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SUBSTANCE USE AMONG YOUTHS: ROLES OF PSYCHOTICISM, SOCIAL ALIENATION, THRIVING AND RELIGIOUS COMMITMENT

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ABSTRACT

The rising levels of drug abuse among youths in the world require evidence-based, cost effective and research-informed intervention strategies. These strategies will need to be formulated around observed socio-demographic and psychosocial characteristics of youths who abuse drugs. This paper presents reports of two studies which investigated the roles of psychoticism, social alienation, religious commitment, and thriving in drug abuse among secondary school students (*n* = 293, 53% males) and undergraduates (*n* = 300, 76% males) students in southeastern Nigeria. The emerging psychoactive substances of abuse among the students were also explored. Participants completed measures of the relevant variables and provided their demographic information. Psychoticism and social alienation were positively significant predictors of substance abuse among secondary school students, while thriving and religious commitment were negatively significant predictors of substance abuse among university undergraduates. It was suggested that psychological factors such as psychoticism, social alienation, thriving and religious commitment be considered in drug use policies and intervention programmes for young persons in Nigeria.

Keywords: adolescents, drug abuse, intervention, prevention, psychoticism, thriving

INTRODUCTION

Substance abuse is the improper, excessive, irresponsible or self-damaging use of addictive substances (Reber & Reber, 2001). Such substances when taken by a person modify perception, mood, cognition, behavior, or motor functions (The American Psychiatric Association, APA, 2000). Substance abuse has become one of the most serious challenges and threats to the life and wellbeing of young persons in several parts of the world, including Nigeria (UNODC, 2018; Uwakwe

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& Gureje, 2011). Williams (2016) posited that over 6 million bottles of codeine are sold and available on a daily basis in the North-West part of Nigeria. Even as the government has placed sanctions on the importation or production and sale of some of these commonly abused drugs (e.g. codeine), the long term effects of exposure to and abuse of these drugs are still evident in the Nigerian society. Moreover, imposing sanctions and making some drugs illegal and medically unauthorized may not be the immediate solution to the menace. Drug abusers have shifted from the abuse of conventional drugs such as codeine, tramadol, cannabis, cocaine, nicotine and phencyclidine, to a mixture of volatile solvents and a wide range of pharmaceutical preparations which go by varying names across different regions of the country.

Research has shown that abuse of drugs is influenced by several underlying psychosocial factors: peer pressure, perceived recreational value of drug abuse, neglect, depression, curiosity and force (Khan & Shah, 2014). It is therefore important that the underlying predispositions to drug abuse among young persons be investigated. These will not only help curb the abuse of drugs, but may help inform better intervention strategies for addicts. This paper reports results from two studies examining the relationships between psychoticism, social alienation, religious commitment, thriving and drug abuse. The first study examined psychoticism and social alienation among college students as predictors of substance abuse. The second study examined religious commitment and thriving as predictors of substance abuse among university undergraduates. Although the two studies were conducted using different samples of young persons, we believe that the unifying factor for these studies is the investigation of psychosocial factors that predict substance abuse among young people.

Psychoticism is a personality pattern typified by aggressiveness and hostility towards others (Eysenck, 1993). More common traits that may be characteristic of psychoticism include impulsivity, sensation seeking, risk taking, and liveliness. Previous research (e.g., Farren, Hameedi, & Rosen, 2000; Johns et al., 2004; Verdoux, Sorbara, Gindre, Swendsen & Vans Os, 2002) established that psychoticism is implicated as a predisposing factor to drug abuse among addicts in experimental populations.

Social alienation is a social condition characterized by distance and isolation between an individual and other members of a society or group. Socially alienated persons perceive meaninglessness if they do not have fulfilling social encounters or lack group ties and social roles that reflect such ties (Ifeagwazi, Chukwuorji, & Zacchaeus, 2015). When looked at subjectively, social alienation refers to a psychological state where alongside feeling isolated and detached from society, an individual feels powerless and meaningless. An alienated individual is only weakly attached to the goals of belonging to a given society and may not be particularly motivated to follow generally accepted norms (Israel, 1994). Social alienation has been implicated to be another predisposing factor to drug abuse (e.g. Shedier & Block, 1990; Murray, 2014; Johnson, Pagano, Lee, & Post, 2015). Nevertheless, there is paucity of literature on psychoticism and social alienation in relation to drug abuse in the sub-Saharan African setting. To fill this gap in knowledge, the present study examines the role of social

alienation in substance abuse among students in Nigeria.

