

## **Impact of Pubg on Student Academic; A Survey Study of Army Public School System**

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### **ABSTRACT**

*In today's digital age, online gaming, particularly Player Unknown's Battlegrounds (PUBG), has become increasingly popular among students. However, there are growing concerns about the potential impact of PUBG on students' academic performance and overall health. The purpose of the study is to investigate the difference in the academic performance of the students, who play PUBG game and those who do not play PUBG game. This survey study used a quantitative methodology, focusing on students from Army Public Schools (APS) in Rawalpindi, Pakistan. A sample of 100 students, comprising 50 students from class 9th (25 PUBG players and 25 non-PUBG players) and 50 students from class 10th (25 PUBG players and 25 non-PUBG players), were selected for the study. The result of the study revealed that there is a significant difference between PUBG players and non-PUBG players with reference to academic achievement but also very surprising. The findings of this study provided valuable insights into the impact of PUBG gaming on students' academic performance. The results may help educators, parents, and policymakers develop strategies to support students in balancing their gaming activities with educational responsibilities effectively.*

**Keywords:** *PUBG Game, Students, Academic Achievement*

### **INTRODUCTION**

Video games have become a pervasive part of modern youth culture, offering immersive entertainment while also raising concerns about potential academic repercussions. PUBG (Player Unknown's Battlegrounds), a highly popular battle royal game, has drawn particular attention for its addictive gameplay and widespread adoption among students (Wang, Chiu, & Ho, 2024). Numerous studies on gaming broadly suggest a notable negative association between problematic gaming and academic performance. Research has consistently identified correlations where excessive gaming behavior is linked to neglect of academic responsibilities such as homework, exam preparation, and study time resulting in diminished academic outcomes (Hu & Fan, 2024). That said, the relationship may be complex and bidirectional; students struggling academically may turn to gaming as an escape or compensatory mechanism. In the context of online game addiction more generally, findings indicate that such compulsive behaviors can erode students' learning engagement behavioral, emotional, and cognitive leading to reduced academic motivation. Regarding PUBG specifically, empirical studies are emerging, including research conducted in Pakistan. A 2023 case study examining school-going children in Swat (Shamozai Zarkhela) and Dir Lower (Ouch)

found that higher engagement in PUBG was associated with lower participation in academic activities and exam performance, as well as negative behavioral and social outcomes (Jamil & Khan, 2023). Another study reported that among university students, the intensity of playing PUBG had a significant negative effect on academic performance with about 11.2% of performance variation attributable to gaming intensity (Gupta & Bhat, 2023). In a similar vein, a study found that PUBG Mobile had a 90% negative impact on English learning achievement among secondary school students, with mean scores falling into the “unsatisfactory” range (Chuane et al., 2023).

Nevertheless, not all evidence is uniformly negative. A study involving over 192,000 adolescents across 22 countries showed negligible differences in academic achievement across differing levels of video-game use in subjects like science, mathematics, and reading (Savic et al., 2023). This suggests that moderate or non-pathological gaming may not inherently harm academic performance. Furthermore, broader literature underscores that video games, especially strategic or action-oriented ones, may enhance cognitive functions such as visual attention, planning, and problem-solving abilities that can support academic success in balanced usage scenarios (Rotondo, 2021).

Excessive use of PUBG among students has been consistently linked with declining academic performance and poor learning outcomes. Students who spend a significant portion of their time playing PUBG often sacrifice essential study hours, skip classes, and neglect assignments, leading to lower grades and weak academic records. A study in Pakistan revealed that students who excessively engaged in PUBG showed reduced classroom participation and deteriorated examination performance, indicating a direct negative influence on academic achievement (Jamil & Khan, 2023). Similarly, research in Indonesia found that the intensity of PUBG playing explained a significant portion of variance in students’ academic achievement, with higher playtime correlating with lower scores (Sari & Naryoso, 2022). In another study, PUBG Mobile use negatively impacted English learning, where students who played excessively recorded unsatisfactory learning results compared to non-players (Julian, 2021). These findings support the broader literature, which highlights that problematic or addictive gaming behaviors are strongly associated with diminished academic motivation and reduced engagement in learning activities (Sun, Sun, & Ye, 2023). Hence, overindulgence in PUBG not only distracts students from their academic responsibilities but also undermines their overall educational progress.

To counter the negative academic effects of excessive PUBG use, students should be encouraged to adopt alternative, balanced activities that promote both learning and recreation. Time management training and digital well-being strategies, such as setting screen-time limits and prioritizing study schedules, can help reduce overindulgence in gaming (Sun, Sun, & Ye, 2023). Universities and schools can introduce structured extracurricular activities like sports, debate clubs, and skill-based workshops that provide healthy outlets for competition and socialization, which are often sought in online games (Jamil & Khan, 2023). Parental guidance and counseling sessions are also essential in helping students replace excessive gaming with productive habits, such as collaborative study groups or e-learning platforms, which have been shown to improve motivation and academic performance (Sari & Naryoso, 2022). Moreover, promoting educational games or gamified learning techniques may channel students’ interest in digital play toward academic gains, leveraging the motivational aspects of gaming while reducing the harmful impacts of PUBG (Julian, 2021). These strategies collectively can support students in achieving better academic outcomes while maintaining a balanced lifestyle.

