

Research Paper

The Relationship Between Internet Gaming Disorder, Academic Procrastination and Personality Traits Among University Students

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ABSTRACT

The present study examines the relationship between Internet Gaming Disorder (IGD), Academic Procrastination (AP), and the Big Five Personality Traits among university students in Nagaland, India. With the increasing prevalence of online gaming, research has indicated its potential impact on academic performance and personality-related behaviors. A sample of 60 university students aged 18–26 years was selected using systematic probability sampling. Participants completed the Internet Gaming Disorder Scale-Short Form (IGDS9-SF), the Academic Procrastination Scale-Short Form (APS-S), and the Big Five Inventory-Short Version (BFI-10). Findings revealed a significant positive correlation between IGD and academic procrastination ($r = 0.5, p < 0.05$), suggesting that excessive gaming is associated with increased delays in academic tasks. Additionally, conscientiousness and agreeableness were negatively correlated with IGD, while neuroticism was positively correlated with academic procrastination. The study underscores the role of personality traits in predicting both gaming behaviors and academic procrastination. The implications suggest that self-awareness of personality traits can help students develop better self-regulation strategies to manage gaming habits and academic responsibilities effectively.

Keywords: *Internet Gaming Disorder, Academic Procrastination, Big Five Personality Traits, University Students*

Globally, the Internet is utilized for trade, academic research, communication, entertainment, and infotainment. Nonetheless, a growing number of scientific studies have started to address the obsession that certain people have with certain features of the internet, and online gaming in particular. A person who uses the Internet frequently and persistently to the point of clinically significant impairment or discomfort is said to have Internet Gaming Disorder (IGD) (American Psychiatric Association, 2013). One significant drawback of Internet gaming is the difficulty in managing one's time, which can also lead to poor academic achievement. Academic Procrastination (AP) can be considered a self-handicapping strategy that occurs in an academic setting, referring to the postponement of academic goals to the point where optimal performance becomes highly unlikely, resulting in psychological distress (Ferrari et al., 1995). Online games offer adolescents comprehensive or compensatory demands satisfaction (Wan & Chiou, 2006).

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According to the model of Internet Gaming Disorder (Dong & Potenza, 2014; Yeh et al., 2017), procrastinators typically choose short-term rewards over persistence in achieving long-term gains (Tice & Baumister, 1997). As a result, they may temporarily avoid academic tasks and enjoy online activities, such as playing games, due to the immediate appeal of psychological rewards. According to data, people with IGD may exhibit "myopia for the future" when choosing between short-term positive outcomes (like playing online games) and long-term negative outcomes (like using the time spent gaming to engage in activities linked to longer-term professional success), as has been said for drug addictions (Pawlikowski and Brand, 2011; Flurus & Siomos, 2012; Bechara et al., 2002). Internet Gaming Disorder (IGD) is also found to be associated with the player's personality features in addition to the game's stimulation. The diathesis-stress model of behavior states that certain personality features might lead to addiction diseases (Müller et al., 2015). People who exhibit increased neuroticism, decreased conscientiousness, and decreased extraversion are thought to be at risk for IGD.

Reyes et al., (2019) studied a large sample of Filipino gamers and found neuroticism was positively correlated with pathological gaming, while the remaining Big Five personality traits (i.e. extraversion, openness to experience, agreeableness, and conscientiousness) were negatively correlated with pathological gaming. Furthermore, many personality traits, such as hostility, detachment, psychoticism, self-devaluation, introversion, submissiveness, impulsivity, and interpersonal sensibility, have been reported to be highly associated with online gaming (Blinka et al., 2016; Griffiths et al., 2018; Laier et al., 2018). With some individuals, academic procrastination may be viewed as a personality trait that is associated with repeated episodes of dilatory behaviour. Wendelian (2018) conducted a meta-analysis on academic procrastination and the Big Five Model of personality. The results showed the largest average correlation was found between procrastination and the factor conscientiousness (negative) and the largest moderate correlation was between procrastination and Neuroticism (positive). Academic Procrastination is highly related to some personality traits, mostly with a lack of conscientiousness, but some relations were also found with neuroticism (Schouwenberg & Lay, 1995; Steel, 2007; Klingsieck, 2013). According to a web report (Newzoo Top 100 countries by Game Revenue), India ranks 22nd in consumer revenue of various gaming companies. This figure is highly suggestive of the Indian population being in a vulnerable position to develop pathological gaming behaviour, especially the youth population. While researches have been conducted among different population groups, published literature on the correlation and pattern of online gaming behaviour among Nagaland students remain scarce. Therefore, the present study aims to explore the relationship between Internet Gaming Disorder, Academic Procrastination, and personality traits according to the Big Five Model in a sample of undergraduate and postgraduate students of Dimapur, Nagaland.

