

Personality Traits as Predictor of Aggressive Behavior in Pubg Gamers. A Comparison between Agreeableness and Neuroticism

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ABSTRACT

Background: PUBG has been criticized for being a violent game and extreme violence can lead to aggressive thoughts, emotions, and behavior which can negatively impact a player's mental health.

Objective: The purpose of the study was to examine the relationship between personality traits (agreeableness, neuroticism) and aggressive behavior among PUBG Gamers.

Design of the Study: A co relational research design and non-probability purposive sampling technique was used.

Place and Duration of the study: This study was conducted from March 2021 to December 2021 in Lahore and Faisalabad.

Sample and Method: A random sample of 210 students, aged between 18 to 125 years (mean age=1.57, SD=.496.) were selected from different private and government academic institutions.

A self-developed demographic sheet was administered along with the Big Five Inventory (BFI) (Goldberg, 1993), and The Buss-Perry Aggression Questionnaire (BPAQ) (1992) were used for assessment. For data analysis, IBM Statistical Package for the Social Sciences (SPSS), Pearson's product-moment correlation coefficient, multiple regression analysis, and independent-sample t-test was used for result analysis.

Results and Conclusion: It was revealed that neurotic (personality trait) is significantly and positively correlated with aggressive behavior, whereas it was negatively and significantly correlated with agreeableness (Personality Traits). The findings will be helpful for Families, friends, teachers, and therapists to manage the harmful impacts of PUBG on gamers having different personality traits

Keywords: Personality Traits, Emotional Regulation, aggressive behavior, PUBG (Player Unknown's Battlegrounds)

Introduction

Online video games have risen in popularity and accessibility since their beginning in the 1990s (Kenneth & Laura, 2014)¹. Players can communicate online, make new friends and initiate dealings that include real or virtual investments. Online games that are entertaining, interactive and actual have become "killer applications" on the Internet and these are the main reasons that some young adults spend hours every day playing these games. Moreover, as online games' fame has grown, so have concerns about their excessive use.

Effect of online games has increased significantly among adolescents and young adults, severely disrupting individuals' functioning (Singh, 2019)². Excessive gaming is causing not only physical but also psychological problems such as aggressive attitude, headache, diminishing eye sight, weight gain or loss and poor performance in studies (Bartel & Gradisar, 2017; Hawi et al., 2018; Satghare et al., 2016)^{3,4,5}. It is also highlighted that those students who playing seven to ten hours, they are more violent.

There are numerous factors that involving PUBG participation such as mobile phone, television, VR box and computer etc. One variable, which account for aggressive behavior levels is neurotic personality. Personality factors played a role in understanding the online game addiction process. The five broad personality traits are extraversion, agreeableness, openness, conscientiousness and neuroticism that have been used to describe human personality⁶. Agreeableness is a personality attribute that refers to a person's tendency to prefer the needs of others over their own. Those who are more agreeable are more likely to be empathetic and enjoy assisting others. Neuroticism is the trait tendency to experience negative effects such as anger, anxiety, self-consciousness, irritability, emotional instability and depression. Neuroticism has been related to aggressive behavior in PUBG players, most likely enabling and maintaining it and neurotic people have a tendency to play more violent video games.

The majority of studies in this field have discovered that violent video games enhance aggressive thoughts, angry feelings, physical sensations and aggressive acts while decreasing empathetic feelings and beneficial activities (Gentile et al., 2017; Hasan et al., 2012; Verheijen et al., 2018)^{7,8,9}. Multiple studies have found a substantial link between Battleground video players and personality features.

Muller et al. (2018) made an effort to comprehend how problematic internet use (PIU) affects personality⁹. The end result showed that PIU had a correlation with elevated stress levels and adjustment disorder symptoms. Agreeableness and neuroticism provided further detail to the connection. (Braun et al., 2016) conducted an online survey with 2891 participants utilizing the Big Five¹⁰. The results showed that gamers with addictions had greater neuroticism scores, and similar findings were seen for non-gamers. The average gamer, in comparison, was found to have few neurotic traits, which in a way suggested that video games are often fun and harmless.

