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## **Investigating the Impact of PUBG on Academic Performance and Mental Health among Pakistani Teenagers**

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### **Abstract**

The PUBG game holds widespread popularity among Pakistani teenagers; however, concerns have surfaced regarding its potential impact on academic achievement and mental health. Prolonged play may result in migraines, eye strain, and back pain, while violent games could potentially influence harsh speech patterns in young individuals. The decision to ban PUBG has attracted attention due to its perceived violent nature. This research aims to ascertain PUBG's detrimental effects on students' academic performance in Pakistan and seeks to find interventions for addressing PUBG addiction. A quantitative study in Pakistan, with a sample size of 100 responders, aims to assess the game's effects on students' emotions and behavior. Thematic analysis, utilizing an interview guide, will be the final analytical strategy employed in this study.

**Keywords:** PUBG, mental health, behavior

### **Introduction**

Player Unknown's Battlegrounds (PUBG), shorthand for the Forest Royale game developed by PUBG Studios and published by Krafton, gained global popularity with over a billion mobile downloads. In 2021, it sold approximately 75 million copies on Xbox and PCs (Coutinho 2021, Pelurson 2022). The game, influenced by the Japanese movie Battle Royale (2000), introduced

a new gameplay style and popularized the battle royal subgenre. It faced technical criticisms but evolved through Microsoft's Xbox workshop (Qamar, Anwar et al. 2023). PUBG's success led to the emergence of unauthorized Chinese clones. The company organized local competitions and enhanced in-game features for widespread broadcasting, aiming to turn PUBG into a recognized sport (Link, Struening et al. 2001). However, it received criticism, including a fatwa from Aceh Ullama, citing negative effects on teenagers (Maher 2008). The game's total income reached 13.07 billion by May 2022 (Ristova and Angelkova 2022).

PUBG Mobile, developed by PUBG Corporation and distributed by Tencent Games, dominates the gaming industry with its captivating battle royale concept. With detailed settings, lifelike weapons, and intense firefights, it provides a visually striking experience, successfully transferring the excitement of the original PC version to smartphones. The game fosters social connections through teamwork, global player interactions, and dynamic terrain changes. PUBG Mobile has become a significant player in esports, hosting tournaments with substantial rewards. However, it has sparked controversy due to its addictive nature, raising discussions on ethical gaming and digital life balance. In summary, PUBG Mobile is a cultural phenomenon, blending action, strategy, and social connection in the mobile gaming landscape.

**Intermediate Students:** pupils completing metric coursework, study alongside FSc (premedical and pre-engineering) and FA (arts) students (Khattak 2012). Struggling in PUBG may adversely affect their academic performance (Fordham 1988).

PUBG has become a major concern in inter-student competition, impacting university students negatively. Reports from parents indicate changes in personalities and behaviors among students engrossed in PUBG.

## **Literature Review**

PUBG impact on individuals varies, influencing behaviors like anxiety and aggression (Jennett, Cox et al. 2008; Granic, Lobel et al. 2014). Video games, designed for entertainment, construct diverse virtual worlds with unique rules (Kafai 1998; Nelson 2002; Kaplan and Haenlein 2010). This research probes the link between gaming and enhanced abilities or its absence, employing diverse data collection methods to explore emotional and behavioral influences. Multiplayer games elicit both physical and psychological effects (Achab, Nicolier et al. 2011; Fryling, Cotler et al. 2015; Palanichamy, Sharma et al. 2020). The surge in online gaming correlates

with issues like aggression, isolation, and negative educational impacts (Cooper and Mackie 1986). Gaming habits may disrupt work schedules (Ericsson, Prietula et al. 2007). Despite challenges, gaming contributes to improved interpersonal relationships, a sense of accomplishment, and heightened enjoyment and entertainment.

**Theoretical Framework:** The dopamine hypothesis, linking gaming addiction to a desire for dopamine release, underscores mental health issues during non-play periods (Wilson and Jack, 2014). Initially underestimated, gaming is now lucrative and provides psychological benefits (Brynjolfsson and McAfee, 2011). Advocates emphasize games combining entertainment with skill development, preparing youth for societal contributions (Bailey et al., 2009; Ericsson, 2014; Granic et al., 2014). This study calls for collaboration among educators, game producers, and legislators to create educational games instilling practical, employable skills in students (Wilson and Jack, 2014; Brynjolfsson and McAfee, 2011; Bailey et al., 2009; Ericsson, 2014; Granic et al., 2014).

