

Full Length Research Paper

Behavioural addiction and illicit drug use as threats towards sustainable social development

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ABSTRACT: Illicit drug users experience adverse life events, but few studies have examined the role of impulsivity, pornography, and gambling among secondary school students in these events. This study employed a simple random sampling to investigate the role of impulsivity, gambling, and pornography in predicting illicit drug use among secondary school students in Uyo metropolis. Participants were two hundred and thirteen (213) students purposively recruited from Monef High School. Using anonymous psychometric robust illicit drug use and behavioral addiction inventories, relevant data were collected which aided the investigation. The three-way Factorial ANOVA found that predictor variables have no relevant explanatory power on illicit drug use $F(1,205)=2.73$, $P>0.05$. However, Impulsivity interacted with pornography to significantly influence illicit drug use $F(1,205)=7.49$, $P<0.05$, as well as impulsivity interacting

with gambling to influence illicit drug use $F(1,205)=2.92$, $P<0.05$. Results of the Factorial ANOVA document that impulsivity and pornography were the strongest influencers of illicit drug use among secondary students and were therefore seen to have potential effects in the fight against illicit drug use among students. The paper concludes with a discussion of the implications for practice, highlighting the need to develop recreational, educational awareness programs, which will contribute to more focused planning of mental health services, harm reduction measures, and outreach programs, as intervention mechanisms to aid in reducing illicit drug use among secondary school students.

Keywords: Illicit drug use, impulsivity, pornography, obsessive gambling, secondary school students

INTRODUCTION

Drug use is problematic for different populations, including secondary school students. The initiation to drug and alcohol abuse early in life has exposed adolescents to voluntary drug consumption, smoking, drinking and substance abuse which have become a threat to our Nation (Obiechina and Isiguzo, 2016). Young people, being impressionable and very expressive are very important to the development of any nation; and contemporary society provides both positive and negative avenues (such as various illicit drugs) for them to express

themselves; whether they express themselves positively or negatively will have important effects on social order and the overall stability of a society. Illicit drug use is an important public health problem worldwide (Lam *et al.*, 2015). Illicit drug users experience adverse life events (Hayaki *et al.*, 2005) but few studies have examined the role of impulsivity, pornography, and gambling in these events.

Illicit drug use represents a condition whereby drug-taking and drug-seeking come to dominate behavior to

such a degree that drug use appears to usurp control over behavior that was once influenced by normal environmental reinforcers, and resulting to adverse life events. Some of the adverse life events previously reported in the literature include a high rate of accidents and injuries, family problems, unemployment, criminal behavior, and legal consequences (O'Connor and Fiellin, 2000).

The first variable of concern is pornography. The study of compulsive Internet pornography use as a sub domain of hyper-sexuality has become a prevalent empirical focus in recent years (Womack *et al.*, 2013). Internet pornography use which is increasingly common in Western cultures (Griffiths, 2012) is becoming prevalent in Nigeria. In tandem with this increase, the mental health community has borne witness to a dramatic rise in problematic Internet pornography use (Owens *et al.*, 2012). Psychologists, counselors, and even clergy are increasingly confronted with individuals, couples, and family members who attest to the negative influence of pornography consumption on their lives (Mitchell and Wells, 2007).

In addition, excessive use of Internet pornography is associated with vocational problems (Young, 2007), family dysfunction (Manning, 2006), interpersonal isolation (Yoder *et al.*, 2005), and psychological distress (Egan and Parmar, 2013). This does not mean that Internet pornography use is always associated with negative consequences, as casual use appears to be related to such things as greater openness to experience and less sexual guilt (Weinberg *et al.*, 2010). However, when use escalates beyond casual recreational activity to excessive or compulsive levels, problems are a likely consequence.

At present, several definitions of problematic Internet pornography use are in circulation. Cooper *et al.* (1999) defined problematic use of Internet pornography as use in excess of 11 hours per week. Such a definition is logical, as high levels of use are very likely to interfere with personal, vocational, or relational functioning. However, what should be said for individuals who use pornography less frequently but still find it to be problematic? Some may consider their use problematic for moral or religious reasons, even if it falls below such a time threshold (Kwee *et al.*, 2007; Patterson and Price, 2012). Still others may find their use problematic for relational or vocational reasons (Levin *et al.*, 2012).

As another variable of interest, gambling is understood as the established practice of staking money or other valuables on games or events of an uncertain outcome (Binde, 2005). Young people including secondary school students are a high risk group for gambling problems (Moore *et al.*, 2013) and a high prevalence of gambling participation and problem gambling has been found indifferent student populations, mainly in studies in high income countries (Etel *et al.*, 2013). Factors associated with gambling participation include 1) socio-demographic

variables such as male gender (Moore *et al.*, 2013), psychosocial correlates (Peltzer and Pengpid, 2014); monthly income (Winters *et al.*, 1998), 2) other risk behaviour, including substance use, drinking, smoking, drug abuse (Hodgins and Racicot, 2013; Sharp *et al.*, 2014), delinquency/illegal acts (Johansson *et al.*, 2009), sexual risk behaviour (Huang *et al.*, 2007), and 3) poor mental health, anxiety and mood disorders (Moore *et al.*, 2013; Sharp *et al.*, 2014).

