

Impact of Playing PUBG on Emotional Intelligence among Indian College Students

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ABSTRACT

Covid-19 pandemic was a period of distress and witnessed a great shift in virtual entertainment use. The surge in playing online games grew out of a need to connect with friends, peer groups, and family leading to behavioral changes. In India, PUBG mobile had reached the pinnacle during this time. The current study aimed at exploring the relationship between PUBG addiction level and Emotional Intelligence. The study sample consisted of 104 college students (males 83.65%, females 16.35%, mean age 21.7) pursuing their undergraduate and postgraduate programs across India who were asked to respond to self-report measures of the study variables. Following a cross-sectional approach and through purposive & snowball sampling the data was collected using PUBG Addiction Test and Emotional Intelligence Scale. Pearson product-moment correlation and simple linear regression were employed to analyze the data using SPSS. The results of the study indicated that playing PUBG and emotional intelligence are negatively correlated ($r = -.223$; $p < 0.05$). In addition, findings also indicate a negative predictive value of PUBG addiction on emotional intelligence with a 5 percent variance ($p < 0.05$). This finding can be incorporated into planning emotional intelligence training programs to help manage and express emotions appropriately.

Keywords: *PUBG addiction; Game addiction; Emotional intelligence; College students*

Playing video games has been one among the top engaging leisure activities across the globe and yet has often received less importance to both its positive and negative effects (Griffiths, 2005). In India, around 365 million online gamers were recorded during the financial year 2020. It is estimated that this number would reach 510 million by the fiscal year 2022. Additionally, India has ranked highest in the growth of online game downloads from play stores widened by 165 percent in the middle of 2016 to 2018 according to Statista Research Department (2021).

According to a study conducted by Herodotou, Kambouri & Winters (2011), trait emotional intelligence was negatively correlated with gaming frequency advising that a lower score on trait emotional intelligence is more likely to be associated with more prevalent game use in a sample comprising of 96% male participants. Likewise, there exists a negative relationship

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between self-control and online game addiction while aggression is positively correlated (Kim, Namkoong, Ku & Kim, 2007). Furthermore, the subject across gender reveals no significant difference between gaming addiction and emotional intelligence (Krishnamoorthy & B, 2021). Another study by Hu and Xi (2019) aimed at finding out whether the elements in game have an influence over the players' emotions and showed that even small changes in game elements had a potential to affect their experience and emotions. Low gamers (three hours per day) reported greater life satisfaction and prosocial behavior compared to no gamers and high gamers (zero hour and >3 hours per day respectively) (Carissoli & Villani, 2019). In short, there is evidence that addiction to online gaming has a serious impact on individuals on a wide range. Having been said that, Player Unknown's Battlegrounds (PUBG) was the most played video game involving 34 million players every day (Navani, 2021) in India. As a result, it can be assumed that being "addicted" to playing PUBG may have an impact on one's emotional dimension of the personality.

Addiction in the literature has been classified into two basic kinds; the first one is defined as substance addiction or abuse and the second as behavior-based addiction (Erden et al., 2009). The former describes a dependency on coffee, drugs, and alcohol while the latter includes behaviors performed repeatedly impairing one's body, behavior, and social adaptation skills. With this view, addiction can be thought about as a condition affecting behavioral, mental, and physical aspects (Bekir & Celik, 2020).

Player Unknown's Battlegrounds

PUBG is a multiplayer battle royale genre played online. Inspired by the Japanese movie "Battle Royale" PUBG Corporation developed and published this game which brings together survival, exploration and hunt for items to survive the game with "Last man standing" game play (Souza et al., 2019). The game accommodates upto hundred players who alight on an island from parachutes and start hunting for weapons to kill other players while safeguarding themselves from being killed (Devasia, 2019).

Emotional Intelligence

Emotions have a significant role to play in everyone's life (Alzoubi et al., 2021). Social activities like communication, learning, perception and decision making and human physiological health are greatly affected by both positive and negative emotions. Conceptualized from the concept of emotions is emotional intelligence defined as "the ability to perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth" (Mayer & Salovey, 1997: 5). Salovey and Mayer (1990) have defined emotional intelligence as a subtype of social intelligence and that it involves a capability to regulate one's own and others' feelings and emotions, to distinguish and use them as a guide to one's thinking processes and acting.

Realizing the association between various online video games and emotions, the current study aimed at determining the relationship between playing PUBG and emotional intelligence. Additionally, the study also aimed to find out whether playing PUBG has an impact on emotional intelligence among college students.

METHODOLOGY

Participants

Following cross-sectional research design and purposive & snowball sampling method, the data was collected from 104 college students (Male = 87; Female = 17) pursuing Bachelor's

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degree. The age range of the participants was between 18 to 25 years (Mean Age= 21.7) hailing from across India.

Measures Used

PUBG Addiction Test (PAT): The test developed by D'Souza et al., (2019) consists of 34 items with a five-point Likert scale and includes seven sub-scales namely disengagement, lack of control, excessive use, obsession, distress, escapism and Over-enthusiasm & Impulsive use. The total score ranges from 34 to 170 with high score indicating high addiction to PUBG. The Cronbach's alpha of the test was found to be 0.912.

