

Study of PUBG Addiction Level Among University Students

Imran Djafar¹, Andrew Ridow Johanis M², Suci Ramadhani Arifin³

^{1,3} Departement of Informatics, Dipa Makassar University
² Department of Entrepreneurship, Dipa Makassar University

Correspondence Author: suci.arifin@undipa.ac.id

Article Info :	ABSTRACT
<p>Article History : Received : 12 Dec 2022 Revised : 12 July 2023 Accepted : 20 July 2023 Available Online : 12 August 2023</p> <p>Keyword : Online Game, PUBG, Addiction, University, Indonesia</p>	<p><i>Player Unknown's Battleground (PUBG) is one of the most popular and successful games globally and become very popular among the youths in recent years. The number of active players continues to increase globally, even reaching 100 million players every month. Of this number, the second country in the world that has monthly active players is Indonesia. Recent academic studies and statistical research reveal that game addiction among college students has shown an increasing trend, and will likely increase in the future as well. This study was conducted to find out the level of addiction of PUBG especially for at the Dipa Makassar University students. PUBG Addiction Test (PAT) was used to measure the level of PUBG addiction among young adolescents. The results of this study indicate that most of the respondents, or 46.0% of respondents belong to the category of low-level addiction, followed by those who are in the moderate-level category (44.9%). Respondents who are included in the high level category are only a small portion of 8.9%.</i></p>

1. INTRODUCTION (11 PT)

PlayerUnknown's Battleground (PUBG), an online multiplayer battle royale game developed and released by PUBG Corporation, is one of the most popular and successful games globally and become very popular among the youths in recent years (Diah *et al.*, 2021; Sen *et al.*, 2021). The number of active players continues to increase globally, even reaching 100 million players every month. Of this number, the second country in the world that has monthly active players is Indonesia (Sung and Umar, 2020).

This phenomenon makes PUBG not only used as a means for entertainment or just fill in spare time but turns into a need that is inherent in the daily lives of the players (Saban, Umasugi and Buamona, 2020). Although this is only a factor of entertainment but not necessarily everything is fine. Eventually the players become addicted to the game which can hinder their quality of life (Tamilselvi and Bhuvanawari, 2020). Recent academic studies and statistical research reveal that game addiction among college students has shown an increasing trend, and will likely increase in the future as well (Bekir and Yildirim, 2018).

There are very limited studies of PUBG addiction level. However, there is already some relevant research within this area, eg, the impact that gaming platforms like PUBG can have on an individual's mental health (Aggarwal *et al.*, 2020; Zul Kamal and Wok, 2020; Sunil, Sharma and Anand, 2021), the psychosocial impact (Mamun and Griffiths, 2019), PUBG-related suicides. In this study, measuring PUBG addiction level conducted to determine the topic of further study after knowing the level of PUBG addiction.

This study was conducted to find out the level of addiction of PUBG especially the Dipa Makassar University's students. After knowing the level of student addiction, the direction for further research can be determined.

2. METHOD

The study conducted is a descriptive survey study that uses a quantitative approach. PUBG Addiction Test (PAT) developed by D'Souza et al. (D'Souza, S and S, 2019) was used to measure the level of PUBG addiction among young adolescents. PUBG Addiction Test (PAT) includes 34 question items (Figure 1) divided into 7 variables and its goal is to measure the addiction formed in PUBG in three levels: low, moderate and high. Each variable briefly conceptualized in the Table 1. Answers are available in the form of a Likert scale, ranging from 1 to 5, where 1 means strongly disagree, 5 means strongly agree. Scores ranged between 20-49 in the questionnaire indicating a low level of addiction, between 50-79 indicating a moderate level of addiction and from 80 to 100 indicating a high level of addiction. The survey was conducted online and distributed randomly to the Dipa Makassar University's students. Only students who have experience playing PUBG can fill out and complete PUBG Addiction Test (PAT). The data were then analyzed using SPSS. A total of 198 respondents were willing to provide feedback to the online survey conducted. Reliability measure of $\alpha = 0.91$ was found.

Table 1. PUBG Addiction Test (PAT) Variable Definition

Component	Definition
Disengagement	When the individual withdraws his/her involvement in a social activity, amidst people or in a group due to usage of PUBG.
Lack of control	Due to the use, the performance or productivity of the individual seems to be affected, they find it difficult to cut down the usage and spend a lot of time thinking about games even when they are not playing, or planning when they can play next.
Excessive use	Being secretive about the use and overindulgence of usage causing disturbance to normal routine lifestyle.
Obsession	Intense passion towards the game and no track of time played, feeling compelled to play more and search more items in the game.
Distress	Playing excess causes manifestations of anxiety and sorrow in the individual when not able to play.
Escapism	Using PUBG as a source to escape from reality, forget about personal problems, or to relieve uncomfortable feelings such as guilt, anxiety, helplessness or depression.
Over-enthusiasm & Impulsive use	The individual has an excessive involvement and this causes unwanted behavior patterns in the individual and also the individual cannot control the usage and does not pay concern over the consequences.

