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# Impact of parenting style and self-control on internet gaming disorder among adolescents

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**Abstract**---There are about 300 million online gamers in India according to AIGF. Most of the time adolescents engaged in screen-based recreation with no physical activity led to adverse physical and psychological outcomes. Studies show that there is a strong association between problematic internet gaming and low academic performance. The current research attempted to study the impact of parenting style and self-control on internet gaming addiction among adolescents. Using multistage cluster random sampling, 600 adolescent students (300 males and 300 females) in Mangalore (Karnataka) were selected and studied. The research tools included self-control, parenting styles, and the internet gaming disorder scale. Current research reflected the impact of four parenting styles. Protective-demanding and authoritarian parenting styles were found as significant predictors in Internet gaming addiction. There is a strong negative correlation between self-control and internet gaming addiction among adolescents. Parents are recommended to use an authoritative parenting style to help the psychological health of their children. Self-control can be improved by therapies and techniques to manage internet gaming Addiction.

**Keywords**---self-control, parenting styles, internet gaming addiction, adolescents.

## Introduction

Excessive gaming has been identified as subtype of internet addiction (Block, 2008). Online gaming revenue are growing 22% annually. The industry estimated to reach Rs 11400 crore by 2023. The report observed that, “number of games developing companies has surged to 250 million in 2018 to 20 million and 25 million respectively in 2010” (Economic times ,2019 March). Tencent PUBG altered India’s mobile game ecosystem. The Indian government recently brought

the hammer down on the popular battle royal game PUBG Mobile after tensions with China showed no signs of slowing down. This was the third ban order after the government issued similar orders in the past. Other games like clash of clown, mind craft and free fire etc. are highly popular multiplayer games. KPMG report indicate that multiplayer games are more than 1/3 rd of Indian gamers. Online gaming in India much like most of the part of the world is male dominated industry with 83% gamers being men. American psychiatric association APA included 'Internet Gaming Disorder' in section 3 on the condition that it guaranteed more clinical research and experiences (NCBI). Screen based recreation are associated with psycho and physical adverse effect such as poor mental health, depression, stress, panic disorder. antisocial personality disorder obsessive compulsive disorder and including obesity, high blood pressure, high blood glucose, high level of triglycerides (Cavanna & Trimble, 2006). There are about 300 million online gamers in India according to AIGF. Most of the time adolescence engaged screen-based recreation with no physical activity are leads to adverse physical and psychological outcome. Male adolescents are more likely than female adolescents to engage in problematic internet gaming, according to earlier research including adult players. It was found a strong association between problematic gaming and low school performance (Van Rooij , Kuss , Griffiths , Shorter, Schoenmakers and Van, 2014).

Parenting, which is proven to have a substantial influence on adolescent development, also has a vital role in the use of a child's internet and related technology. There are four distinct parenting styles (Baumrid, 1991).

