

## NEGATIVE EFFECTS OF PUBG PLAYING ON VERBAL AGGRESSION OF YOUTH AMID COVID-19

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### ABSTRACT

*This study was an endeavor to find the relationship between Pubg playing, a famous violent video game, and the trait verbal aggressiveness by employing a self-reported questionnaire within the given framework of The General Aggression Model (GAM). It was also an attempt to find and compare the frequencies of Pubg playing between before and during the first covid-19 lockdown among the youth. The sample consisted of youth as they were more prone to play violent video games. Purposive sampling was done based on convenience because of lockdown. The results showed a significant relationship between Pubg playing and the trait verbal aggressiveness as expected. Likewise, the comparison of frequencies of Pubg playing between before and after covid-19 lockdown indicated a sharp increase in Pubg playing after the covid-19 lockdown. Both the results were also endorsed by the responses of the mothers interviewed, according to whom the frequency of Pubg playing increased among the children during lockdown that in turn increased the trait VA among them.*

**Keywords:** General aggression Model, PlayerUnknown's Battlegrounds(PUBG), Verbal aggressiveness, Covid-19.

### INTRODUCTION

No one knew till December 2019 that the pneumonia outbreak in Wuhan, China, would usher the world to years engulf in the benightment of contagion covid-19. This deadly virus has swept across the globe changing the scenario within months by making the whole of humanity vulnerable. Till now more than millions of people have died and the no of affectees cross billions. The world has been hit by three consecutive waves of contagion where the strains of the virus keep mutating by becoming more powerful, transmissible, and catastrophic. Though different WHO-approved vaccination has been introduced in the world market by different countries, it is too early to take corona as casual as pneumonia.

During the first wave of coronavirus, life had literary come to a halt across the globe where authorities imposed lockdown and travel restriction in compliance to control the contraction of the pathogen corona. Moreover, social and religious gatherings had been banned, educational institutions, malls, factories, and almost all types of businesses were also shut down in wake of coronavirus covid-19. During the second and third waves, however, the majority of the world countries have decided not to impose lockdown for the fear of economic crisis. Pakistan is also among one of them. Instead of complete lockdown, Pakistan has imposed smart lockdown in affected areas only. Meanwhile, the intermittent closing and opening of educational institutions and restriction of outdoor activities have mostly affected the youth. Consequently, they got stuck at home where a majority of them are reported to have been indulged in the craze of playing online videogame Playerunknown's Battlegrounds, shortly known as PUBG, ever since the first lockdown.

PUBG is a violent video game having a lot of violent content. PUBG belongs to the "Battle Royale" subtype of first shooter game that had been developed and marketed by a small Korean company "Blue Moon" (Dadgee & Philips, 2019). Soon after its inception in 2017, PUBG had become viral instantly taking the world by storm. This is a multiplayer game in which approximately a hundred players parachute themselves on a deserted island where they have to indulge in a battle of survival by searching for weapons without being killed. The surviving players are forced to encounter each other with the passage of time as the safe area become decreases and eventually, the last surviving player or team gain victory along with experience and bonus points.

The availability of PUBG on smartphones has made it accessible from every nook and cranny of the world. According to Al-Mansour (2019) quality graphics, new challenges, ease to access, easy control system, and live social interaction among the players are some of the marking strategies behind the success of PUBG. The live communication includes live text chat, in-game team voice chat, and proximity voice chat. With the help of the proximity voice chat feature, any of the hundred players can speak to one another in real-time as long as they are in proximity of each other in the game world. The PUBG players use in-game voice chat to exchange thoughts and ideas, to formulate strategies and tactics necessary to fight against the opponents, to cope with different challenges, and to hamper the enemy's concentration during the game. The live communication among the players has made PUBG playing experience more exhilarating. However, during this state of excitement players are reported to become aggressive verbally by threatening, using foul language, and profanity.

The present study is an attempt to investigate PUBG players' verbal aggressiveness during their exposure to the game.

## **Research Hypothesis**

### **Hypothesis1:**

Ho: The frequency of PUBG playing is positively related to the trait of verbal aggressiveness among youth?

Ha: The frequency of PUBG playing is not positively related to the trait of verbal aggressiveness among the youth.