Table 2. PUBG Addiction Test (PAT) (D'Souza et al.)

Sl. No.	Original No.	Statement/Item
C1: Disengagement		
1	07	I get frustrated when I cannot finish the PUBG game
2	08	I have less time to sleep because I play PUBG
3	14	I have neglected work/academics because of PUBG
4	15	I am tempted to play more and more PUBG after each game
5	16	I become restless when I am denied/ unable to play PUBG
6	17	I cannot sleep until I have played PUBG to my satisfaction
C2: Lack of control		
7	33	There has been a decrease in my job performance/ educational performance after I started playing PUBG
8	35	I get stressed out after playing PUBG
9	37	My sleep has been disturbed, after I started playing PUBG
10	41	I have lied about the usage time of PUBG to others
11	54	I lose track of time when I am playing PUBG
12	55	I often think of playing PUBG when I am doing other work
C3: Excessive use		
13	47	I have befriended more by playing PUBG
14	51	The in-game chatting/discussion for PUBG is crucial for me to have control over the game
15	52	I recommend PUBG to people so that we can play together
C4: Obsession		
16	11	I take part in the PUBG-competitions held by College fests/ online companies
17	13	I have lost friendships due to PUBG game
18	18	I have spent money to customize my avatar in PUBG
19	19	I tend to spend time customizing my avatar in PUBG
20	22	My teammates and I have a WhatsApp group to discuss matters/issues of PUBG
C5: Distress		
21	24	I get irritated when someone interferes while playing PUBG
22	25	I feel my hands and body sweating as I survive for longer in the PUBG game
23	29	I feel energetic after winning the game which prompts me to play it again
24	30	I get angry/ frustrated when my friends do not cooperate while playing
C6: Escapism		
25	09	I play PUBG to escape from problems
26	10	I play PUBG to relieve a bad mood (e.g., frustration, anxiety, or depression, etc.)
27	36	I play PUBG whenever I am frustrated or angry
C7: Over-enthusiasm & Impulsive use		
28	01	I feel more connected to friends while playing a PUBG team match with them rather than playing alone
29	02	I have had dreams relating to PUBG
30	03	I use a lot of tricks while playing PUBG
31	04	I collect and save money to purchase in-app items of PUBG
32	26	I play PUBG to pass time
33	34	I have uninstalled and reinstalled the game again and again
34	40	My friends/family have complained about my excessive usage of PUBG

3. RESULTS AND ANALYSIS

Demographic details of the respondents involved in this study can be seen in Table 3. As many as 198 respondents have participated in which respondents are dominated by males at 76% and the rest are females as much as 24%. by age category, 83% of respondents are aged 21 and under and 17% are over 21 years of age.

Table 3. Respondent Demographic Details

Demographics	Frequency (N)	Percentage (%)
Gender		
Male	151	76%
Female	47	24%
Age		
21 and below	164	83%
Above 21	34	17%

Figure 1 shows the classification of addiction levels based on the PUBG Addiction Test (PAT) assessment. A range of scores below 79 in the questionnaire indicates a low level of addiction, between 79-125 indicates a moderate level of addiction and a score above 125 indicates a high level of addiction. Reliability measure of $\alpha = 0.96$ was found.