**Method:**

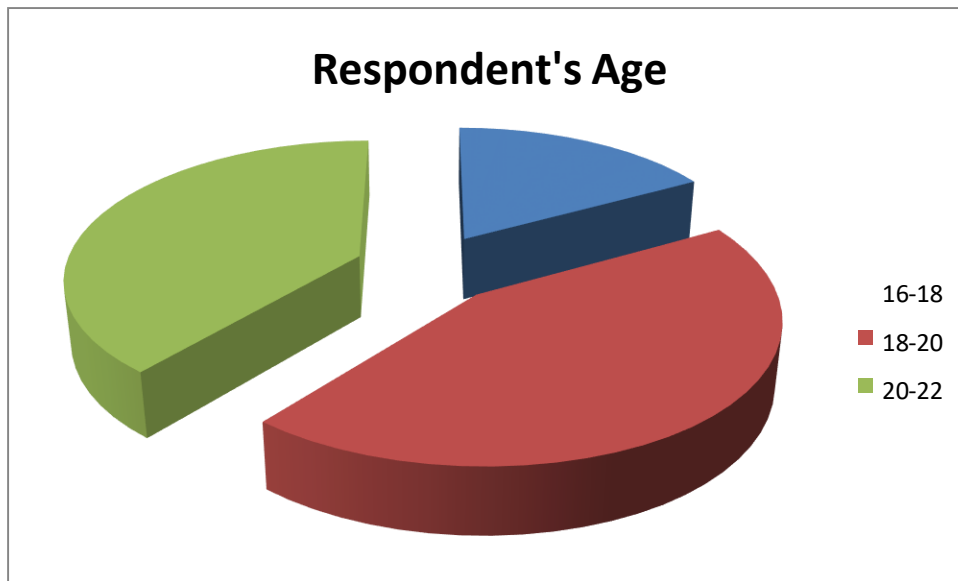
This study utilizes a quantitative research approach to explore the impact of PUBG gaming on the academic success, behavior, and mental health of Pakistani teens. The research population comprises diverse teenagers from various academic disciplines in Pakistan. Using a convenient sampling technique, 100 respondents will be selected to provide insights through structured interviews. The data collected will cover PUBG engagement, frequency, duration, academic performance, mental health, and behavioral changes. Ethical considerations involve informed consent, privacy protection, and voluntary participation, with institutional review board approval sought. Thematic analysis will be the primary analytical method, organizing interview transcripts into themes related to behavior, mental health, and academic success. The study focuses on respondents' age, smartphone accessibility, PUBG installation, and active participation in gaming.

## Age of the Respondents

**Table 1: Respondents Age**

Age	Frequency	Percent in Decimals	Percentage
16-18	17	0.17	17.0%
18-20	44	0.44	44.0%
20-22	39	0.39	39.0%
<b>Total</b>	<b>100</b>	<b>1.00</b>	<b>100.0%</b>

**Chart 1: Respondents Age**

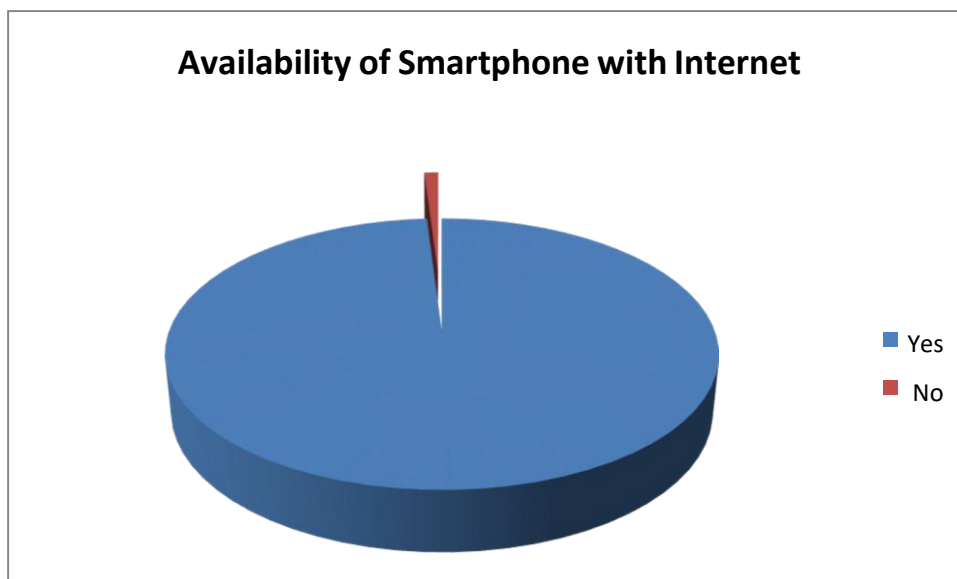


According to the general question, 17% of respondents are between the ages of 16 and 18; 44% are between the ages of 18 and 20; and 39% are between the ages of 20 and 22. Only 17% of PUBG players are between the ages of 16 and 18. The majority of players are between the ages of 18 and 20, then, between the ages of 20 and 22, Since most PUBG players are adults, this is true.