Religious commitment sometimes referred to as religiosity is conceptualized as a reflection of a social entity entailing particular beliefs, customs and boundaries (Miller & Thoresen, 2003). It is the extent to which an individual adheres to his or her religious values, beliefs and practices and uses them in his or her daily living (Worthington et al., 2003). Religious commitment may also include the amount of time an individual spends in private religious involvement and religious affiliation. It is important to note that religious commitment (beliefs, practices and behaviors associated with organized religious groups) is distinguishable from spirituality (a more personal and abstract beliefs and practices such as a sense of the divine in daily life or communication with a transcendent power which may or may not be associated with organized religious practices). Alaedein-Zawawi (2015) reported that religious commitment may influence all areas of an individual's life either positively or negatively depending on the level to which the individual is committed. Research has consistently identified religious commitment as a protective influence against youth substance abuse (e.g., Bahr, Hawks & Wang, 1993; Nonnemaker, McNeely, & Blum, 2003; Ritt-Olson, et al., 2004).

Thriving as a psychological construct refers to the integrative perspective of positive psychological health which cuts across subjective wellbeing, happiness, purpose and meaning in life. Research has established a link between substance abuse and various aspects of thriving. For instance, Khan and Shah (2014) reported an effect of substance abuse on subjective wellbeing of young persons. Visser and Routledge (2007) found that adolescents who abused substances had significantly lower levels of psychological wellbeing and life satisfaction. In the second study, we aim to investigate whether religious commitment and thriving predict substance use in a Nigerian sample of undergraduate students. Research in this part of the world on the issues of interest in the present study are relatively scarce. Hence the need for this study. It was hypothesized that psychoticism and social alienation will positively predict substance abuse, while religious commitment and thriving will negatively predict substance abuse.

Study 1

METHOD

Participants and procedure

Two hundred and ninety three participants (53% (155) males, M_{age}= 15 years, *SD* = 1.2) were drawn from a secondary school in Enugu State. The first author visited the school and obtained the approval of the school principal in order to conduct the study. With the permission of the principal, the researcher moved to the classes to recruit the participants for the study. Two teachers in the school served as research assistants who accompanied the researcher to the classrooms. After the introduction of the purpose of the visit, students were requested to take part in a study on wellbeing of students. Those who agreed to participate in the study were given the questionnaire packs and asked to indicate their informed consent by signing on the front page of the questionnaire form. A total of three hundred copies of questionnaire forms were administered at three different classrooms. Participants took an average

of 13 minutes to respond to all the items on the questionnaire form. All questionnaire forms were collected by the first author and the research assistants on the spot. The first author and research assistants examined each questionnaire before collecting and urged those that had incompletely filled theirs to complete it before returning. However, seven copies of the questionnaire forms were discarded due to incomplete filling. A return rate of 97.6% was therefore observed.

Measures

Data for the first study were gathered via self-report inventories. Respondents completed a questionnaire form containing the Psychoactive Substance Abuse Scale (PSAS, Eze, 2006), The psychoticism subscale of Eysenck Personality Questionnaire Revised-Short Form (EPQR-S) (Eysenck, Eysenck & Barrett, 1985), Social Alienation Scale (SAS) (Jessor & Jessor, 1977) and a demographic section requesting them to indicate their age, gender, and list number of substances they abuse and those they knew friends and others abused.

Psychoactive Substance Use Questionnaire (PSUQ): PSUQ, developed by Eze (2006), is a 6-item measure of the frequency of substance use. The items are scaled on a 4-point Likert format as follows: never used it = 0, used it not more than twice in a week = 1, used it less than thrice in a week = 2, used it more than thrice in a week = 3, used it frequently in the past but stopped = 4. Substances included in the instrument were alcohol, tobacco, heroine, cannabis, cigarette, kolanut and amphetamine. Provision was also made for participants to specify other substances they used that are not among the listed ones. Sample items in the scale are; "how often do you take alcoholic drink", and "how often do you smoke cannabis". High scores on the questionnaire represent high substance abuse. As reported by Eze (2006), the instrument has content validity and test – retest reliability index (r = .61). Reliability analysis and confirmatory factor analysis yielded good fit for the present study (see Table 3).