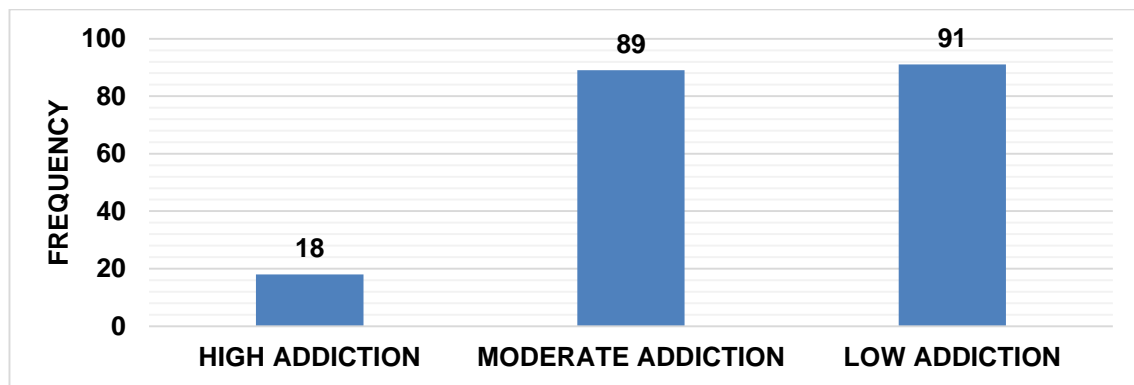


Figure 1. Addiction Level Among Respondents

Based on the findings presented in Figure 1, it is known that most of the respondents or 46.0% of the respondents belonged to the category of low-level addiction, followed by those who were in the moderate-level category (44.9%). Only a small proportion of respondents (8.9%) are included in the high-level category.

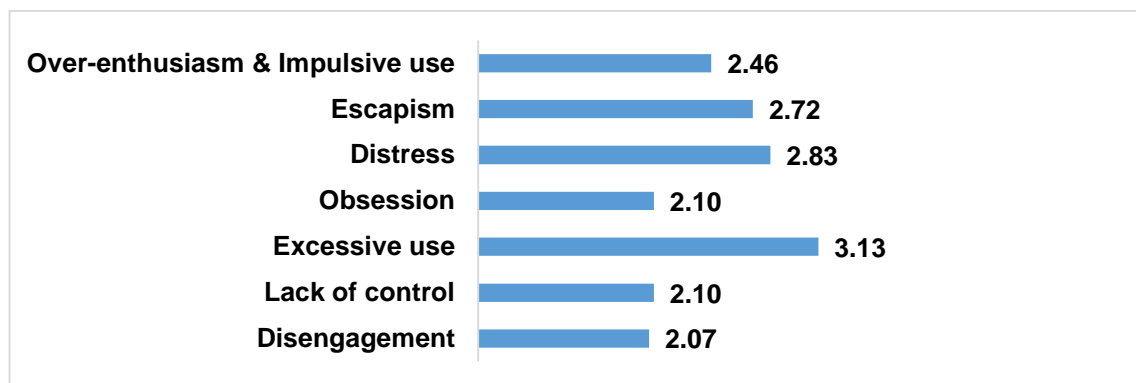


Figure 2. The Mean Scores per Variable of PUBG Addiction Test (PAT)

Figure 2 represented the mean scores of each variable of PAT. Based on the Figure 2, excessive use variable had the highest mean score (3,13) and indicated possible disruption of the normal routine lifestyle. Obsession and lack of control variable had the lowest mean score (2,10).

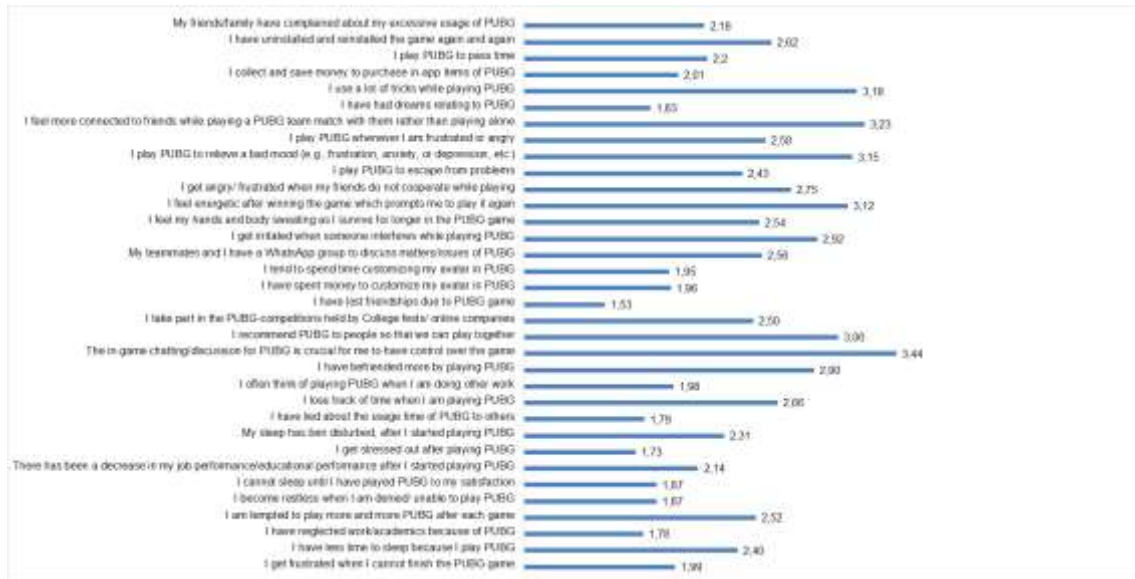


Figure 3. The Mean Scores per item question of PUBG Addiction Test (PAT)

Figure 3 represented the mean scores of each item question of PAT. Based on the Figure 3, “I feel more connected to friends while playing a PUBG team match with them rather than playing alone” item question had the highest mean score (3,23) that indicated that the students feel more connected to friends while playing a PUBG team match with them rather than playing alone and “I have lost friendships due to PUBG game” item question had the lowest mean score (1,53) which means that the students don't lose friendship due to PUBG game.

