esteem significantly affects students' Facebook addiction and performance.

According to several studies, online gaming has become one of the most addictive internet activities (Wan & Chiou, 2006). Computer games have recently become a viral leisure activity among children and adolescents. Based on a report from Syracuse University on the Science Daily Website, games online may have significant negative consequences, especially in students' lives, by causing distraction and interfering with the critical reaction of out-game life actions, such as academic performance, health, and social life.

Facebook addiction, Game online, and physical health have been suggested as a potential behavioral addiction. The element of novelty of this research is that there is a severe lack of research evidence regarding Facebook addiction And online and physical Health behavior among Indonesian students. This study aimed to identify the level of Facebook addiction, play online, and physical health among Indonesian students and determine their relationships.

METHODS

The design of this study was a correlational study to examine the relationship between Facebook addiction, Game online, and physical health among Indonesian students with 206 samples. The sampling method used was purposive sampling. The inclusion criteria were Indonesian college students who were willing to participate and had a Facebook account. These addictions were measured using three instruments: the Bergen Facebook Addiction (BFAS),

the Game Addiction Scale (GAS), and the Physical Health Questionnaire (PHQ); each tool has been validated and has high reliability. *Pearson Correlation* was used to analyze the data.

RESULTS

Table 1 shows the participants of this study are presented in the table below. Most participants (60.9%) were male, with an average age of 18. Most of the students In this study have a computer (78.1%), and (96.1%) have an internet connection.

Table 1. Frequencies and Percentages of Participants' Demographic Characteristics

No	Characteristics	N	%
1	Age	18.4 ± 1.16	
2	Gender	Male	125 60.7
		Female	81 39.3
3	Do you own a personal computer/laptop	Yes	161 78.1
		No	45 21.8
4	Do you have an internet connection at home or dormitory	Yes	198 96.1
		No	6 2.9

Table 2 shows that more than half of the participants (89.8%) reported having a Facebook account. 27.8% use Facebook to expand their network of friends. Of those participants (10.2%) who mostly do not use Facebook (23.3%), they said it was a waste of time. Most participants open their Facebook two times a day, and (34.5%) of participants will start using their Facebook at 10 am. (62.6%). The participants mentioned that using Facebook as a class tool is neutral and unnecessary.

Table 2. Frequencies and Percentages of Participants' Facebook

No	Statement	f	%
1	Do you own a Facebook Account?	Yes	185 89.8
		No	21 10.2
2	Reasons for not using Facebook	I am computer illiterate, so I do not know how to use Facebook	2 2.3
		Information on the internet spreads very fast, so much so that it will be different from the reality	12 13.6
		Other Facebook users can see the pictures that I have in my albums	16 18.6
		Status that has to be updated regularly	6 7.0
		Facebook chat that other Facebook users can read	6 7.0
		No privacy	4 4.5
		It is a waste of time	20 23.3
Facebook can be addictive	2 2.3		

No	Statement	<i>f</i>	%
	It disrupts my concentration on my study	12	14.0
	So many negative comments are posted on the Facebook	6	7.0
3	How often do you open your Facebook account? Daily. How many times in a day?	2.0 ± 0.80	
4	How long do you usually stay online with your Facebook per day?	1.7 ± 1.16	
5	What time do you usually open your Facebook account in the morning?	6 – 11 am	
	5 am	7	3.4
	6 am	7	3.4
	7 am	38	19
	8 am	31	15.5
	9 am	34	17.2
	10 am	69	34.5
	11 am	14	6.9
6	How many Facebook friends do you have?	Range: 50 – 4.951 Average: 1.244	
7	What are your reasons for using Facebook?		
	To expand my network of friends	121	27.8
	To keep in touch with family and relatives	88	20.2
	To have a place to express myself	74	17.0
	To keep up to date on news, current events, and exciting happenings in the world	38	8.7
	To play games online	70	16.1
	To upload photos and pictures	44	10.1
8	What is your perception of using Facebook as a teaching tool in this university?		
	Strongly oppose	14	7.4
	Somewhat oppose	18	9.5
	Neutral	119	62.6
	Somewhat favour	21	12.1
	Strongly favor	16	8.4

Table 3 shows that more than half of the participants (76.7%) have a game online account, (23.3%) do not have a fun online account because (55.8%) say it is a waste of time, and (52.5%) it can be addictive (74.1%) of the participants who play the Game online just once a day for 2 hours, and (41.6%) start playing it at 6 am, 21% do Game online because they are bored.

Table 3. Frequencies and Percentages of Participants' Game Online

No	Statement	<i>f</i>	%
1	Do you own a Game Online Account		
	Yes	158	76.7
	No	48	23.3
2	Reasons for not using Game online		
	I am computer illiterate, so I do not know how to use Game online	18	20.9
	It is a waste of time	48	55.8

No	Statement	<i>f</i>	%
	It can be addictive	45	52.5
	It disrupts my concentration on my study	33	38.4
3	How often do you open your Game online in a day?		
	One time	117	74.1
	Two times	41	25.9
4	How long do you usually stay online with your Game? (hrs)	2.3 ± 1.52	
5	What time do you usually play your Game online in the morning?		
	3 am	1	1.8
	4 am	3	5
	5 am	2	3.6
	6 am	21	37.9
	7 am	23	41.6
	8 am	9	16.3
	9 am	25	45
	10 am	23	41.6
	11 am	7	12.6
6	How many Game online friends do you have?	Range: 1 – 1001 Average: 101.5	
7	What are your reasons for using Game Online?		
	To expand my network of friends	66	10.6
	To keep in touch with family and relatives	120	19.3
	To kill my boredom	136	21.9
	To lighten my clouded mind	84	13.5
	The games are challenging	68	11
	To earn extra income	17	2.7
	To gain acknowledgment from fellow game onlineers	30	4.8
8	What is your perception of using Games Online as a teaching tool at this university?		
	Strongly oppose	35	18.8
	Somewhat oppose	22	11.6
	Neutral	77	40.5
	Somewhat favour	30	15.8
	Strongly favor	24	12.6