Impulsivity as the third variable of interest has been defined in two general ways: reward delay and rapid response (Swann *et al.*, 2002). Reward delay impulsivity is triggered during an individual's active decision to use or abstain from substances, whereas rapid response impulsivity may be activated during more automatic substance use patterns such as cue-reactive behaviors. Consequently, impulsivity is generally regarded as a negative trait; one that conveys only risk. However, what is often overlooked in addiction science is the negative role facets of trait impulsivity can play in everyday life and adaptive functioning. The construct of impulsivity has been of interest to personality researchers for many years (Dawe and Loxton, 2004). It is a major criterion used to diagnose a variety of clinical disorders including bulimia nervosa, attention deficit disorder, pathological gambling, substance abuse, pyromania, kleptomania, and psychopathology.

In view of this, there is a need to investigate the extent to which secondary students' illicit drug use and relevant variables that are associated among secondary school students in Nigeria.

To the researcher's knowledge, no study of such has been carried out till date. Thus, the aim of this study was to investigate illicit drugs and behavioural addictions among secondary students from middle and high income families.

This study sought to quantify the experience of illicit drug users, to examine the association between some negative behavioural dispositions such as impulsivity, pornography, and gambling. The researcher hypothesized that behavioural addictions will significantly influence illicit drug use among secondary school students.

METHODOLOGY

A quantitative, descriptive and exploratory study, with a cross-sectional design aimed at examining whether behavioural addictions are related to illicit drug use among secondary students in Uyo was carried out using self-report measures. Self-report measures are, by far, the most commonly used method of gathering information about drug use because they are cheap, easy to administer, and widely accessible (Grekin, 2010). To collect the data, this study employs a purposive sampling method.

Participants

Two hundred and thirteen (213) secondary students from Monef High School which is a well-known school in Uyo metropolis were purposively selected in this cross-sectional survey. Inclusion criteria included: being aged 10 and above. Participants' age ranged from 13 to 25 years, while mean age was 18.91 years with a standard deviation of 2.85. Of the 213 respondents, 103 (48.6%) were male and 109 (51.4%) were female. In terms of ethnic affiliations, majority were Ibibio 85 (41.9%), 31 (15.3%) were Efik, 30 (14.8%) were Oron, 31 (15.3%) were Annang, 23 (11.3%) were Igbo and others.

Measures

Validated questionnaires were used to collect relevant data in this study. Socio-demographic questions included gender, age, religion and ethnicity. Illicit drug use was assessed with Drug Abuse Screening Test (DAST)-20, Adolescent Version. The DAST was developed and validated by Skinner (1982) at the Addiction Research Foundation, Toronto, Canada (now the Center for Addiction and Mental Health). The DAST-20 is a 20-item, yes/no, self-report instrument that has been shortened from the original 28-item DAST (Bohn *et al.*, 1991). Each question answered with a "Yes" scores 1 point. All items assess drug use in general, without referring to specific types of drugs. Impulsivity was measured using the 10-Item Self-Scoring Self-Control Scale adapted from Tangney *et al.* (2004). The self-scoring self-control scale is scored on a 5-point Likert by adding up all the points and dividing by 10. The maximum score on this scale is 5 (extremely self-controlled), and the lowest scale on this scale is 1 (not at all self-controlled). Some items are "I have a hard time breaking bad habits," "I do things that feel good in the moment but regret later on," and "I often act without thinking through all the alternatives."

Gambling behaviour was assessed with the Gambling Passion Scale (GPS) developed by Rousseau *et al.*, (2002). This scale assesses people's obsessive and harmonious passion toward gambling. It contains 14 items with three subscales, Harmonious Passion (Items 1, 4, 6, 8, and 9), Obsessive Passion (Items 2, 3, 5, 7, and 10), and Passion Criteria (Items 11, 12, 13, and 14) which were all assessed on a 7-point scale of '1=Not Agree at All to 5=Very Strongly Agree). For pornography, the Cyber Pornography Use Inventory-9 (CPUI-9) developed by Grubbs *et al.* (2015) was used. The authors developed and refined a short 9-item measure of perceived addiction to Internet pornography, confirmed its structure in multiple samples, examined its relatedness to hyper-sexuality more broadly, and demonstrated that the notion of perceived addiction to Internet pornography is very robustly related to various measures of psychological distress. Scores for all measures were

calculated by taking averages of individual item responses. Participants were asked to indicate the rate at which they agree with the statement using a 7-point Likert of 'Not at all' to 'Extremely.' The CPUI-9 is made up of three subscales, perceived compulsivity = Items 1–3; access efforts = Items 4–6; and emotional distress = Items 7–9. Some of the statements include, "I believe I am addicted to Internet pornography" and "At times, I try to arrange my schedule so that I will be able to be alone in order to view pornography."