Research Objectives

1. To investigate the relationship between Internet Gaming Disorder and Academic Procrastination among university students of Nagaland.
2. To explore the relationship between Internet Gaming Disorder and Big Five Personality traits among university students of Nagaland.
3. To examine the relationship between Academic Procrastination and Big Five Personality traits among university students of Nagaland.

METHODOLOGY

Sample

The researcher selected the participants for the current study from Dimapur district of the state of Nagaland. A sample size of 60 university students, 48 males and 12 females, aged from 18-26 years, participated in the study. We employed a systematic probability sampling method. The inclusion criteria were students who played internet/online/offline games for at least 3 hrs/day on weekdays, at least 5 hrs/day on weekends, and had maintained an internet gaming pattern for more than 1 year. Exclusion criteria was participants that did not fill out the questionnaire completely.

Instruments

- 1. Internet Gaming Disorder Scale-Short Form (IGDS9-SF):** The IGDS9-SF is a nine-item brief tool to assess the severity of IGD and its detrimental effects by examining both online and/or offline gaming activities occurring over a 12-month period. The nine questions comprising the IGDS9-SF are answered using a 5-point Likert scale: 1("Never"), 2("Rarely"), 3("Sometimes"), 4("Often"), and 5 ("Very Often"). The scores are obtained by summing the gamer's answers and total scores can range from 9 to 45, with higher scores being indicative of higher degrees of gaming disorder. The IGDS9-SF has shown to be reliable according to several indicators of reliability.
- 2. Academic Procrastination Scale- Short Form (APS-S):** The APS-S (McCloskey, 2011) is a five-item Likert type scale with anchors 1: "Strongly Disagree" to 5: "Strongly Agree", with the items for the short form of the scale originally selected from the 25-item full length scale. Higher scores on the scale indicate a greater tendency to procrastinate on academic tasks. The internal consistency reliability estimate is found to be .87 (Cronbach's alpha) among a sample of 282 university students. The scale also showed good estimates of convergent validity with significant correlations with both the Procrastination Assessment Scale-Students (PASS)[$r(96) = .54$] and Tuckman Procrastination Scale [$r(69) = .79$]
- 3. Big Five Inventory-Short Version (BFI-10):** The BFI-10 is a 10-item scale measuring the Big Five personality traits Extraversion, Agreeableness, Conscientiousness, Emotional Stability, and Openness. The scale was developed based on the 44-item Big Five Inventory (BFI-44; John, Donahue, & Kentle, 1991; Rammstedt, 1997) and allows assessing the Big Five by only two items per dimension. The items are rated on a five-point Likert scale wherein the subjects choose from responses ranging from "Strongly Disagree" to "Strongly Agree". The mean correlations of the BFI-10 with BFI-44 among a sample of English and German students was found to be .83 indicating a good level of correlation.

Procedure

Data from participants on different social media sites were collected via Google form. In addition, demographic information and informed consent were gathered. The following questionnaires were distributed in order to gather responses: Short Form of the Internet Gaming Disorder Scale (IGDS9-SF), Short Form Academic Procrastination Scale (APS-S), The Short Form of the Big Five Inventory (BFI-10). Following data gathering, statistical calculations were made to satisfy the research objectives.

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RESULTS

Table No. 1 Correlations between internet gaming disorder, academic procrastination, and personality traits.