### **Objective of the Study**

1. To analyze the difference between PUBJ players and non-PUBJ players with reference to academic achievement.

### **LITERATURE REVIEW**

The PUBG game has quickly become the most popular form of entertainment. Addiction to video games is a dangerous, characterized by excessive playtime and disruptions in regular daily functioning. PUBG game addiction refers to violence and has severe side effects on physical health such as blurred vision, weight gain, neck pains, decreased attention, depression, anxiety, and emotional irregularity and so on. In present time there are many problems caused by PUBG game for the youth. This game creates many problems for mental growth of the teen agers. It has many negative effects on the mental health of the students in educational institutions. The purpose of the literature review is to set the direction for the present study. In this respect, researcher reviewed the related literature. After having knowledge of the topic of the study, researcher sought guidance to complete his research.

In the present time, digital changes have brought great changes in man's life. In the past no one could think about digital gaming but now most of over youth know well how to play digital games. Now PUBG has become more popular among the school and college students worldwide. This game has become a cultural reality in every type of society in the world. It effected the different aspects of individual lives. It has increased the interest of its users. It has become worldwide online game. . This online game affects the students around the word (Wang, Chiu, & Ho, 2024). This study investigates the impact of PUBG game on the students' academic performance. A study analyzed that young people play games for extended periods of time and occasionally lose self-control in order to advance in the games and avoid the real world, which they find unsatisfying (Hu & Fan, 2024).

Gaming addiction can lead to mental illness and other issues. The researcher's goal with this study is to determine how regular PUBG game play affects college students and what other video games they prefer and how many hours do students spend playing video games. For years, media opponents such as parents, scholars, and professors have claimed that continuous video gaming is bad, especially for college students (Burgess, Stermer, & Burgess, 2012).

In recent years, Player Unknown's Battlegrounds, or PUBG, has risen to prominence as a highly engaging and immersive online gaming experience. Players play online with the competitors online and they struggle to win in this battle field. They have interest in their victory. They are concerned with the PUBG game (Aksun, 2022). Psychological study is very important for the teachers as well as for the learners. In this respect different games are involved in developing the learning skills of the students. In educational process co-curricular activities play an important role in increasing the knowledge of the students. Online game s has different effects on the learning process of the students. As other physical games do not affect the learning process while on the other hand online games effects negatively on the mind and learning of the students. Online PUBG game affects the eye sight of the students that is the reason for academic bad result of the students. Excessive use of online PUBG games may cause mental disorder that affects the learning habits of the students. Students lose their temperament and do not perform well in their education.

Healthy body has sound mind when students do not take part in the physical activities it affects badly on the learning activities. The problems faced by the students in education are caused by the excessive use of mobile for playing PUBG game (Ifiani et al., 2023).

## **METHOD AND MATERIAL**

### **Research Design**

This study utilizes comparative research design for comparing a PUBG players and Non PUBG players through survey method. To investigate impact of the PUBG game on student academics, this survey study utilizes a quantitative research approach.

### **Population of the Study**

The population of this research study comprised students of all Army Public Schools in Rawalpindi City. A total of 25 Army Public Schools are in Rawalpindi District, with the total students, studying in these schools comprised of about 7000.

### **Sampling and Sampling Size**

The researcher used a convenient sampling strategy, which entails choosing individuals based on their availability and desire to participate, with a specific focus on students in grades 9 and 10. A total of 100 students, 10 from each school who used to play PUB G were the sample for the study. 10 students from each school divide into 5 those who play PUBG game and 5 those who did not play PUBG game.

### **Tools for Data Collection**

In the current study, self-made questionnaire used for data collection aiming to analyze the involvement of students in PUBJ game (PUBGQ) and obtained the results of the students to assess their academic performance.

### **Statistical Analysis**

For data analysis, the researcher used SPSS-25 version. In the present study, both the descriptive and inferential statistics were used. Descriptive statistic was used to describe the characteristics of each participants. While, inferential statistic has followed to compare the PUBG game players and Non players with reference to academic achievements.

### **Descriptive Statistics**

**Table .1**      *Descriptive Result of the Study*

Variable	Do you play PUBG	N	Mean	Std. Deviation	Std. Error Mean
Academic Achievement	Yes	50	4.5800	.18183	.02571
	No	50	4.3000	.02020	.00286

The descriptive statistics present the mean differences in academic achievement between students who play PUBG and those who do not. The results show that students who play PUBG (N = 50) reported a higher mean academic achievement score (M = 4.58, SD = 0.1818) compared to non-players (N = 50) who reported a mean score of 4.30 (SD = 0.0202). The standard error of mean (SEM) is also larger for PUBG players (0.0257) than for non-players (0.0028), suggesting greater variability in academic achievement among

PUBG players compared to non-players. These findings indicate that, on average, PUBG players in this sample performed better academically than non-players. However, the relatively higher standard deviation among players reflects that their academic performance varies more widely, while the non-players' scores are more consistent.

