



**THE RELATIONSHIP BETWEEN PUB-G GAME USAGE AND  
AGGRESSION LEVEL: ANALYZING PHYSICAL AGGRESSION,  
VERBAL AGGRESSION, ANGER, AND HOSTILITY AMONG USERS**

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**ABSTRACT**

**Introduction:** PUB-G game, which is a violent game, is very popular today. Weapons and guns are used in PUB-G game to play it. In it, a player has to defeat their opponent. PUB-G game addiction is causing a problem. PUB-G game creates a negative effect on youth. Playing too many violent games affects their lives. Playing a violent game lie PUB-G can cause anger and hostility in them. In PUB-G game, the skillful person tries everything possible to defeat another and divert the opponent team's mind by applying strategy.

**Methods:** The study was conducted using the research design of an observational cross-sectional study. The study included 110 participants were recruited by non-probability sampling. SPSS version 23 were used for statistical analysis and tabulation of data. Frequency table and one-sample test were used in study and cross-tabulation table were used to analyze physical, Verbal, Anger and Hostility.

**Results:** Data showed that out of 110 55.5% male and 44.5% were female playing game. The physical aggression in valid percent at moderate level 51.8% and verbal aggression lie at low level 70.9%, anger lie at moderate range 62.7% and hostility among PUB-G gamers is lie at low level range 54.5%.

**Discussion and Conclusions:** preliminary findings demonstrate that the PUB-G game addiction significantly and positively correlate with aggression .The result of this study concludes that the relationship

	between PUB-G game and aggression is positively correlated with the aggression subscale item. Aggression is moderately significant with PUB-G game.
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## 1| INTRODUCTION

The recent study reveal that online games apparently come out with the unconventional format for communication. While the various others games simplify the direction of rivalry, and the combined effort of players within the stimulated environment. Gamers have progressively set about the different visual social network. The fundamental skills of gamers in which they accelerate the internet community in online gaming space. This method increase the distinctive interpersonal relationship in the middle of electronic or computerized game admirer. (Bano et al., 2024)

According to the WHO gaming disease as compatible and monotonous consultation in gaming caper that replace the leisure activities. Addiction of video game have negative impact on a person daily life. In recent study show that online video games are mostly popular like Pub-g it attracts the person attention. The addiction of PUB-G game highly influences the person life and person neglect the life domains; it also negatively affects the person overall wellbeing. Most of the researcher say that video game assist aggression, it lessens pro-social behavior, expand heedlessness and hinder with cognition as well as mood in its players. It shows that the short-term effect of violent video game highly increases the level of aggression in those people who play the violent games. Violent games provoke unfavorable influence in physical, cognitive, emotional and behavioral term. (Hassan et al., 2023)

According to analysis the popular video game such that the online video games emerged a high chance of disturb the functioning. In survey examination the researcher explore that how the player playing a game within week and schedual of time compared both in male and female. Unlikely to gender exchange their character in game. In this research the researcher view that how long both they played the video games with full enthusiasts. They fully involve in game and choose a partner with your own choices and other players strongest matches of character in game. They did not choose the preferred character while they choose position and partner in which they get reward and rank and upgradation. In the consequences of research the adolescence gamers were more in male and mostly assume that the features of violence become more attractive while playing the game. The long period of playing the games in younger increase the more risk of violence. (Griffiths, Davies, & Chappell, 2004)

The exploration of this investigation explain that the hazardous risk elements that extremely specify the consequences and result of playing electronic video games among youth. The main aim or objective of study was to differentiate the gamers with the non gamers. These differentiation usually based on individual and contextual factors. It was presume that the individual who play the video game would have more likely to perceive the world with negative perception. The health will affected with different disorder. These adult mostly dependent on internet support that ease the connection of recreational games with gamers. Due to excessive use of social media and playing the game like intense violent games the changes occur and high chance of increase the body mass index. On other hand nongamers having a healthy lifestyle and free from the stressors. (Weaver III et al., 2009)