Emotional Intelligence Scale (EMS): The EMS developed by Hyde and Dethe (2001) consisted of 34 items responded on a 5 point rating scale (5= strongly agree; 4= agree; 3= neutral; 2= disagree; 1= strongly disagree). It includes 10 sub-scales namely self-awareness, empathy, self-motivation, emotional stability, managing relations, integrity, self-development, value orientation, commitment and altruistic behavior. The total score ranges from 34 to 170; high score indicating high emotional intelligence. The split-half reliability co-efficient of the scale was found to be 0.88 with face validity and content validity established. The reliability index indicated high validity of .93.

Procedure

A google form was prepared by the researcher which included consent form, demographic details, and the questionnaires of the study variables with instructions circulated via WhatsApp and email. College students who engaged in playing PUBG were identified and the purpose of the study was explained to them. These participants were then given access to the google form. The responses collected was downloaded as an excel sheet and consolidated for further analysis using SPSS.

Statistical Analysis

The data was analyzed using descriptive statistics namely mean and SD. Further, person product moment correlation and simple linear regression was employed to determine the association between the variables and the impact of playing PUBG on EI respectively.

RESULTS

Table 1 Demographic Details of the Participants

Demographic Detail	Groups	N	%
Gender	Male	87	83.65
	Female	17	16.35
Age	18-25	104	100
Degree Pursuing	Bachelor's Degree	104	100
PUBG Rank	Bronze	1	.96
	Siler	2	1.92
	Gold	16	15.38
	Platinum	13	12.5
	Diamond	13	12.5
	Crown	30	28.85
	Ace	28	26.92
	Conqueror	1	.96
Mode of Play	Single	7	6.73
	Duo	4	3.85
	Squad	79	75.96
	Single, Duo and Squad	14	13.46

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Table 1 shows the gender, age, degree pursuing, PUBG rank and preferred mode of play of the study participants (N= 104). Of the total sample, 87 were male and 17 were female participants whose age ranged from 18 to 25 years pursuing under-graduation programs. The participants' rank in the game ranged from bronze (lowest) to conqueror (highest); in that majority of them were towards top ranks, i.e., 30 participants (28.85%) were in the Crown and 28 (26.92%) were in Ace. The preferred mode of playing PUBG by 79 participants (75.96%) was Squad, 14 participants (13.46%) chose to play single, duo or squad, 7 (6.73%) preferred single and 4 (3.85%) preferred duo.

Table 2 Pearson product moment Correlation and Descriptive Statistics of the variables

	PUBG	Emotional Intelligence	Age
PUBG	1		
Emotional Intelligence	-.223*	1	
Range	34-170	34-170	18-25
Mean	91.31	130.58	21.7
SD	17.155	14.984	3.09
N	104	104	104

* $p < 0.05$

Table 2 depicts Pearson product moment correlation, range, mean, and SD of PUBG addiction and emotional intelligence. The results revealed a significant negative correlation between PUBG addiction and emotional intelligence ($r = -.223$; $p < 0.05$).

Table 3 Summary of Simple Linear Regression of PUBG addiction on Emotional Intelligence

	B	SE	β	T	R	R ²	Adj. R ²	F change
EI	-.194	.084	-.223	-2.305*	.223	.050	.040	5.314*

* $p < 0.05$

Table 3 represents simple linear regression of PUBG addiction on emotional intelligence. It was found that playing PUBG has a significant negative influence on emotional intelligence of the participants ($\beta = -.223$; $p < 0.05$). The findings further indicate a 5 percent variance caused by the predictor on the dependent variable.

DISCUSSION

The study aimed to determine the association between playing PUBG and emotional intelligence among under-graduate and post-graduate students whose age ranged between 18 to 25 years. Further, the study also assessed the predictive value of playing PUBG on emotional intelligence.

A study conducted by Krishnamoorthy and B (2021) revealed a negative correlation between gaming addiction and emotional intelligence; in that tolerance, mood modification, and relapse was significantly negatively associated with sociability, self-control and sociability respectively. Another study showed strong positive correlation between game statistics of PUBG players and internet gaming disorder, generalized anxiety disorder and ADHD (Aggarwal, Saluja, Gambhir, Gupta & Satia, 2020). Further, aggression is positively correlated with online game addiction and self-control displayed a negative correlation (Kim, Namkoong, Ku & Kim, 2008). Multiple linear regression from the same study indicated that the amount of online gaming addiction can be predicted on the basis of aggression and other personality traits.

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The current study confirmed a significant negative relationship between playing PUBG and emotional intelligence and also established that playing PUBG has a negative influence on emotional intelligence causing five percent variance. Yet, researchers have also found that video games can help individuals in evaluating, expressing and managing emotions when included as part of training programs on emotional intelligence (IANS, 2019).

CONCLUSION

Although there are mixed results regarding the effects of playing PUBG on emotional intelligence, during the Covid-19 pandemic the number of PUBG phone players and the number of play hours increased which may have caused a negative influence on the respondents' emotional intelligence.

Limitations

The study was conducted with small sample size because PUBG was banned in India during the time of research and it did not permit further data collection.

Implications

Since the study hinted a significant negative relationship between playing PUBG and emotional intelligence, and that playing PUBG has a negative predictive value, care should be taken in future while planning interventions that could involve video games and college students receive appropriate guidelines regarding their usage of online video games.

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Conflict of Interest

The author(s) declared no conflict of interest.

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