1. Authoritarian
2. Authoritative
3. Permissive
4. Neglectful

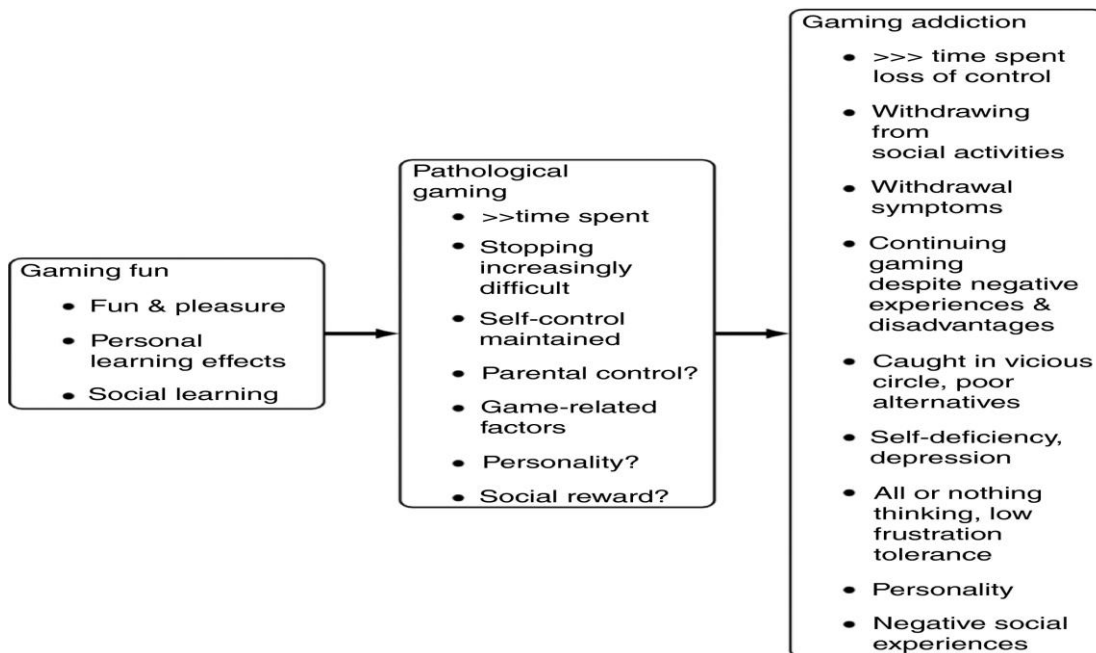
One study pointed out that “authoritarian, indulgent, and neglectful parenting styles were all likely linked to Internet addiction, while an authoritative parenting style could be effective in preventing adolescents from Internet addiction” (Tao et al., 2007). Another research found that “parenting style is significantly a predictor of problematic Internet use and authoritarian parents' style was associated with problematic Internet use” (Moazedian, 2014).

Figure 1 Parenting styles

	High expectations for self-control	Low expectations for self-control
High sensitivity	<b>Authoritative:</b> Respectful of child's opinions, but maintains clear boundaries	<b>Permissive:</b> Indulgent, without discipline
Low sensitivity	<b>Authoritarian:</b> Strict disciplinarian	<b>Neglectful:</b> Emotionally uninvolved and does not set rules

Self-control is closely linked to the online game addiction among adolescents. Pathological online gaming is protected by high level of self-control (Kim et al. 2008). Low self-control leads to immediate satisfaction, they don't depend on long term goals. So low of self-control leads to problematic behavior such as internet addiction (Cao et al., 2007). "Self-control (or self-regulation) refers to the ability to control one's actions for the attainment of a particular goal and it involves the capacity to pursue long-term goals by controlling one's undesirable behavior" (Tangney et al. 2004; Vohs and Baumeister 2004). To achieve long-term goals, high levels of self-control are directly linked to the ability to resist temptation and suppress impulsive behavior and sensory interests. (Hofmann et al. 2009). Self-control capacity has been studied as a key factor in problematic media use, and it has been found to have a major impact on problematic online and gaming behaviors. (Kim et al., 2008; LaRose, 2010). As high levels of self-control protect against pathological online gaming behavior, adolescents' use of online games is directly connected to a lack of self-control (Kim et al., 2008). Low self-control, on the other hand, causes adolescents to seek instant pleasure rather than rely on long-term goals, leading to undesired behaviors such as gaming addiction (Cao et al. 2007; Ozdemir et al. 2014).

Figure 2 Types of Gaming



Several detrimental implications of Internet gaming addiction are causing increasing worry. Problems with real-life relationships, sleep, job, education, socializing, attention, academics, and memory are all examples. Aggression and aggressiveness, tension, and a high level of loneliness are all possible symptoms. Players are too preoccupied with playing pubg to concentrate on their careers, academics, or responsibilities. Conducting research on this topic to demonstrate how parenting may help to minimize game addiction and the impact of self-

control on online gaming addiction. Previous research has discovered a link between parenting style and online game addiction. (Yasmin, 2019).

## **Method**

### **Objective**

- To study the impact of parenting style on internet gaming disorder among adolescents.
- To find out the significant difference in self-control among male and female adolescents with internet gaming disorder.

### **Hypothesis**

- There will be a significant difference in self-control among male and female adolescents with internet gaming disorder.
- There will be an impact of parenting style on internet gaming disorder among adolescents.