Personality traits	Internet Gaming Disorder	Academic Procrastination
Openness to experience	.06	.05
Conscientiousness	-.26*	-.52*
Extraversion	-.13	-.17
Agreeableness	-.21*	-.16
Neuroticism	.12	.22*
Academic Procrastination	.5*	

**correlation is significant at 0.05 level*

From Table 1, it is evident that academic procrastination significantly and positively correlates with Internet Gaming Disorder ($r=0.5$, $p<0.05$). This indicates that the more engaged students are in online/offline gaming, the more likely they are to procrastinate on college assignments. It can also be seen that conscientiousness is significantly and negatively correlated with internet gaming disorder ($r= -0.26$, $p<0.05$) as well as academic procrastination ($r= -0.52$, $p<0.05$) Agreeableness is found to be significantly and negatively with internet gaming disorder ($r= -0.21$, $p<0.05$), while neuroticism is significantly and positively correlated with academic procrastination ($r= 0.22$, $p<0.05$)

DISCUSSION

The researcher conducted the present study to investigate the relationship between internet gaming disorder, academic procrastination and the big five personality traits: openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism in a sample of university students.

With regard to internet gaming disorder and academic procrastination, as can be seen in table 1, this study finds that there is a significant positive correlation between internet gaming disorder and academic procrastination. The result is in line with the results of a study conducted by Liu et al. (2024) who found that aspects of internet addiction (such as online gaming), was positively correlated with academic procrastination. Similarly, another study's findings suggest that procrastinators tend to choose short-term rewards rather than persist in obtaining long-term gains (Tice & Baumister, 1997); resulting in temporarily avoiding academic tasks and engaging in enjoying online activities.

The present study also examined the relationship between internet gaming disorder and the big five personality traits. The findings indicate that the dimension of conscientiousness is found to be negatively correlated with internet gaming disorder. Low Conscientiousness indicates one has less commitment to personal goals, a tendency to be disorganised, and impulsive (Ross et al., 2009) therefore the digital world may be more attractive (Muller et al., 2014). Likewise, several studies (Cole & Hooley, 2013; Peters et al., 2008; Wang et al., 2015) discussed that people with low conscientiousness are less persistent in pursuing personal aims, and often show difficulties organising their activities. If gamers with these characteristics find the environment of computer games particularly attractive, they are at greater risk of developing IGD. The current study also indicated a significant negative correlation between the agreeableness trait and IGD. This finding is consistent with considerations reported by several researchers (Basha, 2021; Vollmer et al., (2014) that

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decreased agreeableness indicates a higher tendency toward competition rather than cooperation. Those with high levels of this personality trait try to stay out of conflicts. Accordingly, they might not enjoy gaming genres like first-person shooter (FPS) or massively multiplayer online battle arenas (MMOBA) that involve intense competitions.

The current study also established significant negative and positive correlations between academic procrastination and the big five personality traits. The results of this study confirmed the findings of previous studies regarding the role of conscientiousness in predicting academic procrastination. It was found that conscientiousness has the highest negative correlation with academic procrastination. This result is consistent with the findings of Schouwenberg & Lay (1995), who report that “in essence trait procrastination is the lack of conscientiousness.” Likewise Watson (2001) found that “total procrastination was related to low conscientiousness facets of competence, order, dutifulness, and self-discipline.” Johnson and Bloom (1995) report that the findings of their research showed that the majority of unique variance in procrastination scores was predicted by the conscientiousness factor. Neuroticism was found to be positively correlated with academic procrastination, which confirms the findings of Bäumle et al. (2021) who found that the largest moderate correlation was between procrastination and Neuroticism (positive). The results of the present study are also consistent with a previous study conducted by Ocansey et al. (2020) who found that neuroticism including traits like being depressed, low on energy, having low self-esteem and having neurotic beliefs was positively correlated with procrastination.

CONCLUSION

The aim of this present study is to examine the relationship between the following variables: internet gaming disorder, academic procrastination, and big five personality traits in a sample of undergraduate and postgraduate students from Nagaland, India. The findings report that excessive online gaming is associated with the behavior of academic procrastination in that when students expose themselves to prolonged hours of gaming, their educational goals are also affected negatively. The results of this study also suggest a significant relationship between internet gaming disorder and some of the big five personality traits. This indicates the role of personality in predicting pathological gaming behavior among university students. Consequently, the current study reveals that academic procrastination, to an extent, can be influenced by personality traits of the individual. The researcher concludes that the findings of this present study could be essential in helping students understand their personality traits in order to adopt certain strategies to control their gaming activity and academic procrastination.

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Conflict of Interest

The author(s) declared no conflict of interest.

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