Table 4 shows the levels of Facebook addiction, online game addiction, and physical health scores, which are summarized below. Overall, Facebook addiction is low (Mean= 1.83, SD=.19). Game online addiction is moderate (Mean= 2.43, SD= .46). Physical health is moderate (Mean=2.45, SD=.42). Facebook addiction has the lowest level of these three levels.

Table 4. Level of Facebook Addiction, Game Online, and Physical Health

	Mean	Std. Deviation	<i>f</i>
Facebook Addiction	1.83	.19	6
Game online Addiction	2.43	.46	16
Physical Health	2.45	.42	16

Table 5 shows the relationship between Facebook addiction, games online, and physical health. The correlation results showed a significant positive correlation between Facebook addiction and physical health ($r=.32$, $p<0.05$). A significant positive correlation exists between online games and physical health ($r=.19$, $p<0.05$).

Table 5. Relationship between Facebook Addiction, Game Online, and Physical Health

	Mean	Facebook Addiction	Game Online	Physical Health
Facebook Addiction	Pearson Correlation	1	.318	.328
	Sig (2-tailed)		.539	.525
	N	6	6	6
Game Online	Pearson Correlation	.318	1	.196
	Sig (2-tailed)	.539		.466
	N	6	16	16
Physical Health	Pearson Correlation	3.28	.196	1
	Sig (2-tailed)	.525	.466	
	N	6	6	6

DISCUSSION

The research results show that Facebook addiction is low level, games online moderate level, and moderate level of physical health. According to the development of the Bergen Facebook Addiction (BFAS), the level of Facebook addiction was low (Mean=1.83, SD;.19). Most of the participants in this study had a low level of Facebook addiction because they used Facebook for one to two hours a day and are busy with their school work and school activities. Another reason is that most of the participants in this study were male (60.7%).

A survey by Yaman (2016) found that the analysis of the male students' mean scores showed that their higher scores were significantly higher than those of the female students. However, because the score is still low, the consideration is that male students should not be qualified as Facebook addicts. A similar finding to this study from Folaranmi (2013) reveals a low level of Facebook addiction, particularly among university undergraduates in private universities.

Based on the Game Addiction (GAS) instrument finding that the game level was at a moderate level (Mean=2.44, SD=.46). Most of the participants in this study had a moderate level of the Game online because more than half of the study participants were male (60.7%).

Like in Hastings's study, more than half of the participants are male (88%). However, in this study, most students are addicted to games online. This study does not have the same result on the online game level as the previous one because, in this study, most of the students play games online for just 1 to 2 hours a day, and they have no time to play games online because of the class schedule and activities. According to Xu et al. (2012), there are several preventions in reducing competition online addiction, such as education and attention-switching activities.

In addition, the Physical Questionnaire (PHQ) results reveal that the study's level of physical health is moderate (Mean= 2.45, SD=.42). Most of the participants in this study have a moderate physical health level because they are not addicted to Facebook and online games.

In a survey by Zamani et al. (2009), there was a significant positive correlation between game addiction and physical and mental health in physical health, anxiety, and sleeplessness. From this study, we can conclude that online game addiction can cause physical health.

There was a significant positive correlation between Facebook addiction and physical health ($r=.328$, $p<0.05$); this can explain that Facebook addiction positively impacted physical health. Facebook addiction had a positive effect on physical health because most of the participants in this study were not Facebook addicts. A survey from Asante and Nyarko (2014) showed that excessive Facebook use had physical and musculoskeletal health effects on students. This study's results are similar to Brailovskaia & Margraf (2017); Facebook addiction was significantly positively related to physical health. In this study, the students are not addicted to Facebook because they are active in this university's extracurricular activities.

There was a significant positive correlation between Games online and physical health ($r=.196$, $p<0.05$); this can explain why games online harm physical health. Most of the participants in this study have a moderate level of online gaming, affecting their decrease of physical health. This study has a different result from Zamani et al. (2009). There was a significant positive correlation between game addiction and physical health and mental health in physical, anxiety, and mental health.

CONCLUSION

This study found that overall, Facebook addiction was low, Gaming online was moderate, and physical health was moderate. Also, there was a significant positive correlation between Facebook addiction and physical health and a significant positive relationship between Gaming online and physical health.

Overall, from this study, we can see and understand that Facebook addiction positively impacts physical health if students are not on Facebook addiction. On the other hand, Facebook addiction will affect a student's physical health. The best way to prevent students from Facebook addiction is to make them busy with school activities. Game online hurts physical health. The longer we play the game online, the more physical health problems we will have. Say no to Facebook Addiction and games online. These two activities will have an impact on your physical health.

LIMITATION

Some limitations of this study should be acknowledged. This study adopted a correlational approach using a small sample of Indonesian students. Therefore, the findings may only partially apply to other sociocultural contexts and countries. Further research in other populations is recommended.

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