## **Operational Definitions**

### **Parenting style**

“Parenting style is conceptualized as a constellation of attitudes or a pattern of parental authority towards the child which are conveyed to the child, creating the emotional context for the expression of parent behavior. Parenting style differs from parenting practice in that it characterizes parent–child interaction across settings and situations, whereas parenting practices are specific to particular situations and domains” (Baumrind, 1971; Darling & Steinberg, 1993).

### **Self-control**

“Self-control is the ability to regulate and alter responses in order to avoid undesirable behaviours, increase desirable ones, and achieve long-term goals. Research has shown that possessing self-control can be important for health and well-being” (Moffitt, 2011).

### **Internet Gaming Addiction**

“Gaming addiction is defined in the 11th Revision of the International Classification of Diseases (ICD-11) as a pattern of gaming behavior (“digital-gaming” or “video-gaming”) characterized by impaired control over gaming, increasing priority given to gaming over other activities to the extent that gaming takes precedence over other interests and daily activities, and continuation or escalation of gaming despite the occurrence of negative consequences” (WHO, 2018).

## Sample and procedure

Samples of 600 adolescents in the age range 16-19 will be collected from the population of 7000 adolescents in St Aloysius institutions, Mangalore, Karnataka using cluster sampling method. Questionnaire distributed and collected among different academic stream clusters and randomly selected 300 male and 300 female.

## Tools

### Internet Gaming Disorder -20 Test (Pontes et al., 2014)

The IGD Test is a 20-item likert-style scale designed to examine six components of addictive behaviour related with the DSM-5 criteria for IGD diagnosis (e.g., salience, mood alteration, tolerance, withdrawal symptoms, conflict, and relapse) (Pontes and Griffiths, 2014). According to Pontes et al. (2014), the recommended cut-off points for the IGD-20 Test are 71 points.

- Salience (Factor 1): items: 1, 7, and 13.
- Mood Modification (Factor 2): items: 2R, 8, and 14.
- Tolerance (Factor 3): items: 3, 9, and 15.
- Withdrawal Symptoms (Factor 4): items: 4, 10, and 16.
- Conflict (Factor 5): items: 11, 17, 19R, and 20.
- Relapse (Factor 6): items: 6, 12, and 18.

Questionnaire will be distributed among participants (e.g., I often lose sleep because of long gaming sessions) and will be asked to choose one of five responses (1 = strongly agree, 2 = agree, 3 = neither agree nor disagree, 4 = disagree, 5 = strongly disagree). Questions 2 and 19 are reverse scoring so that a score of 5 was converted to 1, 4 was converted to 2, 2 was converted to 4, and 1 was converted to 5.

Reliability and Validity: criterion related validity of association between weekly gameplay and IGD 20 test score was  $r(1003) = .77, p, .001$ . Concurrent validity of association between IGD-20 test and DSM- 5 criteria was  $r(1003) = .82, p, .001$ . IGD 20 test dimensions were strongly correlated with their corresponding IGD criteria. The internal consistency of the IGD-20 Test, as determined by Cronbach's alpha, was .88.

### Self-control scale (Baumeister, and Boone, 2004)

The Brief Self-Control Scale consists of 13 items assessed on a five-point Likert scale. Each item's score is a graded response ranging from 1 (strongly disagree) to 5 (strongly agree) (strongly agree). The Likert scale yields an overall score and five subscales: self-discipline, deliberate/non-impulsive behaviour, healthy habits, work ethic, and reliability. In this study, just the overall score was taken into account. A higher overall score showed greater self-control. Internal consistency measured by the Cronbach's Alpha of the scale was 0.724.

### Parental Authority Questionnaire (Buri, 1991)

Buri developed the parental authority questionnaire (PAQ) in 1991 to assess permissive, authoritarian, and authoritative parenting styles, which included 30 Likert type items. The test includes thirty items for each parent, with children responding on a five-point scale. Several studies have found that the Parental Authority Questionnaire is a psychometrically sound and valid measure of Baumrind's parental authority prototypes, and that it has considerable potential as a valuable tool in the investigation of correlates of parental permissiveness, authoritarianism, and authoritative perspective. It comprises 30 items having three subscales developed on the parental power designs, and each subscale comprises 10 items. Alpha coefficient of .75 for permissive, .85 for authoritarian and .82 for authoritative scale while great dependability in test-retest unwavering quality that .81 for permissive, .86 for authoritarian and .78 for authoritative scales separately.