The objective of this research indicated the evaluation and exploration of addiction to network usage and online activity, web based gaming, the social media networking. The different online

activity interconnected with the depression, hopelessness, and physical issues occur among adults these present research investigated in china, singapore and america. In this the students were enlisted to identify the depression among adults. Different emotional and mental utensil used to measure the depression. The addicted disorder were also assess by using the various assessment for estimations and analyze the perceived symptoms of depression. The mastery in online video game and web based internet games were most common among males and while the other side the online social media website were common among women and they were more addicted to the gaming platform. The student excessively used the internet and social media platform but slighter emergence of online gaming. The china survey explore that the the depression among student were elevated while using the compulsive internet using. (Tang, Koh, & Gan, 2017)

Researcher explain that numerous youngsters take part in the violent video game. The researcher investigated that the why PUB-G gamers influence mostly in addicted games and showing an aggressive behavior. The obsession of PUB-G game is extraordinary and productively correspond with aggression. The level of aggression higher in men as compared to women because men play more video games. Aggression is a one of the most society's huge issue that influence the younger humankind mental health due to the video game addiction. In spite of the fact that subsist research has explain the connection between aggression due to the addiction of video games. It is found that aggressive behavior is highly increased due to the video game addiction. In the course of time majority of population spend a lot of time in video game. Aggressive behavior is a problematic to ourself and other. In which person are out of control and does not know how to give up. (Adachi & Willoughby, 2011)

PUB-G is a violent game it prompts the aggressive behavior among the adults. Aggression has many from like verbal, non-verbal, physical aggression and anger, hostility. Subsequently ultimate deal and interconnection occur above computerized seer, these areas provide a great availability to examine the player behaviors. Online game feasible write down the action of players, to develop or riddle prey interconnection, and to get depend behaviors occasion. Through the help of data, we can better the game adventure to provide better pleasure and then game is not influencing the person behavior. (Balci & Salah, 2015)

Survey investigation shows that influences of aggression are not only influence the person mental health but also her daily life events. Violent video games highly expand the aggressive behaviors in children and young adults and also influences the aggression related elements. The actual life violent video game take part in productive linked to aggressive behavior and dereliction of duty. The connection was powerful for participant who are distinctive aggressive and for men. So that the pedagogical realization was gloom-ridden associated to a lot of time spend on violent video games. The men have highly aggressive view in the world as compared to the women. The general affective aggressive model says that violent video game raised the level of aggressive when a players spend a lot of time in it. (Anderson & Dill, 2000)

The elements of the video game are raised constantly aggression. Violent video game has harmful act on participant who play such game. Aggression is an over-burster behavior in which person effect our self and also affect the surrounding person. So that the level of aggression is increase in young children as compared to teen age children and children are more aggressive after playing or watching a violent video game. (Griffiths, 1999)

## **2 | METHODS**

### **2.1 | Participants and recruitment**

The study was conducted by using the online filling questionnaire among youth and young adults. Participant filled out the informed consent form before filling out the questionnaire. The sample

size was 110 including males and females (using Raosoft) the exclusion criteria for this pilot study was Student with injury issues, Adults with heart attack, Older adult, Neonate. The inclusion criteria in which the Age 15-35 years were eager to participate in research project. Students who played PUB-G game constantly .Male and female both included in this study for the recruitment of aggression subscale. Aggression analyze in adults while playing game. Use a Non-Probability (convenient sampling technique) to determine the aggression level among PUB-G gamers

## 2.2 Procedure

Those participants who play the PUBG game given this questionnaire to fill out. In pub g game the main component is defeat the opponent player and won the battle by applying a different strategies. By using the weapons and Guns the gamers showed how they act and play with different behavioral tendencies. Analyzed the behavior which lead to aggression that significantly occur in PUB –G. The behavior of player in game were sometimes unplanned and impulsive. After analyzing the different viewpoint the consequences occur that the physical violence in game escalate the unfavorable anticipation and negative assumptions. The changes definitely ramifications the participant or player with detrimental effect

## 2.3 Measures

A buss Perry aggression questionnaire were used for screening the aggression among youth. The aggression subscale items identify the aggression level among sample population. In aggression scale we identify how a person explode other. Sometimes the person hit back to other person in anger mood that was a sign of a physical aggression. A person become so aggressive while playing game and have a condition like a mad and broken things in angry mood. The person have a trouble to controlling the temper.