### **Hypothesis 2:**

Ho: The exposure of PUBG playing has increased after covid-19 among the youth.

Ha: The exposure of PUBG playing has not increased after covid-19 among the youth

## **Relationship between violent video game playing and aggression**

The present study is an attempt to investigate the relationship between violent video game playing and trait verbal aggressiveness. A plethora of research in the past has established a close relationship between violent video game playing and VA (Gentile, Bender & Anderson, 2017; Greitemeyer, 2018; Krahe, 2014; Teng et al., 2019; Velez, Greitemeyer, Whitaker, Ewoldson, & Bushman, 2016; Yao, Zhou, Li & Gao, 2019).

According to Anderson et al. (2010), exposure to violent video games not only play a pivotal role in increased aggressive behavior, aggressive cognition and aggressive effect but it is also a causal factor in decreasing empathy and pro-social behavior. Research by Shao and Wangon (2019) on adolescents' exposure to violent video games found that violent video game playing has direct effects on an individual's aggression having good family environment, whereas, it affects both, directly and indirectly, the individual's aggression with a poor family environment. Video game addiction develops various pathological behavior for instance preoccupation, loss of control, and interpersonal and intrapersonal communication (Lemmens, Valkenburg & Peter, 2011). Moreover, the American Psychological Association task force on violent media has also declared that violent video game addiction increases aggressive behavior, thoughts, and emotions as well as decreases empathy. Furthermore, repeated video game playing is responsible for moral disengagement, dis-inhibition, and increasing the four aggressive traits (physical aggression, verbal aggression, anger, and hostility) (Yao et al., 2019). In research on aggression, verbal aggression is often treated as a subtype, however, according to Infant and Wigely (1986),

“ Verbal aggression is worthy of study in its own right and should be distinguished from other types of aggression in order to understand better its relationship to them and to learn more about verbal aggression itself.”( pg.67)

## **Verbal aggression**

Verbal aggression is conceptualized as a personality trait that predisposes persons to attack the self-concepts of other people instead of, or in addition to, their positions on topics of communication (Infant & Wigely, 2004, pg.61). Strauss and Sweet (1992) define verbal aggression as “a communication, either verbal or nonverbal, intended to cause psychological pain to another person, or perceived as having that

intent. Examples include name-calling or nasty remarks (active, verbal), slamming a door or smashing something (active, non-verbal), and stony silence or sulking (passive, non-verbal)” (pg.3).

According to Beatty and McCroskey (1997), verbal aggression is an inherited trait that is genetically determined by nature and remains persistent throughout our lives. Whereas, Infant, Treling, Shepherd, and Seed (1984), while illustrating different causes of aggression, argue that verbal aggression is the outcome of social learning.

Research on verbal aggression usually uses any of the following methods: natural observation, contrived observation, and self-report on aggressive behavior. Natural setting observation is a non-participant observation where the observer records the behavior of a group for example school children at regular intervals. This process provides ideal natural settings for the observation of events prior to the aggressive act. Nonetheless, sometimes the natural observations are not as productive as the relevant act of observation may or may not occur during the observation period. Subsequently, some studies shift to contrived observations to evoke aggressive responses by the subjects both in natural and laboratory situations for instance using a car to block an intersection, and using the amount and timing of horn honking as the measure of aggression, exposing an individual to a frustrating phone call, etc. The laboratory situations include subjecting the respondents to an abusive confederate, administering controlled levels of alcohol, giving subjects a frustrating game, etc. (Strarus & Sweet, 1992).

In the area of verbal aggression research, a plethora of researchers uses the self-report questionnaire to measure verbal aggression.

## **THEORETICAL FRAMEWORK**

The present study has been conducted within the given framework of Anderson and Bushman’s (2002) General Aggression Model (GAM). According to GAM long-term exposure to violent media (violent video game playing) results in building aggressive personalities. GAM states that repeated video game playing acts as a constant learning process that consequently develops automatizes and reinforces aggression-related knowledge structures. These aggression-related knowledge structures include aggressive belief and attitudes, aggressive perceptual and expectation schemata, aggressive behavior scripts, and aggressive desensitization. Consequently, these aggression-related knowledge structures affect players’ personalities in such a way that they become more aggressive. In a nutshell, GAM purposes that the frequency of playing violent video games directly leads to an increase in aggression (Anderson & Bushman, 2002; Anderson, 2004; Anderson et al., 2004).