4. CONCLUSION

The results of this study showed PUBG addiction levels of Dipa Makassar University students. Most of the respondents, or 46.0% of respondents belong to the category of low-level addiction, followed by those who are in the moderate-level category (44.9%). Respondents who are included in the high level category are only a small portion of 8.9%. Excessive use had the highest mean score (3,13) and indicated possible disruption of the normal routine lifestyle. Obsession and lack of control had the lowest mean score (2,10). Further, other interesting areas of research can be undertaken. Collaboration with researchers from social sciences and psychologists can lead to more in-depth and diverse observations of PUBG addiction.

5. REFERENCES

- Aggarwal, A. *et al.* (2020) ‘Study of PUBG’s addictive gaming habit among Indian Youth’, *International Journal of Business and Management Invention (IJBMI)*, 9(5), pp. 27–35.
- Bekir, S. and Yildirim, S. (2018) ‘Adaptation of Questionnaire on Online Gaming Addiction for University Students’, *Journal of Family Counseling and Education*, 3(1), pp. 30–37. Available at: <https://doi.org/10.32568/jfce.403131>.
- Diah, N.M. *et al.* (2021) ‘A Web-based of PUBG’s Weapon Prediction’, in *2021 IEEE 11th IEEE Symposium on Computer Applications Industrial Electronics (ISCAIE). 2021 IEEE 11th IEEE Symposium on Computer Applications Industrial Electronics (ISCAIE)*, pp. 94–99. Available at: <https://doi.org/10.1109/ISCAIE51753.2021.9431785>.

- D'Souza, L., S, M. and S, D. (2019) 'Development and Validation of PUBG Addiction Test (PAT)', *International Journal of Indian Psychology*, 7(1). Available at: <https://doi.org/10.25215/0701.063>.
- Mamun, M.A. and Griffiths, M.D. (2019) 'The Psychosocial Impact of Extreme Gaming on Indian PUBG Gamers: the Case of PUBG (PlayerUnknown's Battlegrounds)', *International Journal of Mental Health and Addiction* [Preprint]. Available at: <https://doi.org/10.1007/s11469-019-00102-4>.
- Saban, A.H., Umasugi, F. and Buamona, Z. (2020) 'ANALYZING STUDENTS' COMPETENCE IN VOCABULARY MASTERY THROUGH ONLINE GAME "PUBG" (PLAYERS' UNKNOWN BATTLE GROUNDS) TO THE 2ND GRADE STUDENTS AT MADRASAH ALIYAH NEGERI 1 SANANA', *JURNAL DODOTO*, 20(20), pp. 55–62.
- Sen, D. *et al.* (2021) 'Prediction of the final rank of Players in PUBG with the optimal number of features', *arXiv:2107.09016 [cs]* [Preprint]. Available at: <http://arxiv.org/abs/2107.09016> (Accessed: 11 September 2021).
- Sung, M.-H. and Umar, W. (2020) "'Virtual" v.s. "Reality"— On Taxing E-Sports Virtual Goods Transaction in Indonesia', *Indonesian Comparative Law Review*, 3(1), pp. 45–62. Available at: <https://doi.org/10.18196/iclr.v3i1.11159>.
- Sunil, S., Sharma, M.K. and Anand, N. (2021) 'Impact of PlayerUnknown's Battlegrounds (PUBG) on mental health', *Medico-Legal Journal*, 89(2), pp. 99–101. Available at: <https://doi.org/10.1177/0025817220981817>.
- Tamilselvi, S. and Bhuvanawari, G. (2020) 'Is pubg ruining youngsters bright career and totally destroying their time?', *TNNMC Journal of Community Health Nursing*, 8(2), pp. 33–36.
- Zul Kamal, N.S. and Wok, S. (2020) 'THE IMPACT OF ONLINE GAMING ADDICTION ON MENTAL HEALTH AMONG IIUM STUDENTS', *International Journal of Heritage, Art and Multimedia*, 3(11), pp. 01–20. Available at: <https://doi.org/10.35631/IJHAM.311001>.