## 2.4 Analysis

Data were analyzed into IBM SPSS S statistics 23.Describe with the help of statistic including frequency table, one sample test, and bar chart. According to statistic result, adult plays a PUB-G game frequently. Most people who live in an urban society play PUB-G game. Male playing game than female. Anger being a more dominant than physical, Verbal and Hostility.

## 3 | RESULTS

Table No 1: *Frequency and percent distribution of data of Physical Aggression, Verbal Aggression, Anger, Hostility*

			Frequency	Percent	Valid Percent	Cumulative Percent
<b>Physical Aggression</b>	Valid	Low (9–20)	49	44.5	44.5	44.5
		Moderate (21–35)	57	51.8	51.8	96.4
		High (36–45)	4	3.6	3.6	100.0
		Total	110	100.0	100.0	
<b>Verbal</b>	Valid	Low (5–12)	78	70.9	70.9	70.9

<b>Aggression</b>		Moderate (13–18)	30	27.3	27.3	98.2
		High (19–25)	2	1.8	1.8	100.0
		Total	110	100.0	100.0	
<b>Anger</b>	Valid	Low (7–15)	38	34.5	34.5	34.5
		Moderate (16–25)	69	62.7	62.7	97.3
		High (26–35)	3	2.7	2.7	100.0
		Total	110	100.0	100.0	
<b>Hostility</b>	Valid	Low (8–18)	60	54.5	54.5	54.5
		Moderate (19–30)	48	43.6	43.6	98.2
		High (31–40)	2	1.8	1.8	100.0
		Total	110	100.0	100.0	

The analysis of the Buss–Perry Aggression Questionnaire (BPAQ) subscales among the respondents reveals that the majority of individuals fall within the low to moderate ranges of aggression, suggesting generally adaptive and socially acceptable patterns of aggressive expression. For physical aggression, 51.8% of participants reported moderate levels, indicating a tendency to express aggression physically but within controlled limits, while 44.5% showed low levels and only 3.6% exhibited high physical aggression, reflecting a small subset with potentially problematic tendencies. In terms of verbal aggression, a significant majority (70.9%) demonstrated low levels, showing a preference for non-confrontational verbal behavior, with 27.3% at moderate and only 1.8% at high levels, indicating that verbal hostility is not a dominant feature in this sample. For anger, 62.7% reported moderate levels—suggesting a common experience of frustration—while 34.5% had low anger, reflecting better emotional control, and just 2.7% reported high anger, possibly needing attention. Similarly, hostility was low in 54.5% of respondents, moderate in 43.6%, and high in only 1.8%, showing that feelings of mistrust and resentment are limited. Collectively, these results indicate that severe or extreme aggression is rare in this group, with physical aggression and anger being more prominent in the moderate range, and verbal aggression and hostility being mostly low, pointing to a generally emotionally regulated and non-aggressive population.