RESULTS

Before the main statistical analysis, the testing normality of the data was conducted which is a prerequisite for inferential statistical technique. Results from Kolmogorov-Smirnov (K-S) test revealed that the significance levels for all variables were less than 0.05 which indicated non-normality except for pornography - a significance level of less than 0.05 indicates non-normality (Coakes *et al.*, 2010). Table 1 shows the result of a 2 x 3 x 3 ANOVA which tested for the independent and joint effect of the variables of this study. The result indicates that predictor variables independently and jointly did not exert significant effect on illicit drug use, $F(1, 205) = 2.731$, $P > 0.05$. However, a close observation of the table indicated that impulsivity interacted with pornography to significantly influence illicit drug use $F(1, 205) = 7.49$, $P < 0.05$, as well as impulsivity interacting with gambling to influence illicit drug use $F(1, 205) = 2.92$, $P < 0.05$.

DISCUSSION

The present study investigated the influence of behavioural addictions on illicit drug use among secondary school students in Uyo, Nigeria. The study found that impulsivity and pornography on one hand, and impulsivity and gambling on the other hand were the strongest influencers of illicit drug use among secondary students and was therefore seen to have potential negative effects in the fight against illicit drug use among students. This finding confirms the previous finding by Hodgins and Racicot, (2013) and Sharp *et al.* (2014). This finding was also in consonance with the study of Hayaki *et al.* (2005) on negative life experiences who recruiting 330 respondents and found a number of substance-related diagnoses being associated with adverse life events, and that these events were significantly associated with impulsivity.

Grubbs *et al.* (2015) also observed that addiction to Internet pornography is also a clinically relevant construct because it is likely to affect various areas of psychological functioning, which in this case can include illicit drug use. Internet pornography use and perceived addiction to internet pornography has also been found to

Table 1: 3-Way ANOVA showing the main and interaction effect of impulsivity, pornography and gambling on illicit drug use among secondary school students.

Source	SS	Df	MS	F	Sig.
Impulsivity (A)	0.07	1	0.07	0.02	>0.05
Pornography (B)	2.29	1	2.29	0.66	>0.05
Gambling (C)	1.22	1	1.22	0.35	>0.05
A x B	26.05	1	26.05	7.49	<0.05
A x C	10.17	1	10.17	2.92	<0.05
B x C	4.31	1	4.31	1.24	>0.05
A x B x C	9.50	1	9.50	2.73	>0.05
Error	713.21	205	3.48		
Total	53200.00	213			

R Squared = .066 (Adjusted R Squared = .034)
 Computed using alpha = .05b

be associated with various indicators of psychological distress which is one of the consequences of illicit drug use (Brand *et al.*, 2011; Egan and Parmar, 2013). Other studies were also in line with this finding especially regarding impulsivity and gambling as can be seen in the study of Ferentzy *et al.* (2013) who conducted a comprehensive review of the literature by focusing on illicit drug use and issues related to gambling; finding as a hidden problem in the illicit drug use community: problem gambling and substance use disorders as closely linked afflictions. In addition, Ioannidis *et al.* (2019) carried out a systematic review and found that gambling was associated with significant impairments and heightened impulsivity was seen across a range of cognitive domains in gambling disorder. The findings of this study also tallies with Şalvarli and Griffiths (2019) who while reviewing 33 eligible empirical studies and recruiting 18,128 participants found a positive association between impulsivity and internet gaming. Summarily, there appears to be a link between perceived addiction to Internet pornography and indicators of poor mental health, which again highlights the clinical relevance of assessing these constructs: impulsivity, pornography, and gambling.

Therefore, the study concludes that for a sustainable development of our future human capital, there is need to develop recreational, educational awareness programs, which will contribute to a more focused planning of mental health services, harm reduction measures and outreach programs, as intervention mechanisms to aid in reducing illicit drug use among secondary school students. This should be pioneered by teachers who should be provided with skills on how to handle students with behavioural problems and they should always organize lectures/classes, rallies, seminars and film shows for students on the adverse effects of illicit drug use. Furthermore, the State Ministry of Education and Culture in-collaboration with National Drug Law Enforcement Agency (NDLEA) should work on

arrangement for sensitization; particularly for secondary school students to ('catch them young') on the adverse effects of illicit drug use with respect to impulsivity, pornography and gambling. Health educators, families, schools, civil society, religious organizations and the community should be concerned and worried that more students in our secondary schools are fast joining the drug train via pornography, gambling and impulsivity, draining away their future for the pleasure of getting high, which pose a threat to the health and safety of the adolescents/students. Preventing these unwholesome situations should be the focus of parents/guardians, educators and behaviorists.

Authors' declaration

We declared that this study is an original research by our research team and we agree to publish it in the journal.

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