The present study is employing GAM to study the relationship between playing Pubg and the trait of verbal aggressiveness.

### **Verbal aggression scale**

Infant and Wigely (1989) devised a verbal aggression Scale to measure verbal aggression. It is a 5 points Likert-based scale consisting of 20 items, 10 of which are negatively/ aggressively worded items while the other 10 are positively/benevolently worded items. VAS has been widely employed in studies intended to measure verbal aggression since it was devised. According to Bickle et al and Croucher et al (2016), it may be fair to contemplate verbal aggression as a personality trait and VAS, a solid instrument to measure verbal aggression. Initial studies (Infante & Wigely, 1986; Beatty, Rudd & Valencic, 1998; Suzuki & Racer, 1994, etc.) carried out by employing VAS proved it as an authentic and valid uni-dimensional scale to measure the trait verbal aggressiveness. However, according to Levine, Beatty, Limon et, al, confusion may arise regarding the dimensionality of the scale because several factor analytical studies (e.g. Beatty et al, 1999; Infant and Wigely, 1986; Suzuki and racer, 1994) have implored that the VAS is multidimensional. Levin et al (2004), have done substantial testing on the dimensionality of VAS and declared it as a multidimensional scale. So, they suggest using only the aggressively worded items for future studies as they have proved substantial in measuring verbal aggression. While positively worded items should be excluded as they only seem to predict pro-social and non-aggressive communication but not verbal aggression. Both sets of authors agree that future research can either score the factors separately or only score the 10 aggressively worded items to avoid invalid measurement.

## METHODOLOGY:

This research was purely quantitative. Owing to the coronavirus covid-19 pandemic, the usual or required sampling was not possible as all the academic institutions were closed. So, from the accessible population, purposive sampling was done conveniently during the three waves of coronavirus. Some of the questionnaires were filled by the respondents in the face-to-face setting while others were being sent by WhatsApp to the respondents which they filled and then returned to the researcher. The sample included young people ranging from 10 years to 19 years of age. This research was conducted in two phases.

In the first stage, the respondents were given questionnaires. The questionnaire had two parts, the first part was constructed based on 5 points Likert scale ranging from strongly disagree to strongly agree. The first part was meant to measure the trait of verbal aggressiveness. The items of the verbal aggressiveness scale were mainly adapted from Infant and Wigley's verbal aggression scale. According to Croucher et al (2016), in order to avoid confusion regarding the VAS's dimensionality, several studies have used a 10-item version of the scale made up of only the negatively or aggressively worded items (see Anderson & Martin, 1999; Chesboro & Martin, 2003; Martin & Anderson, 1996; Myers & Johnson, 2003). As suggested by Levin et al (2004), only 10 items (aggressively/negative worded) were used in the present study to avoid any ambiguity in the results. Moreover, this version has proved substantial in measuring verbal aggressiveness in several previous studies as mentioned above. The second part of the questionnaire was meant to measure the frequency of Pubg playing before and after the covid-19 lockdown. The respondents were asked how long and how often did they play PUBG in a day. The measurement of PUBG playing was taken separately for before covid-19 and after covid-19. The participants reported how frequently they played Pubg from 1 to 7 and the duration of PUBG playing was noted from 1 to 5 where the numbers have nothing to do with numbers of hours, however, the numbers 4,5,6,7, represents extreme points.

Moreover, the measurements of trait verbal aggressiveness and PUBG playing frequency were completed at the same time by the respondents. In the second phase, mothers of the respondents were interviewed regarding the effects of PUBG playing on the behavior of their children. Total thirty interviewees were selected and their selection was based on convenience and their willingness. They were asked the following questions.

Q1.Should children be given cellphones?

Q2.How long do your children play Pubg during covid-19 lockdown?

Q3.Have you noticed any change in their attitudes and use of language because of Pubg playing?