WenWanga (2015) examined the relationships between adolescent dependency on various online activities and personality traits based on the Big Five model¹¹. The results showed a clear difference in personality traits for dependability related to various internet activities. The results showed a stronger correlation between neuroticism and internet addiction in general, with neuroticism scoring higher and conscientiousness lower. However, conscientiousness and poor openness were strongly associated with gaming addiction. Additionally, extraversion and neuroticism were strongly linked to addiction to social networking websites.

Vollmer et al. (2014) came to the conclusion that extraverted and agreeable students reported reduced addiction to video games¹². The findings revealed no significant correlation between students' scores on computer game addiction and conscientiousness or openness to new experiences. The final findings suggested that students who play computer games in the evening are more likely to develop a problem with addiction than those who play in the morning.

Mehroof et al. (2010) focused on the relationship between many personality traits and addiction to online gaming, including self-control, sensation seeking, neuroticism, aggression and anxiety. It was shown that there was a significant connection between personality traits including sensation seeking, neuroticism, state anxiety, aggression, and trait anxiety with addiction to online gaming¹³. Another study examined how online a game has its effect on adolescents' personality. As a result, the researcher discovered a significant difference in the degree of conscientiousness and agreeableness among online game participants. The results also show a significant difference between gender and conscientiousness about Internet Game Disorder. The level of neuroticism also showed a significant variation based just on gender. Additionally, results indicate that participants with a higher risk of IGD scored lower on agreeableness than those with a lower risk of IGD (Kauret et al., 2020)¹⁴.

Ferguson and Dyck (2012) investigated the relationships between personality and aggression using the general aggressiveness and five-factor models, as well as the NEO 5 Assessment (NEO-FFI) expert manual. When the connections between the five major variables were studied, only agreeableness and conscientiousness were shown to be connected with aggressiveness. These finding come back the usage of the GAM to control aggressive populations (Julia et al., 2013)¹⁵.

Additionally, violent and competitive video games are positively connected with physical violence, according to (Dickmeis & Roe, 2019)¹⁶. The study by Johnson et al., (2010) looked at the connections between personality, preferred video games, and gaming experiences. The validity of the PENS, current theories of the motivations and enjoyment of video games, and subgroups of people who might be more sensitive to potentially harmful effects of games are all taken into consideration when interpreting the results¹⁷.

Sneha et al. (2020) focused on variations in three personality variables, namely neuroticism, openness to experience, and agreeableness, between PUBG addicts and non-addicts. Results showed that there was no

statistically significant difference between PUBG addicts and non-addicts in degrees of neuroticism and openness. Additionally, research revealed that PUBG users are less agreeable than non-addicts¹⁸.

Based on the evidence presented above, it may be stated that internet game addiction has developed dramatically in late teenagers, causing serious disruptions in their functioning. Gaming addiction creates not only physiological but also psychological problems. It has been stated that PUBG game addiction has grown drastically in latest days, having a very high degree of negative affective and a low level of compassion and agreeableness among Battleground players causes difficulties with aggressive behavior. Hence, the present study aims to investigate the relationship between personality traits and aggressive behavior among PUBG gamers. Additionally, it is clear that parent-child conflicts have increased due to increased aggression in PUBG gaming addiction, which has grown significantly in recent years. Therefore, further research is required to determine the behavioral patterns of gamers so that effective interventions for reducing addiction can be developed. On the basis of previous study, it is hypothesized:

1. There would be positive relationship between negative personality traits (neuroticism) with aggressive behavior among PUBG Gamers.
2. There would be negative relationship between positive personality traits (agreeableness) with aggressive behavior among PUBG Gamers.
3. There would differences in personality traits and Aggressive behavior on the basis of demographics among PUBG Gamers.

Subjects and Method.

Participants

The convenient sample of the present study (N = 210) were taken from different private and government institutes of Lahore and Faisalabad. The sample comprised both boys (n = 99) and girls students (n = 110) between the age range of 18-25 years with the M = 1.533 years and SD = .509. The students with any physical or psychological disability were excluded in the present study. Those students who were playing game continually 7 to 8 numbers of hours per day was included. Students belong to low, middle, and high socioeconomic status with nuclear and joint family setup.