**Table 2: Availability of Smartphone with Internet**

Answers	Frequency	Percent in Decimals	Percentage
Yes	99	0.99	99%
No	1	0.01	1%
<b>Total</b>	<b>100</b>	<b>1.00</b>	<b>100%</b>

**Chart 2: Availability of Smartphone with Internet**



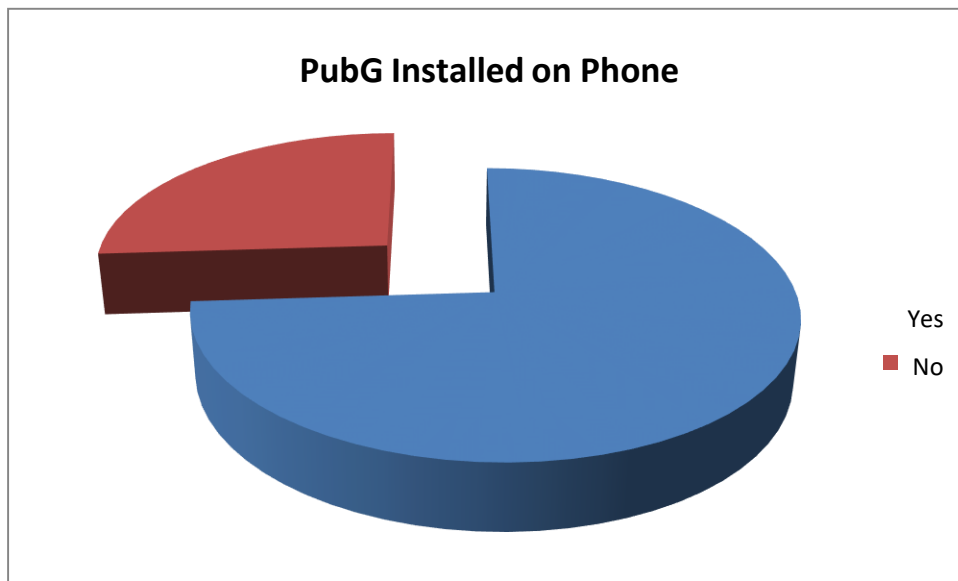
According to the goal, the results show that 99 percent (99) of respondents have smart phones with internet access, while just 1 percent (1) of respondents indicate they do not. They utilize PUBG even though they've never played it when they have a Smartphone with an internet connection.

**PUBG Installed on Phone:**

**Table 3: PUBG Installed on Phone**

<b>Answers</b>	<b>Frequency</b>	<b>Percent in Decimals</b>	<b>Percentage</b>
Yes	74	0.74	74%
No	26	0.26	26%
<b>Total</b>	<b>100</b>	<b>1.00</b>	<b>100%</b>