**Figure: 01.** *Frequency Distribution*

Figure :01

Figure:02

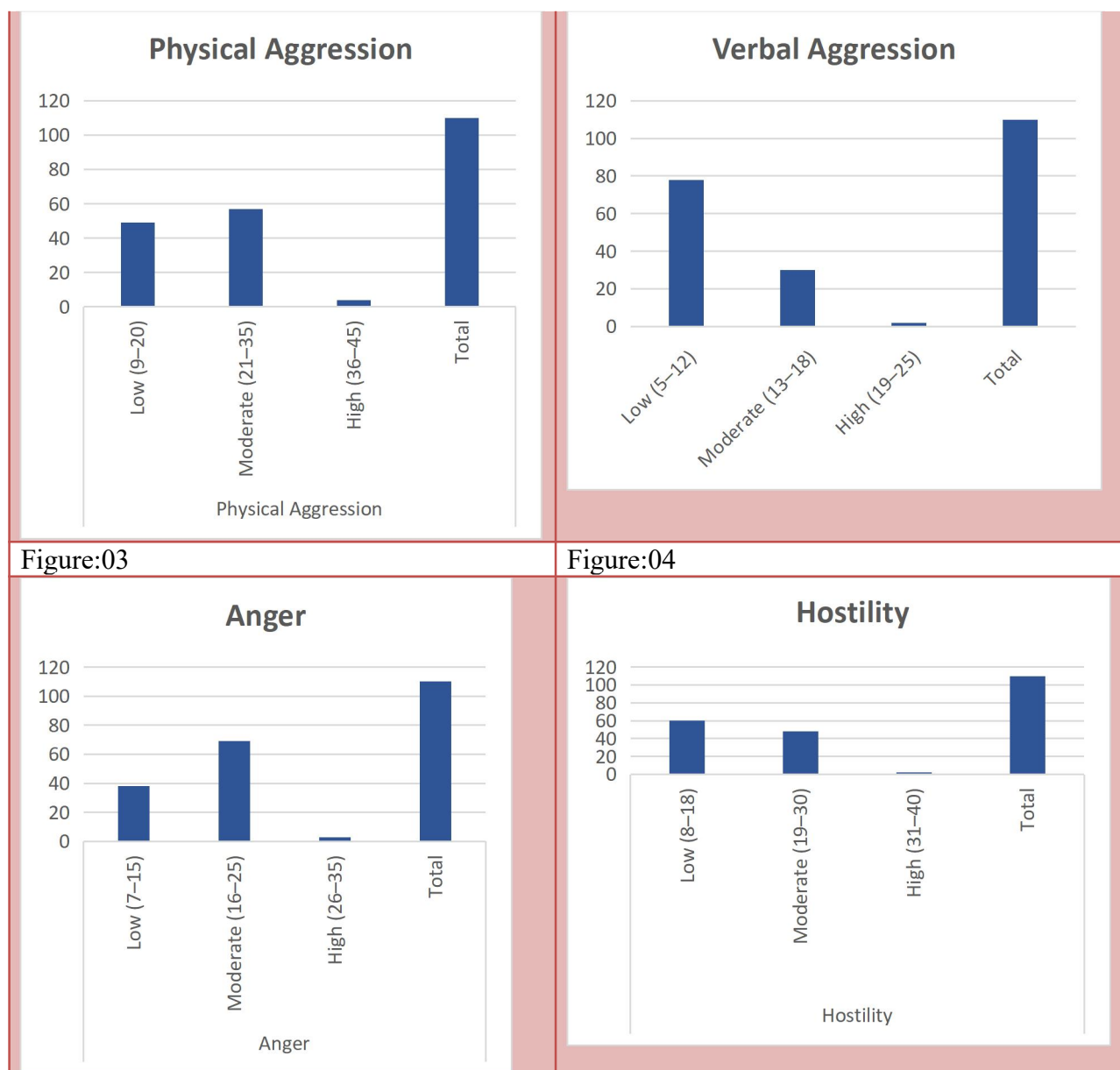


Figure:03

Figure:04

Table No 2: One Sample Test among aggression subscale

Sample Test					
	Null Hypothesis = 0				
			Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference
Physical Aggression		109			