Measures

Demographic Sheet:

It consists of age, gender, level of education, no. of siblings, birth order, religion, playing hours, gaming center, marital status, social- economic status, father education, father occupation and mother education.

Assessment Tools

Big Five Inventory (BFI)

The Big 5 Assessment is a self-administered questionnaire that evaluates personal qualities. The BFI is made up of 44 questions that are classified into five personality domains (Goldberg, 1993), disagree a lot, disagree a little, neither agree nor disagree, agree a little, Agree a lot In this study, the total BFI score was used to indicate personality. The Major Points are applied in various fields of psychological study in ways that are independent of any one theory's precise assertions (John, O. P., & Srivastava, S. (1999).

Buss-Perry Aggression Questionnaire (BPAQ).

Adult aggressiveness is assessed using the Buss-Perry Aggression Questionnaire (BPAQ). The BPAQ is divided into four variables: physical aggression (9 items), verbal aggression (5 items), anger (8 items), and hostility (8 things) (8 items). Aggressions total score is the sum of the factors.

Procedure

First and foremost, the original writers consent was sought for the scale. The significance and goal of the study would be presented to each respondent prior to the administration of the questionnaire. The data was collected physically. All study questionnaires, as well as informed permission and demographic information and respondents were given verbal and written instructions. Respondents were first given instructions regarding the aim of the study and then they were handed fake questionnaires. The respondents were given enough time to complete questionnaires. The data collection procedure was halted once the desired amount of sample had been reached and a file of data sheets in MS Excel was downloaded from Google Form, which was then translated into two SPSS files. The full text of the articles will be found.

Results

In the first step, reliability analysis of all measured was computed using Cronbach's alpha and descriptive statistics. In the second step, Pearson product moment co-relation was computed to assess the relationship between personality traits (agreeableness, neuroticism) and aggressive behavior in PUBG Gamers.

Table 1

Descriptive statistics and Cronbach's alpha Reliability of Personality Traits, Aggressive Behavior (N=210)

Variables	K	M	SD	α	Ranges	
					Actual	Potential
PT	44	163.54	17.87	.71	44-220	104-210
AB	29	99.61	12.56	.78	29-145	63-127

Note *** $p < .001$, ** $P < .01$, * $P < .05$; PT= Personality Traits; AB= Aggressive Behavior

Table 1 showed mean and standard deviation of variables of the current study. It also depicted internal consistency index (alpha coefficient) for all scale used in this study. The results showed that all scales of the present study are internally consistent as alpha coefficients of all scales are above .70.

Table2.

Pearson Product Moment Correlation of Personality Traits, Emotional Regulation and Aggressive Behavior among PUBG Gamers (N=210)

Variables	M	SD	1	2	3
1 AB	3.43	.43	-	-	-
2 Agreeableness	29.00	4.86	-.21**	-	-
3 Neuroticism	25.25	3.60	.32***	-.20**	-

Note, *** $p < .001$, ** $P < .01$, * $P < .05$; AB= Aggressive Behavior

Table 2 Revealed that Agreeableness has significant Negative relationship with Aggressive Behavior and Neuroticism has significant positive relationship with Aggressive Behavior. Moreover agreeableness and neuroticism has significant negative relationship.

Table 3.

Regression Coefficients of Agreeableness and Neuroticism on Aggressive Behavior among PUBG Gamers (N=210)

Variable	B	SE	t	p	95%CI
Constant	2.9	.29	9.9	.000	2.325, 3.472
Agreeableness	-.01	.01	-2.1	.037	-.024, -.001
Neuroticism	.04	.01	4.4	.000	.020, .051

Note. *** $p < .001$, ** $P < .01$, * $P < .05$. CI= Confidence Interval;

Table 3 shows the prediction of Aggressive behavior by Agreeableness and neuroticism. The R^2 Value is .12 revealed that agreeableness and neuroticism explained 12% percent variance in aggressive behavior. Moreover agreeableness is the negative predictor whereas neuroticism is the positive predictor of Aggressive behavior in PUBG gamers.