The psychoticism subscale of Eysenck Personality Questionnaire Revised-Short Form (EPQR-S): The psychoticism subscale of the EPQR-S (developed by Eysenck, Eysenck & Barrett, 1985) consisting of 12 items was used to assess participants' levels of psychoticism. Each question has a binary response of 'yes' or 'no' and is scored 1 or 0 for each dichotomous item. Sample items on the psychoticism sub scale include, 'do you take much notice of what people think?', 'Would being in debt worry you?' 'Would you like other people to be afraid of you?' etc. An earlier version of the scale had yielded acceptable reliability and validity in Nigeria (see Eysenck, Adelaja, and Eysenck, 1977). Abiola, Udofia and Yunusa (2012) reported that the EPQ psychoticism domain correlated negatively with agreeableness and conscientiousness as evidence of its construct validity. Eysenck, Eysenck and Barrett, (1985) reported an internal consistency of .68 for males and .51 for females. In interpreting the test, higher scores indicate a manifestation of the typical personality characteristic of psychoticism. Reliability analysis and confirmatory factor analysis yielded good fit for the present study (see Table 3).

Social Alienation Scale (SAS): The Social Alienation Scale was developed by Jessor and Jessor (1977). The scale measures

generalized alienation with respect to uncertainty about the meaningfulness of daily roles, activities and the belief that one is isolated from others. It is made up of 15 items that have a Likert-type response format of 'strongly agree', 'agree', 'disagree' and 'strongly disagree'. Scores range from 15 to 60 with higher scores indicating higher alienation. Sample items include, 'I sometimes feel that children I know are not too friendly', 'I often feel alone when I am with other people', and 'Hardly anyone I know is interested in how I really feel inside'. Safipour, Tessma, Higginbottom & Emami (2010) reported an internal consistency using Chronbach's alpha of .81. Reliability analysis and confirmatory factor analysis yielded good fit for the present study (see Table 3).

Statistical Analysis

Confirmatory factor analysis and item analysis were first conducted to validate the measures. Thereafter, Pearson's correlation (r) analysis was conducted among the study variables while hierarchical multiple regressions was employed to statistically test the hypotheses for the study.

RESULTS

Table 1 showed the intercorrelations among study variables. Significant positive correlations were observed between psychoticism, social alienation and substance abuse. As evident from Table 1 above, there are significant associations between the study variables. The positive correlations suggest that higher levels of psychoticism and social alienation in respondents are associated with higher substance abuse.

Result of the hierarchical multiple regression in Table 2 in which substance abuse was entered as the criterion variable indicates that the demographic variables entered in the equation as controls collectively accounted for a 2% variance in substance abuse. However, only age (β =.16, t = 3.72, p<.05) significantly and positively predicted substance abuse. This means that for every one unit increase in age of respondents, substance abuse increased by .16 units. Thus, older students reported abusing drugs more often than younger students. When psychoticism was entered in step 2 of the equation, it contributed a significant 12% variance observed in substance abuse. Psychoticism positively and significantly predicted substance abuse (β = .21, t = 6.23, p<.01). This means that for every one unit increase in psychoticism, substance abuse increases by .21 units. Social alienation entered in the last step of the equation raised the variance observed in substance abuse to 17%. Social alienation also significantly and positively

Table 1. Intercorrelations between variables in Study One

Variables	1	2	3	4
1. Age	1			
2. Gender	.01	1		
3. Psychoticism	.16	.04	1	
4. Social Alienation	-.13*	-.06	.28*	1
5. Substance Abuse	.37**	.08	.54**	.33**

Note. N = 293, * = p < .05 (two-tailed), ** = p < .01 (two-tailed), *** = p < .001 (two-tailed). Gender was coded 0 = female, 1 =male.

Table 2. Hierarchical multiple regression predicting substance abuse by psychoticism and social alienation

Variable	Step 1 B	Step 2 β	Step 3 B
Controls			
Age	.16*	.15*	-.15*
Gender	.04	.03	.02
Predictors			
Psychoticism		.21**	.21**
Social Alienation			.29**
Adjusted R^2	.02	.12**	.17**
ΔR^2	.03	.10**	.15
ΔF	7.09	32.46**	26.6**

* = $p < .05$, ** = $p < .01$, *** = $p < .001$.