## RESULT

The first portion of the questionnaire was a scale to measure the trait VA. The VA data was analyzed statistically by using spss software. Regression statics and ANOVA test were run on the data for the purpose of finding the relationship between the frequency of Pubg playing and trait V.A. Fig1 vividly shows that there exists a statistically significant relationship between PUBG exposure and Aggressive behavior. So, the result rejects the null hypothesis ( $H_0$ ) and supports ( $H_a$ ) which emphasizes the positive relationship between the frequency of Pubg playing and the trait verbal aggression. Moreover, it also relates the frequency of PUBG exposure with aggressive behavior. An hour increase in PUBG exposure would increase the aggression level (more than) 1 point on a 5 point scale. 34% of Aggressive behavior is caused by PUBG exposure among PUBG players. . The result is also consistent with the Chory & Cicchirillo (2007) research' result that also showed a positive correlation between the frequency of violent video game playing and the trait of verbal aggression among the players.

In order to get a single frequency of Pubg playing, the ratings of how long and how often were combined together for both before covid-19 and after covid-19 Pubg playing data. The mean value and standard deviation of the frequency of Pubg playing before covid-19 were  $M=3$ ,  $SD=1.09$  while the mean value and standard deviation value of Pubg playing frequency after covid-19 were reported as  $M=4$ ,  $SD=1.37$ .

**Figure: 1**Relationship between frequency of Pubg playing exposure and the trait V.A

| <i>Regression Statistics</i> |                     |                  |                |                |                       |              |               |               |
|------------------------------|---------------------|------------------|----------------|----------------|-----------------------|--------------|---------------|---------------|
| Multiple R                   | 0.58194             |                  |                |                |                       |              |               |               |
| R Square                     | 0.33865             |                  |                |                |                       |              |               |               |
| Adjusted R Square            | 0.33114             |                  |                |                |                       |              |               |               |
| Standard Error               | 0.75752             |                  |                |                |                       |              |               |               |
| Observations                 | 90.00000            |                  |                |                |                       |              |               |               |
| <i>ANOVA</i>                 |                     |                  |                |                |                       |              |               |               |
|                              | <i>df</i>           | <i>SS</i>        | <i>MS</i>      | <i>F</i>       | <i>Significance F</i> |              |               |               |
| Regression                   | 1                   | 25.8580          | 25.8580        | 45.0613        | 0.0000                |              |               |               |
| Residual                     | 88                  | 50.4980          | 0.5738         |                |                       |              |               |               |
| Total                        | 89                  | 76.3560          |                |                |                       |              |               |               |
| <i>DV</i>                    | <i>Coefficients</i> | <i>Standard,</i> | <i>t-State</i> | <i>P-Value</i> | <i>Lower 95 %</i>     | <i>Upper</i> | <i>Lower</i>  | <i>Upper</i>  |
| <i>Aggression</i>            |                     | <i>Error</i>     |                |                |                       | <i>95 %</i>  | <i>95.0 %</i> | <i>95.0 %</i> |
| Intercept                    | 2.6195              | 0.1419           | 18.4640        | 0.0000         | 2.3376                | 2.9014       | 2.3376        | 2.9014        |
| PUBG Exposure                | 0.1030              | 1.0153           | 6.7128         | 0.0000         | 0.0725                | 0.1335       | 0.0725        | 0.1335        |

In order to test the hypothesis that Pubg playing has been sharply increased among the youth after covid-19, the data was tested statistically where the  $t = -6$  and  $p = .0$  that rejects the null hypothesis and showed a strong and significant difference in the Pubg playing exposure between before and after covid-19.