Figure 1

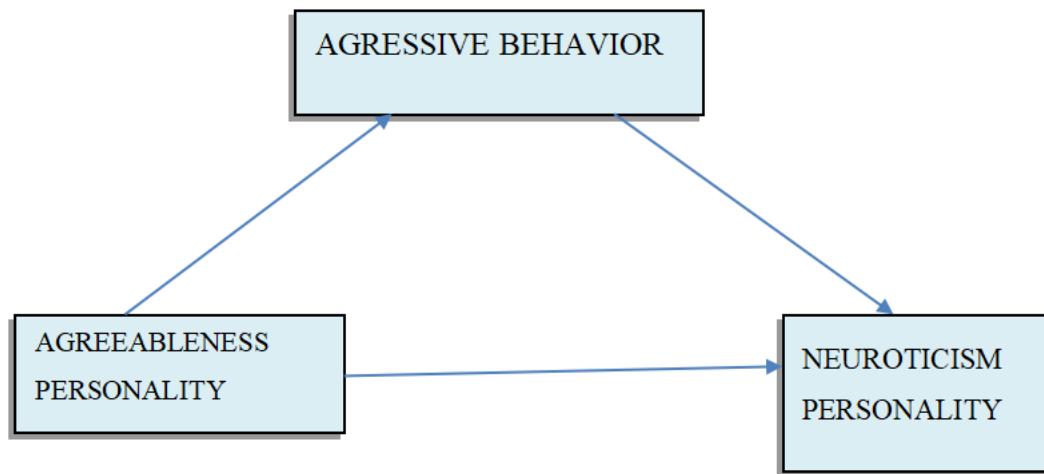


Figure 1. Schematic Presentation of Direct and Indirect effect of personality traits (neurotic, agreeableness) on aggressive behavior.

Discussion

In this study the focus was on the two opposite traits these are agreeableness and neuroticism which shows meaningful results and highly correlated with aggressive behavior. In their study Sharpe and Desai (2001) revealed that, compared with other dimensions, Agreeableness and Neuroticism were the most predictive of trait aggressiveness. So It was hypothesized that there would be positive relationship between negative personality traits (Neuroticism) with aggressive behavior among PUBG gamers. Which showed that those students who have neurotic personality faced sadness, anxiety, anger and mood swings. Neurotic personality enhance aggressive attitude toward PUBG players. Hennig et al. (2005) in a factor analysis the authors reported a strong positive correlation between Neuroticism and the Neurotic Hostility. Evidence suggests that aggression-related constructs may be divided into two main factors. The angry factor of aggression appears to be positively related to Neuroticism, this type of aggression may be similar to reactive aggression.

It was also hypothesized that there would be a negative relationship between positive personality traits (agreeableness) with aggressive behavior among PUBG Gamers. Agreeableness personality is more likely to be trustworthy, helpful, and caring. Result indicate that the positive impact of agreeableness personality in PUBG gamers such as they can understand that online games have negative impact on physical and mental health. So, they add physical activities in their daily routine. Same results were found in a study conducted by (Adams & Malcolm, 2003) showed that persons with Low in Agreeableness were more likely to report that destructive conflict resolution tactics (i.e., physical action, threats, and undermining others' self-esteem) were appropriate in response to interpersonal conflict scenarios, compared with those high in Agreeableness. Likewise, Gleason et al. (2004) found that participants' level of Agreeableness was negatively related to the number of peers who nominated the participant as likely to engage in aggressive behavior.

Conclusion

This study concluded that Personality Trait such as agreeableness has a significant negative relationship and neuroticism has a significant positive relationship with aggressive behavior in PUBG gamers. The Agreeableness dimension describes people who are directed toward interpersonal relationships and the needs of others, and they are with agreeable personality they are cooperative, friendly and show prosocial behavior. The people with Agreeableness shows trust, straightforwardness, altruism, compliance, modesty, and tender-mindedness. PUBG is less likely to impact the behavior and mental health of agreeable personality trait as compared to the person having neurotic personality traits. Those students who have neurotic personality they show violence, aggressive behaviors toward others.

Limitations and Recommendation

Few limitations were present in this study such as we only compared two personality traits in this study, with other personality traits like (openness, Conscientiousness and extroversion) we could not find the meaning full results. Reason could be the small sample size or flaws in data collection. Multimodal method should be used for further studies for higher validity. Study should be carried out on sample of different age range to find out how PUBG impacts differently on different age groups.

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