Verbal Aggression				1.30909		
				1.68182		
Hostility				1.47273		

A One-Sample t-Test was conducted to determine whether the mean scores on each of the four subscales of the Buss–Perry Aggression Questionnaire (BPAQ)—Physical Aggression, Verbal Aggression, Anger, and Hostility—significantly differed from a test value of zero. While a test value of 0 serves as a theoretical reference point, interpretation must align with the BPAQ's scoring framework, where higher scores reflect greater aggression. The results showed that all four subscales yielded statistically significant differences ( $p < .001$ ), indicating the presence of aggression-related traits within the sample. Specifically, anger emerged as the most pronounced dimension, with a mean difference of 1.68 and the highest t-value (33.699), suggesting a strong emotional reactivity or frustration tendency among participants. This was followed by physical aggression ( $t = 29.619$ , mean difference = 1.59), indicating a clear but regulated expression of physical assertiveness. Hostility also showed a significant result ( $t = 28.770$ , mean difference = 1.47), reflecting the presence of negative thoughts, mistrust, or resentment. Verbal aggression, while still statistically significant ( $t = 27.339$ , mean difference = 1.31), appeared as the least pronounced form, suggesting that participants were less likely to express aggression verbally compared to emotional or physical forms. Overall, these findings confirm that all four dimensions of aggression are meaningfully expressed in the sample, with anger being the most dominant, followed by physical aggression, hostility, and verbal aggression. While the results are statistically significant, understanding their practical implications requires contextualizing them within the BPAQ's scoring range and established normative data to assess whether these levels reflect clinical concern or fall within normal behavioral variation.

Table No 3: *Cross Tabulation between aggression item and job status*

Crosstab					
Count					
Physical Aggression					
		Low (9–20)	Moderate (21–35)	High (36–45)	Total
Job Status	Student	31	29	2	62
	Multidisciplinary Professional	18	28	2	48
Total		49	57	4	110
Verbal Aggression					
		Low (5–12)	Moderate (13–18)	High (19–25)	Total
Job Status	Student	46	15	1	62
	Multidisciplinary	32	15	1	48

	y Professional				
Total		78	30	2	110
<b>Anger</b>					
Job Status		Low (7–15)	Moderate (16–25)	High (26–35)	Total
	Student	25	35	2	62
	Multidisciplinary Professional	13	34	1	48
Total		38	69	3	110
<b>Hostility</b>					
Job Status		Low (8–18)	Moderate (19–30)	High (31–40)	Total
	Student	36	25	1	62
	Multidisciplinary Professional	24	23	1	48
Total		60	48	2	110

The analysis of cross tabulation between job status and aggression subscale. In job status we analyze the student and multidisciplinary professional aggression level that falls between low to moderate and moderate to high range. In physical aggression the student and multidisciplinary professional reveal moderate aggression level which is 57, low physical aggression is 49, high physical aggression is 4. In verbal aggression, indicating a high aggression level which is 30, low aggression is 78 and high aggression level is 2. In anger, the low level indicate anger issue lie at 38, and moderately reported aggression is 69, and high anger issue lie at 3, In hostility, the low level reflect 60 in student and multidisciplinary professional, moderate range reflect 48, and high hostility lie at 2.

Table No 4: *Cross Tabulation between Residential Area and Aggression item*

<b>Crosstab</b>					
Count					
<b>Physical Aggression</b>					
		Low (9–20)	Moderate (21–35)	High (36–45)	Total
Residential area	Rural	3	11	1	15
	Urban	46	46	3	95
Total		49	57	4	110
<b>Verbal Aggression</b>					
		Low (5–12)	Moderate (13–18)	High (19–25)	Total
Residential area	Rural	9	6	0	15
	Urban	69	24	2	95
Total		78	30	2	110
<b>Anger</b>					



Residential area		Low (7–15)	Moderate (16–25)	High (26–35)	Total
	Rural	4	10	1	15
	Urban	34	59	2	95
Total		38	69	3	110
<b>Hostility</b>					
Residential area		Low (8–18)	Moderate (19–30)	High (31–40)	Total
	Rural	8	6	1	15
	Urban	52	42	1	95
Total		60	48	2	110

The cross tabulation of buss Perry aggression subscale among residential area. The residential area is further arrange in rural and urban population in which analyzed the aggression subscale that is physical aggression, verbal aggression, anger and hostility. These items expressed aggression for moderately to high and low. The physical aggression in rural area and at urban level lie at 49. Moderately expressed of aggression level in residential area is 57 and at high range 4 indicate high physical aggressiveness. The verbal aggression at low level indicate aggression which is 78. Moderately developed 30 and high indication of aggression is 2. Anger analysis show that 38 at low level, 69 at moderate level and 3 at high level. The hostility among aggression item and residential area reveals that low hostility range is 60. high range is 2 and at moderate range lie.