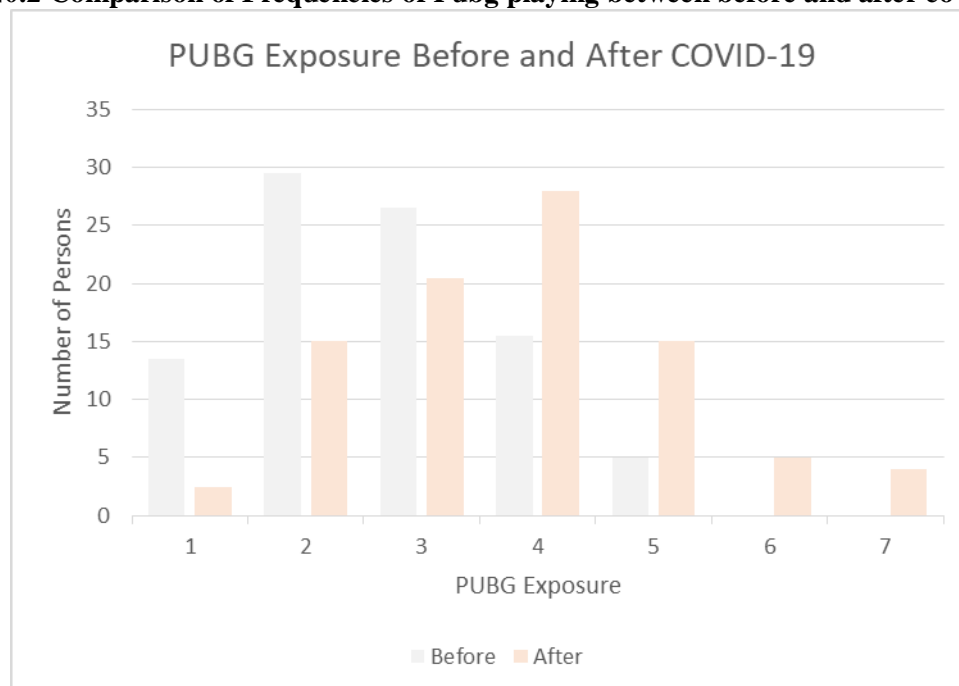
**Figure N0.2 Comparison of Frequencies of Pubg playing between before and after covid-19**

Figure 2 clearly shows a sharp increase in the exposure of PUBG playing among the players after covid-19.

Total thirty mothers of the PUBG players were interviewed. Three questions were asked and their answers were computed into percentages. The first question was whether the children would be given cell phones. According to 40%, mothers, children should be given cell phones as it is the necessity of today's life whilst 60% thought that because the majority of the children possessed cell phones so their children should not be deprived of this facility as well. All (100%) of the interviewees (mothers) accepted that their children played PUBG longer during the covid-19 lockdown than before and they complained that their children were hooked to their mobiles twenty-four-seven during the pandemic break. The last question was regarding whether they perceived any change in the language use and attitude of their children because of PUBG playing. About eighty-five percent of interviewees accepted that there was an evident change in the attitude and language use of their children as they became short-tempered and more aggressive verbally by continuously using profanity and foul language while communicating aloud with their teammates during PUBG playing. The interviewees reported that children had started indulging in playing PUBG to such an extent that they became oblivious of their surroundings.

## DISCUSSION

Nowadays mobile phone is inevitable for young and old alike. In addition to being a necessity, mobile phones are also considered as a symbol of status and sophistication where certain brands and models symbolize high prestige while others are considered as a label of low prestige. This psyche has deeply rooted in the minds of our new generation as everyone seems liable to have smart and expensive cell phones and even parents leave no stone unturned to equip their children with the latest model of smart cell phones. Furthermore, the addition of 3G, 4G along with Wi-Fi has made the internet accessible from every nook and cranny of the world. On top of it, the current pandemic has made parents more conscious about the physical health of their children whilst completely ignoring their mental wellbeing. Consequently, the youth have started spending too much time on the internet, and the majority of them are more inclined to play online video games and Pubg is the most famous one among them.

Amid the waves of coronavirus covid-19, youngsters have been reported to become addicted to PUBG playing as they got plenty of time at home because of the on and off closure of educational institutions and restrictions of outdoor physical and social activities. In this regard, the present research

was done to find the frequency of Pubg playing during waves of corona and its contribution in increasing the verbal aggression in the players.

The result of the present research confirms the general aggression model (GAM) that playing violent video games produces aggressive personalities and it is also consistence with the result of Chory Chyrillio (2007) which states that the frequency of playing a violent video game is directly/positively related to the trait verbal aggression among the players. However, the present research is unique in this regard that it focuses on the most played violent video game (PUBG) to date, amid unusual circumstances (covid-19 lockdown) where players got plenty of time to play it without any interruption as parents have been more interested in keeping their children alive and healthy from the deadly contagion. Hence, the children have become addicted to Pubg playing, and the effects of this addiction on the behavior and mental health of the children are unprecedented.