Table 3. Goodness of Fit indicators for the measures used in studies 1 & 2

Scale	α	χ^2	Df	χ^2/Df	CFI	TLI	RMR	GFI	RMSEA(90% CI)
EPQ-R (P)	.67	491	170	2.8	.83	.88	.05	.95	.06(.07-.08)
SAS	.82	491	169	2.9	.88	.87	.05	.91	.04(.03-.05)
RCS-10	.80	133.5	35	3.8	.85	.72	.04	.92	.07(.08-.09)
BIT	.93	256	143	1.8	.90	.89	.04	.96	.04(.03-.05)
PSAS	.78(.71)	247.8	20	12.3	.70(.76)	.60(.80)	.10(.06)	.81(.87)	.19(.17-.22)

Note: **α**=*Cronbach's alpha (>0.6 suggests adequate internal reliability, <0.6 suggests poor internal reliability) CFI: comparative fit index (>0.95 suggests good fit, >0.9 suggests adequate fit, <0.9 suggests poor fit); TLI: tucker Lewis Index (> 0.95 indicates good fit, >0.9 suggests adequate fit, <0.9 suggests poor fit); RMR: root mean residual (<0.05 suggests good fit, <0.08 suggests adequate fit, >0.08 suggests poor fit); GFI: Goodness of fit Index (> 0.95 indicates good fit, >0.9 suggests adequate fit, <0.9 suggests poor fit) RMSEA: root mean square error of approximation (< 0.05 is good fit, <0.08 is adequate fit, >0.08 is poor fit) CI: confidence interval. Values for PSAS in bracket represent indices obtained from study 2; RMSEA for study 1 and 2 were the same.*

predicted substance abuse (β = .29, t = 4.18, p<.01). This means that for every unit increase in social alienation, substance abuse or proneness to substance abuse increases by .29 units. It was therefore observed that age, psychoticism and social alienation are predictors of substance abuse among secondary school students.

Study 2

Participants and Procedures

Three hundred (76% (228) males, M_{age}=17, SD=2.3) undergraduate students of the University of Nigeria, Nsukka participated in this study. Respondents were majorly Igbo (82.3%) while others were Yoruba (4.3%), Hausa (6%) and other ethnic groups (7.3%). With respect to religious affiliation, 90.7% of the respondents reported being Christians while 5% reported being Muslims and 4.3% belonged to the African Traditional Religion. Forty-two percent had stayed in the boarding houses during their secondary school education while 58% attended secondary schools from homes. As regards to accommodation in the University, 49%

of the participants were living off campus, 26% in the University hostels, 12.7% were living either with their parents or grandparents and 12.3% lived within the University Staff quarters. They were conveniently sampled by the first author and some research assistants at three different times; during a sports event at the Stadium, University of Nigeria Nsukka, during a social psychology class and at their apartments. Informed consent was got by asking respondents to indicate willingness to participate in the study. Those who indicated by signing were administered the questionnaire individually. They were informed that they were free to withdraw from the study at any point without facing any consequences. A total of three hundred copies of questionnaire forms were administered and retrieved at the different occasions giving a return rate of 100%. Response time varied from 7-14 minutes for the different occasions. All questionnaire forms were collected on the spot. The first author and some research assistants examined each questionnaire form before collecting and urged those that had incompletely filled theirs to complete it before returning.

Measures

Data for the second study were gathered via self-report inventories. Respondents completed a questionnaire form containing the Psychoactive Substance Abuse Scale (PSAS, Eze, 2006), Religious Commitment Inventory, RCI-10 (Worthington et al., 2003), the Brief Inventory of Thriving (BIT, Su, Tay, & Diener, 2013) and a demographic section requesting them to indicate their age, gender, religion, ethnic group, type of secondary school attended, type of accommodation in school and list number of substances they abuse and those they knew friends and others abused.