### Testing of Hypothesis

H<sub>A1</sub>: Significant difference exists between PUBG players and non-PUBG players with reference to academic's achievement.

**Table. 2** *Independent Sample t-test*

Levene's Test for Equality of Variances		t-test for Equality of Means							
	F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	11633549735581560.000	.000	10.82	98	.000	.28000	.02587	.22866	.33134
Equal variances not assumed			10.822	50.210	.000	.28000	.02587	.22804	.33196

The independent sample t-test was conducted to compare the academic achievement between PUBG players and non-PUBG players. The results indicate a significant difference in academic achievement between the two groups. When assuming equal variances, the t-test yielded a t-value of 10.822 with 98 degrees of freedom, showing a statistically significant difference ( $p = .000$ ) with a mean difference of 0.28000. When not assuming equal variances, the results remained significant with a t-value of 10.822 and 50.210 degrees of freedom ( $p = .000$ ), indicating a mean difference of 0.28000. The 95% confidence interval for the difference in means ranged from 0.22866 to 0.33134 when equal variances were assumed and from 0.22804 to 0.33196 when not assumed.

### DISCUSSION

The basic aim of the study is to compare the PUBG player and non PUBG player regarding the impact of PUBG upon students' academic. Current study findings suggest that the students who play and don't play have significantly difference between the academic achievements. The students, who do not play online PUBG game have higher academic performance and achievements as compared to students, regularly playing online PUBG game. It means that playing online PUBG game has the potential to cause addiction in students, which has detrimental effects on the academic achievement and performance of students. This finding of the study is similar to the study of Jamil & Khan (2023) revealed that students who excessively engaged in PUBG showed reduced classroom participation and deteriorated examination performance, indicating a direct negative influence on academic achievement. Similarly, another research found that addiction of playing video games caused mental health problems like feeling very worried or sad, as well as physical issues like getting headaches and having trouble sleeping (Ferhana Shabih's et al (2021). Furthermore, a study analyzed that research in Indonesia found that the intensity of PUBG playing explained a significant portion of variance in students' academic achievement, with higher playtime correlating with lower scores (Sari & Naryoso, 2022). In another study, PUBG Mobile use negatively impacted English learning, where students who played excessively recorded unsatisfactory learning results compared to non-players (Julian, 2021). These findings support the broader literature, which highlights that problematic or addictive gaming behaviors are strongly associated with diminished academic motivation and reduced engagement in learning activities (Sun, Sun, & Ye, 2023). In light of the above discussion, it is found that too much involvement of students in online games like PUBG have adverse effects on the academic performance and achievement of students and even, it is also reported that addiction of PUBG game also badly affect mental health of students that may lower their learning performance and attention. So, the parents, teachers, and institutes should seriously make a flexible schedules for their children's in order to keep them away from online games like PUBG.

## **CONCLUSION**

Based on the analysis of the collected data and the findings of the research conducted on the impact of PUBG game on students' Academic performance for effective research, the researcher studied the academic record of the institution to observe the students' performance. The topic of this study was to investigate the students who play online PUBG game and do not play online PUBG game. Academic achievement, an independent t-test was conducted to test the fourth hypothesis. The findings indicate a significant difference in academic achievement between PUBG players and non-players. It means PUBG players do not perform well in their academics. On the other hand, non PUBG players perform well in their academics. Findings of this researcher are the main concern to address the educational issues. The researcher concluded this research on the basis of the objectives of the research. After the data analysis, it was included that students who play PUBG game have different psychological problems which create problems in the way of learning. This study provided sufficient material for the future. Through this study it was concluded that the students who play PUBG game have not good results on the other hand non PUBG players performed well in their academics.

## **RECOMMENDATION**

1. Given the significant difference in academic achievement between PUBG players and non-players, it is essential to raise awareness about the importance of balancing time spending on mobile gaming and maintaining a healthy balance between gaming and physical activity. Educational institutions can implement programs that encourage students to engage in regular exercise and adopt healthy lifestyle habits to support their overall well-being which leads to academic success.
2. Educational institutions should develop tailored academic support programs for students who are avid gamers. These programs could include time management strategies, study skills workshops,



and academic mentoring to help students balance their gaming activities with their academic responsibilities and improve their overall academic performance.

3. Schools and parents can educate students about the importance of setting limits on gaming time, prioritizing academic commitments, and maintaining a healthy lifestyle to ensure that gaming does not negatively affect their academic achievements.
4. Encourage students to develop effective time management skills to balance their gaming activities with academic responsibilities. Providing workshops or resources on time management techniques can help students allocate sufficient time for studying, gaming, and other activities, promoting a more balanced lifestyle.
5. Continuously monitor and evaluate the impact of gaming on students' academic performance through surveys, assessments, or follow-up studies. This ongoing evaluation can provide valuable insights into the effectiveness of interventions, identify trends, and guide future strategies to support students in achieving academic success while engaging in gaming activities.
6. Encourage open communication between parents and students regarding gaming habits and academic priorities

### **Conflict of Interest**

The researcher has no conflict of interest.

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