PUBG, because of its deadly effects on youth, has already been banned in severely countries like China, Jordan, Israel, Iraq, and India. In Pakistan, a suicide case was reported in Lahore during the first lockdown where a young boy aged 16, committed suicide after being stopped by parents from Pubg playing. This news got immediate media attention, after which it was banned for a short period but even then children were reported playing Pubg by using VPN, a feature on the internet that enable the players to access Pubg despite the ban. Nonetheless, the ban had been lifted recently from Pubg playing. However, in December last year, another case of death was reported on media because of non-stop Pubg playing. According to Samaa news, the Pubg player was hospitalized in December 2020. According to the hospital authorities, his veins were ruptured after which he lost sanity as he was playing Pubg continuously for twenty-four hours. According to the doctors he kept talking about what was happening in the game even when he was unconscious. Moreover, recently a case was reported on media about where a PUBG addict opened fire on his family members that killed two persons at the spot while three were injured. The authorities confirmed that the accused tried to recreate a PUBG scene after having a brawl with the family. The accused family used to stop him from playing PUBG.

The present concern of the research was, however, the verbal aggression of the youth that has increased immensely after the covid-19 because of excessive PUBG playing. PUBG is a violent video game where players may battle alone or as a team member for their survival by continuously searching for weapons to defend themselves.

PUBG playing is not only limited to certain age groups, in fact but an entire community of PUBG players has also been developed with members of different ages. PUBG playing is more of pop culture than merely a video game where the players report playing PUBG as one of the most exhilarating experiences of their lives with live communication and chatting. The PUBG community has even developed their own slangs which the outsiders do not understand like NT means nice try, OP used to compliment someone, boom bam refers to anything exciting that can happen, ADS means aim down sensitivity, bait means when a team member becomes endangered, etc. These Pubg slangs are understood by the Pubg community only. The feature of online oral communication among the players is also responsible for the increase of verbal aggression among the players as they use the communicative feature to give directions to teammates and to respond to their opponent's actions. When the game reaches its peak, the players become more excited by feeling an adrenaline rush which in turn makes them more aggressive verbally, therefore, they do not want to tolerate a minor mistake on their behalf or on the behalf of their partners. When a mistake is done, the use of verbal aggression reaches its peak where the players tend to become louder by swearing, criticizing, and threatening the opponents and by directing, blaming, and scolding their teammates. During their interview, several mothers of Pubg players expressed concern about their children who became preoccupied with the game by completely forgetting their surroundings and even skipping their meals. At times it seems like they have got certain kind of mental disorder when they continuously talk, threat, swear and make aggressive gestures while being solely alone. Moreover, The Pubg community includes players as young as 10 years old and as old as 40 years of age. This difference of age is also evident in their use of language during exposure to the game and it, in turn, affects the language of the younger players badly as they tend to be more innocent by using simple language while the elders are more prone to use profanity.

## CONCLUSION

Pubg playing is not that bad if played for a limited time. It can help build leadership qualities in players and it also enhances teamwork, coordination, and decision-making abilities. However, it becomes toxic for the physical and mental health of the players when playing too much. Though Pubg playing was very common before covid-19, it reaches the calamity during the corona waves where the players got plenty of time because of the intermittent opening and closing of educational institutions and restrictions on all types of outdoor activities. This addiction was further worsened by the callous attitude of parents towards the activities of their children. The majority of the students were reported to play Pubg till late at night, therefore, they wake up late. Consequently, this addiction has in turn negatively affected the Pubg players' behavior badly by making them verbally aggressive, short-tempered, violent, and indifferent to their surroundings.

The negligence on the part of the government as it has failed to ban this kind of violent online video contributed to developing the aggressive personalities of the youth. In addition, the parents are also accountable as they only pay attention to the physical health of their children while completely ignoring their mental and psychological needs. Though they have provided cellphones to their children, failed to keep track of their activities.

In the future, this research can be replicated on a larger population with more natural methods like by personal observation or by recording the conversation of the players without being noticed to have a clear picture of verbally aggressive words and phrases during Pubg playing. Furthermore, the PUBG slang and the language used in the chatting among the players during the exposure of the game would also be interesting areas to explore researchers in the future.

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