Religious Commitment Inventory, RCI-1O: RCI-1O (Worthington, et al., 2003) assesses one's level of religious adherence in daily life and the extent to which an individual interprets life events based on his/her religious views. It was designed for research and clinical use. The 10 items of the inventory are arranged on a 5-point Likert type scale: not at all true of me (1), somewhat true of me (2), moderately true of me (3), mostly true of me (4) and totally true of me (5). Sample items of the scale include: 'my religious beliefs lie behind my whole approach to life' (intrapersonal), and 'I enjoy working in the activities of my religious organization' (interpersonal). Worthington et al. (2003) reported 6 different studies for the development and refinement of RCI - 10, in large heterogeneous samples, including college students and university undergraduates. Scores on the RCI-1O had strong estimated internal consistency with Cronbach's alpha ranging from .93 - .96 (Worthington et al., 2003). A previous study in Nigeria had replicated the two factor structure of RCI-10 (See Ifeagwazi & Chukwuorji, 2014). Another study by Chukwuorji, Ituma and Ugwu (2017) obtained Cronbach's alpha values of .85 (full scale), .79 (intrapersonal religious commitment) and .74 (interpersonal religious commitment). Higher scores on the inventory indicate higher religious commitment. Reliability analysis and confirmatory factor analysis yielded good fit for study 2 (see Table 3).

Brief Inventory of Thriving (BIT): The BIT (Su, Tay & Diener, 2014) was used to assess participants' perceived levels of subjective wellbeing. It is a 5-point Likert-type

scale, consisting of 10 items, responded to on a response format ranging from strongly disagree (1) to strongly agree (5). It consists of items such as "There are people who appreciate me as a person", "I feel a sense of belonging to my community", "I feel good most of the time". All items are directly scored. Possible range of scores was from 10-50. High scores indicate the presence of subjective wellbeing while low scores reflect a negative evaluation of one's life and consequently low levels or possible absence of wellbeing. The validity and reliability of the BIT has been demonstrated in various studies. For example, Su, Tay, and Diener (2014) reported a reliability coefficient of α = .90. The convergent validity for the BIT was established using the Satisfaction with Life Scale (Diener et al., 1985) (r = .29, p < .001), and a Cronbach's α of .87 was obtained. (Chukwuorji, Iorfa, Nzeadibe, & Ifeagwazi, in press). Reliability analysis and confirmatory factor analysis yielded good fit for the present study (see Table 3).

Statistical Analyses

Confirmatory factor analysis and item analysis were first conducted to validate the measures (results are given in Table 3). Thereafter, Pearson's correlation (r) analysis was conducted among the study variables while hierarchical multiple regressions was employed to statistically test the hypotheses for the study.

Results

Table 4 shows the intercorrelations among study variables. There were negative correlations between thriving and substance abuse, as well as religious commitment and substance abuse.

The results of the hierarchical multiple regression in Table. 5 in which substance abuse was entered as the criterion variable indicate that the demographic variables entered in the equation as controls collectively accounted for a 10% variance in substance abuse. However, only type of secondary school attended (β = .06, t = 1.72, p<.05) and type of accommodation in school (β =.02, t =1.07, p<.05) significantly and positively predicted substance abuse. This means that respondents who had attended day secondary schools abused drugs more than those who had attended boarding secondary schools. Also, students who stay

Table 4. Pearson's correlations of demographic factors and study variables

Variables	1	2	3	4	5	6	7
1. Gender	-						
2. Ethnic group	.19	-					
3. Religion	-.11	.16**	-				
4. Type of sec school	-.04	-.13*	.00	-			
5. Accommodation in school	-.04	-.01	.03	.27**	-		
6. Substance Abuse	-.21**	.10	.16**	.08*	.11*	-	
7. Thriving	-.09	.03	.11	-.05	.01	-.75**	-
8. Religious Commitment	.01	-.03	-.04	.02	.11	-.63**	.83**

Note. N = 300, * = p < .05 (two-tailed), ** = p < .01 (two-tailed), Gender was coded 1 = male, 2 =female. Ethnic group, 1= Igbo, 2= Yoruba, 3= Hausa, 4= Others; Religion, 1= Christianity, 2= Islam, 3= African Traditional Religion; Type of Secondary School, 1= Boarding house, 2= Day school; Accommodation in school, 1= living with parents, 2= School hostel, 3= Staff quarters, 4= off campus