### Statistical analysis

To find out the impact of parenting style and occupation status regression analysis and to find out significant difference t test will be used.

### Result

Table-1 Internet Addiction Levels of Participants

Internet Gaming Addiction Level	Male	Female
No Symptom	180	222
Partial Symptom	90	60
Internet Gaming Addicts	30	18

According Table 1 male adolescents shows higher percentage of internet gaming addiction compared to female girls. Participants who scored 70 points or more were classified as Internet Addicts. Those who received 50-69 points were classified as having Partial Symptoms, while those who had less than 50 points were classified as having no Symptoms.

Table- 2 Difference in Self Control of Internet Gaming Addicted Adolescents Based on Gender

Variable	Group	N	Mean	Median	SD	SE	t value	p value
Self-Control	Female	78	38	38	3.63	0.411	-0.663	0.508
	Male	120	38.5	38.5	5.79	0.528		

As seen in table 2, mean value of self-control among male(38.5) and female (38) adolescents with internet gaming addiction . t value ( $t = -0.663$ ,  $p > 0.05$ ) shows that there was no significant difference in self control between male and female adolescents.

Table. 3 Multiple Regression Analysis of Perceived Parenting Style on Internet Gaming Addiction

Variable	B	Coefficients	Beta	t	Sig. P value
Constant	12.38	4.681		2.640	0.008
Authoritative Parenting	-0.01	0.058	-0.007	-0.174	0.867
Protective-Demanding Parenting	0.617	0.105	0.30	5.813	0.00
Authoritarian PS	0.65	0.126	0.25	5.042	0.00
	R=.500	R <sup>2</sup> =.250	F (3-415) =46.32		P <.05

As seen in Table 3, As an independent variable, perceived parenting style with three subscales predicted significantly the level of Internet gaming addiction ( $R=.50$ ,  $R^2=.25$ ,  $p.05$ ). According to the findings, perceived parenting style accounted for 25% of the total difference in Internet addiction. According to the standardized regression coefficient, the most powerful predictor of Internet gaming addiction was the protective-demanding parenting style ( $=.30$ ), followed by the authoritarian parenting style ( $=.25$ ) and Democratic parenting style ( $=-.007$ ). It was shown that protective-demanding and authoritarian parenting styles were significant predictors of Internet gaming addiction, accounting for 25% of total variation.

## Discussion

The purpose of this study was to look at the influence of parenting styles in predicting adolescent Internet gaming addiction and the differences in self-control between male and female adolescents with internet gaming addiction. Protective-demanding and authoritarian parenting styles were shown to be significant predictors of Internet Addiction, accounting 25% of the variation. In the Internet Addiction study, however, democratic parenting style was not a significant predictor. These findings were consistent with previous research (Darling, 1999; Dornbusch et al., 1987; Moazedian et al., 2014; Rosen, 2008; Xiuqin et al., 2010; Beard & Wolf, 2001; Davis, Flett, & Besser, 2002; Valcke et al., 2010). Another conclusion is that there is no statistically significant difference in self-control between male and female teenagers. Another study (Safarina, 2019) discovered a negative relationship between

## Conclusion

According to the study, poor parenting approaches are directly associated to adolescent Internet gaming addiction. This shows that warm family relationships reduce the amount of computer gaming addiction, but families with low kindness may not create a pleasant atmosphere that reduces teenagers' feelings of

loneliness. As a result, this study recommends that parents develop a supportive and acceptable family structure in order to keep their adolescents from being hooked to the Internet. As a result, their children will be raised in a good environment, perhaps reducing the prevalence of Internet gaming addiction. There were several limitations to the study. To begin with, the sample was limited to teenagers recruited from Mangalore. The findings should be reproduced with larger representative general population samples.

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