**Chart 3: PUBG Installed on Phone**



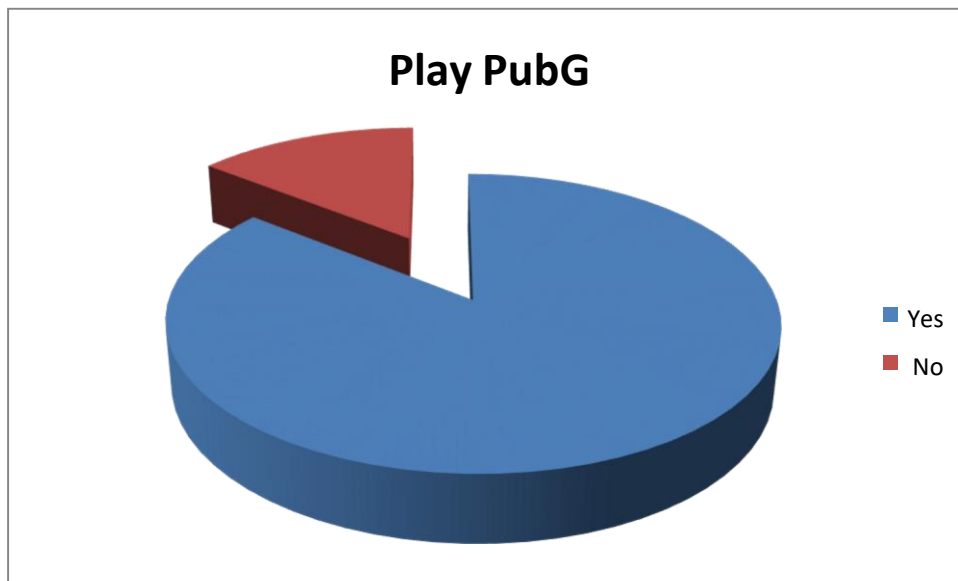
According to the aim, the results show that 74% of respondents (respondents) have a PUBG game loaded on their phone, whereas 26% of respondents (respondents) say they haven't installed a PUBG game on their phone. Therefore, the answer to the question satisfies the goal of the game's popularity among CUSB students. Findings show that the majority of respondents have the PUBG mobile game loaded.

### **Play PUBG**

**Table 4: Play PUBG**

<b>Answers</b>	<b>Frequency</b>	<b>Percent in Decimals</b>	<b>Percentage</b>
Yes	66	0.66	66%
No	11	0.11	11%
<b>Total</b>	<b>77</b>	<b>1.00</b>	<b>100%</b>

**Chart 4: Play PUBG**



According to the aim, the results show that PUBG is played by 85.7% (66) of respondents, while 14.3% (11) of respondents say they don't play the game. Therefore, the results show that the majority of respondents play PUBG. Due to their access to the internet and gaming industry, the majority of respondents play PUBG.

**Findings:**

**Negative Effects of PUBG Addiction on Academic Success:** PUBG gaming addiction can harm academics by consuming too much time, causing missed lessons and incomplete work. Sleep deprivation from late-night gaming affects focus and cognitive skills needed for learning. Psychological effects, like distraction and anxiety, can hinder academic performance. Social isolation may occur as players withdraw from social activities, impacting peer connections crucial for learning. Seeking support, such as counseling or addiction treatment, can help break the cycle and improve academic success.

**Impact on mental health:** PUBG affects kids' mental health. Data explore the link between PUBG and issues like addiction, depression, and anxiety in teenagers. Surveys and clinical evaluations are used to gather data on gaming behaviors and mental health. Indicating a connection between excessive gaming and mental health problems, while others consider moderating factors.

**Physical health concern:** Prolonged PUBG gaming may lead to negative physical health effects. Extended sitting can cause backaches and potential long-term spine issues. Eye strain from prolonged screen time may result in dryness and hazy vision, with the blue light affecting

sleep cycles. Long gaming sessions also pose a risk for migraines, impacting academic performance and overall quality of life. Investigating these issues is crucial for developing preventive measures and understanding their impact on players' well-being.

**Influence of speech pattern:** Playing PUBG raises concerns about its impact on young people's communication. Studies investigate if exposure to violent games leads to aggressive speech and behavior. Methods include surveys, linguistic analysis, and behavioral observations, indicating a potential link between violent game exposure and aggressive speaking tendencies. Results are not definitive, as proving a direct correlation is challenging. Ongoing debates among academics and decision-makers stress the need for understanding this relationship for responsible gaming discussions and age-appropriate content rules. Many factors contribute to changes in teen communication and behavior due to violent games, requiring thorough exploration.

**Conclusion:** The findings suggest that PUBG holds significant popularity among Pakistani youth, with potential consequences on academic performance, mental health, and physical well-being. Prolonged play is associated with declining academic performance, mental health issues, and physical discomfort. Additionally, observed shifts in speech patterns among players hint at a potential connection between violent video game content and altered communication styles. It emphasizes the importance of moderation in gaming behaviors and raises concerns about the broader impact of such games on various aspects of well-being.

**Recommendation:**

1. Raise awareness in schools about responsible gaming to address health and academic concerns.
2. Parents play a crucial role in managing children's gaming time for a balanced lifestyle. Conduct more research on PUBG's long-term effects on academics, mental health, and behavior in different age groups.
3. Policymakers should consider age-appropriate regulations for violent games like PUBG to protect children's well-being.
4. Educational institutions should provide accessible support services for students facing gaming-related academic and mental health issues.
5. Foster communication between parents and teachers to identify and address academic or behavioral problems linked to gaming in student.



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