#### 4| DISCUSSION

PUB-G game is violent game due to high coverage of violent content. The violent behavior is occur mostly by chalenging factors in game when opponent team won the game. The frustation and anger increase with competitive games in which the action, adventure is central gameplay mechanics. When people show aggreessive nature by playing the game is sometime indicate of internal conflict. In violent game the chance of low self esteem and low self actualization achieved. The person show a Narcisstic Personality while continously played a game. As the task or rank achieved in game the person have urge to attain more goal and defend herself with the opponent team. The game level difficulty in game indicate a person frustation and hostility. Most people create a startegy before satrting the game. On other hand some people also like to played a non violent game which is free from aggression and frustation.

This Study main investigate and analyze the aggression level in youth while playing a PUB-G game. The physiological arousal arose in many games. The psychological impairment occur when usage of game within daily basis. The person feels aggressive thoughts and negative pattern applied daily life. The decrease of emphatic behavior. He increase risk of aggressiveness. Sometime the bad company in gaming zone contribute the high aggression item in youth. Game demand a high level of skills and competitive player but due lack of skills and ranks were not achieved the person feel helpless and this condition lead to hostility behavior.

Teenagers is significantly correlate with aggression subscale. In demographic variable the 15-20 age group people mostly played a game in which the valid value is 53.6% and in gender distribution the male mostly involved in game. Urban area youth have highly significant with video game because of advance technology and new innovation applied in game. In education setting the Bachelor student have high popularity in gaming while on other side the single individual correlate with game mostly. The physical aggression reported moderately in youth

which is 51.8%. The verbal aggression lie at low level in youth 70.9%. The anger subscale of Buss Perry aggression indicate moderate anger issue in adult expressed 62.7% in 16-25 range. The hostility among PUB-G gamers is 54.5 % which lie at low level which indicate mistrust is in controlled limit. These analysis showed that aggression subscale is statistically significant with PUB-G game. Frequency is positively related to aggression item.

In previous study in Lahore Pakistan, illustrate that the PUB-G game addiction significantly and positively correlate with aggression. In video game like pub-g game addiction with social interaction is positive. It also reveals that PUB-G game addiction mostly in male than women. Employment status showed significant differences with unemployed participants scoring high in PUB-G game. The finding were contrast with the existing literature. (Kausar et al., 2024)

Among gender differences and style in use of digital game reveal that when playing a digital game the male spent more time than female. (Bonanno\* & Kommers, 2005)

#### **4.1| Limitations and considerations for future research**

As we have evaluated the aggression subscale in PUB-G game. There are some strength and limitation of this survey. The research main strength indicate we analyzed the aggression item in PUB-G game. We have taken participant of specific age group (youth) and analyze the physical, Verbal, Anger and Hostility behavior in game. This study is limited to older adults and unstable participants. This study is only limited to Faisalabad region. It provide a more accurate and reliable study. Participants of adolescent (youth) involved in study. Further research should be performed on large sample size in different circumstances to collect data.

#### **5| CONCLUSIONS**

The study was done to find out the aggression level in youth due to playing of game in Faisalabad region. Also evaluate the Buss Perry Aggression subscale in youth. The result conclude that aggression level moderately occur in adult while playing a game. The teenage population played a PUB-G game (53.6%) rather than early middle age or late young adulthood. PUB-G game significant in male 55.5% rather than female. By using the cross tabulation, Physical aggression and anger moderately occur. Verbal aggression and hostility at low level.

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