Table 5. Hierarchical multiple regression predicting substance abuse by thriving and religious commitment

Variable	Step 1 B	Step 2 B	Step 3 B
Controls			
Gender	-.07	-.10	-.10
Ethnic Group	.02	.03	.03
Religion	.10	.11	.11
Type of Secondary School	.06*	.07*	.07*
Accommodation in School	.02*	.04*	.05*
Predictors			
Thriving		-.13*	-.12*
Religious Commitment			-.37**
Adjusted R^2	.10	.12*	.32**
ΔR^2	.12	.11*	.21**
ΔF	1.2	4.40*	7.61**

* = $p < .05$, ** = $p < .01$, *** = $p < .001$.

outside the school campus either with their parents or by themselves reported higher substance abuse than those who stayed in school hostels. When thriving was entered in step 2 of the equation, it contributed a significant 12% variance observed in substance abuse. Thriving negatively and significantly predicted substance abuse (β= -.13, t = -3.25, p<.05). This means that for every one unit increase in thriving, substance abuse decreases by .13 units. Religious commitment entered in the last step of the equation raised the variance observed in substance abuse to 32%. Religious commitment also significantly and negatively predicted substance abuse (β = -.37, t = -7.18, p<.01). This means that for every unit increase in religious commitment, substance abuse or proneness to substance abuse decreases by .37 units. It was therefore observed that age, type of secondary school, type of accommodation in school, thriving and religious commitment are predictors of substance abuse among university undergraduates.

Data on emerging psychoactive substances abused were also gathered from studies 1 & 2. The results is presented in Table 6 below. It was observed that apart from the common psychoactive substances abused by youths, new and emerging substances which most times are a combination of two or more other drugs have surfaced and are known by varying names in different locations across the country. Table 6 presents alongside the name of the drug, the percentage of participants in the study who had either used it, seen someone use it or have heard of it.

DISCUSSION

The aim of this study was to examine the roles of psychoticism, social alienation, thriving and religious commitment in substance abuse. The present study established strong association between substance abuse and psychoticism, social alienation, thriving and religious commitment. While the first study looked at predisposing

Table 6. Emerging psychoactive substances abused by young persons in Nigeria

Substance	Reason for intake	Mode of intake	% of awareness in Study 1	% of awareness in Study 2
Marijuana (*Kpoli, Igbo, ganja)*	Euphoria	Smoking, chewing	53%	89.6%
Black Mamba (spice, Colorado,)	Euphoria	Smoking	7%	85%
Codeine (blunts)	Euphoria	Injestion	32%	77%
Tramadol	Euphoria, delay ejaculation,	Ingestion (singly/mixed with alcohol/coca-cola)	34%	98%
Rohypnol (Roko, roofies, renfol, etc.)	Euphoria,	Crushed/snorted, smoked with Marijuana, dissolved in drinks	6%	68%
Alabukun	Treat hangover	Sniffing/mixed with alcohol	3%	47%
Dexacoitin	Gain weight	Ingestion	0%	34%
Aspirin	Euphoria	Ingestion (singly/mixed with alcohol/coca-cola,	3%	57%
Valium	Relaxation	Injestion, Injection	7%	33%
Gum	Euphoria	Sniffing	79%	54%
Soakaway	Euphoria	Sniffing	12%	34%
Monkey tail (local gin brewed in marijuana leaves, stems, roots, seeds)	Increase libido	Ingestion	8%	67%
Gutter water (a combination of codeine, refnol, tramadol, cannabis, and water/juice	Euphoria	Ingestion	0%	3%
Dongoyaro	Euphoria	Ingestion	43%	78%
Molly	Euphoria	Swallowed	0%	6%
Storm	Increase libido	Swallowed	0%	20%
Cloud 9 (ZB, bath salt)	Euphoria	Swallowed	0%	1%
Ecstasy (Rolls)	Euphoria	Swallowed, snorted, smoked, injected	0%	13%

factors to substance abuse, the second study looked at positive concepts that may buffer substance abuse in youths.

It was found in this study that the more psychoticism traits reported by the participants, the more the level of substance abuse as well. Therefore the hypothesis which stated that psychoticism will positively predict substance abuse was supported. The implications of this in intervention and therapy is that anti-drug campaigns, intervention strategies and therapeutic approaches ought to include efforts at reducing the manifestation of psychotic traits in individuals. Investigating substance abuse at the secondary school level, we found that the menace has become common among adolescents in secondary schools. Type of secondary school (whether boarding or day) attended also had influences on drug abuse later in the university. As observed from the results, secondary school students who had attended day schools during their secondary education, abused drugs more than those who stayed in the boarding house. Also, undergraduate students who were not living in campus hostels abused more drugs than their counterparts who stayed in the university hostels.

This study also found significant and positive prediction of substance abuse by social alienation. Therefore the hypothesis which stated that social alienation will positively predict substance abuse was supported. Integrating social inclusion as an intervention strategy and creating a sense of belonging among drug addicts may prove instrumental in psychosocial interventions for substance abuse. Earlier studies had also touched on social inclusion as a therapeutic approach to drug addiction. For instance, Alexander (2010) reported experiments in which rats in solitary confinement consumed more drugs than rats which were allowed to socialize. Addiction may create a cage for the addicted and therefore the need to bring them out of that cage for social inclusion into the society. Social inclusion therapies may need to be client oriented with self-directed goals. In emphasizing social inclusion for the addict, therapists and clinicians must have in mind that addicts are more prone to developing networks based on their problems rather than the presenting solutions. Therefore, group therapies and good social networks may be suggested to the addict.

The society must also strive for collectivism- a more collective attitude that broods a sense of belonging to every member of the community. Social exclusion also may result from other socioeconomic factors such as unemployment, poor housing, family breakdown and disputes. This calls for government and other agencies involved to work on implementing policies that revolve around poverty reduction and crime eradication in the society. These and many other factors may be indirectly responsible for the high rate of substance abuse observed in the country.

In the second study, it was found that religious commitment was a negative predictor of substance abuse. In other words, those who were more religiously committed reported less use of psychoactive substances. Therefore the hypothesis which stated that religious commitment will negatively predict substance abuse was supported. The finding is consistent with finding by some authors (e.g., Bahr, Hawks & Wang, 1993; Nonnemaker, McNeely, & Blum, 2003; Ritt-Olson, et al., 2004) that have consistently identified religious commitment as a protective influence against youth substance abuse. By implication, fostering stronger religious beliefs and adherence to the tenets of one's religion may make the students less likely to engage in abuse of substances.

Thriving was also found to be a negative predictor of substance abuse. Previous research has established a link between substance abuse and various aspects of thriving (e.g., Khan & Shah, 2014; Visser & Routledge, 2007). Therefore the hypothesis which stated that thriving will negatively predict substance abuse was supported. Efforts and psychosocial interventions to enhance the psychological well-being and functional mental health of youths must be given priority in the society. By so doing, the abuse of substances may be reduced. However, it should also be noted that the use of substances also impacts negatively on mental health status.

Our study has some noteworthy limitations. As a crosssectional research, it has all the inherent weaknesses of this type of research design. Although we considered the four independent variables factors in substance abuse, it is possible that substance abuse also influences one's perceived alienation, psychotic traits,

religious commitment and thriving. We suggest the adoption of longitudinal designs in future research to clarify the causal mechanisms of effect among the variables. We used self-rated substance abuse and the predictor variables by students in a secondary school university located in South eastern Nigeria. The sample was not religiously diverse because of the predominance of Christians in the student population. Therefore, the generalizability of the findings is limited. Researchers should in future consider a more religiously and ethnically heterogeneous group in order to make better generalisations.

CONCLUSION

Youth addiction has become a major public health concern, not only in Nigeria, but all over the world. This is partly due to the over availability of prescription medication/over the counter drugs and the ease in procuring street drugs (marijuana, cocaine, nicotine, etc.). While the government and other regulatory agencies fight this menace from the top, it is essential that a grass root approach that integrates evidence-based, cost effective and research-informed intervention strategies be adopted to fight the menace at individual levels. The findings from this study will help inform proper therapeutic approaches and intervention strategies for tackling substance abuse among young persons. Taken together, these results have implications for clinical practice and counselling among youths. Clients who are inclined to religious commitment may respond better to therapies that incorporate religious teachings and create room for clients (who are willing) to discuss religious themes with therapists.

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