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RESEARCH ARTICLE

GENDER AND LOCUS OF CONTROL: A COMPARATIVE STUDY OF ADOLESCENT SUBSTANCE ABUSE IN AWKA METROPOLIS

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ARTICLE INFO	ABSTRACT		
Article History: Received 20 th February, 2019 Received in revised form 24 th March, 2019 Accepted 27 th April, 2019 Published online 30 th May, 2019	The study explored gender and locus of control as a comparative study of adolescent substance abuse in Awka Metropolis. Total number of one hundred and fifty-three (153) secondary school students in Awka metropolis; served as participant for the study. 61 (39.9%) were females while 92 (60.1%) were boys. Simple random sampling technique was used to select the secondary schools and the participants. Their ages comprised 11 to 18 years with a mean age of 14.86 years and standard deviation of 2.28. Substance Craving Scale by Mazza (2004) and Levenson Multidimensional Locus		
Keywords:	of Control by Levenson (1973) were employed for data generation. Two by Two Factorial Designs and Two-way Analysis of Variance (ANOVA) statistic were adopted and three hypotheses were		
Gender, locus of Control, Adolescent substance Abuse.	tested. The first hypothesis which stated there will be no significant difference between boys and girls on adolescent substance abuse in Awka metropolis and the second hypothesis which stated that there will be no significant difference between those that have external and internal locus of control on adolescent substance abuse in Awka metropolis were confirmed at $p>.05$. while the third hypothesis which stated that there will be no significant interaction effect between gender and locus of control on adolescent substance abuse in Awka metropolis was confirmed at $p>.05$. Implications and recommendations of the study were properly established in the study.		

INTRODUCTION

Naturally, adolescence is a time of significant developmental transition which is considered to be second only to infancy in the magnitude of changes that occur (Hart & Carlo, 2005). Adolescents experience numerous developmental challenges at varying stage, including: increasing need for independence; evolving sexuality; transitioning through education and commencing employment; consolidating advanced cognitive abilities; and negotiating changing relationships with family, peers and broader social connections (Blum & Rinehart, 2008). The adolescent period is also marked by increased involvement in maladaptive behaviours that may predispose young people to poor long term outcomes. Many of these deviant behaviours are relatively transitory in nature and are resolved by the beginning of adulthood. However, there is increasing evidence of the significant level of emotional and behavioural difficulties such as depression, anxiety, conduct disorder, substance abuse, alcoholism and suicidal thoughts that are experienced by some Nigerian adolescents (Abdulkarim, Mokuolu & Adeniyi, 2005). Substance abuse which is the interest of this study is a rapidly growing global problem (Lakhanpal, Agnihotri, 2007; United Nations Office of Drugs and Crime, 2007; Abudu, 2008). The problem of substance abuse poses a significant threat to the social, health, economic fabrics of the families, society and the entire nations (Giade, 2012; Oshodi, Aina & Onajole, 2010).

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Almost every country in the world is affected from one or more drug being abused by its citizens. The increased of drug abuse globally has brought problems such as increase in violence and crimes and diseases such as HIV/AIDS, collapse of the veins and collapse in the social structure (UNODC, 2007; Oshodi, Aina, & Onajole, 2010). The impact of drug abuse among Nigerian students has been a feature of a morally bankrupt, corrupt and wasted generation and loss of our societal values and ideals. The situation now appears to be such that no one can argue ignorance of what is happening (Abudu, 2008). "one cannot sit and pretend that he/she has not seen the menace of drug abuse among adolescents" (Hamisu, Ahmad & Lim, 2014). According to Giade, (2011), any nation being used by drug barons as a transit route has the potentials of becoming a substance abuse consumer's country; substance abuse threatens the security of every nation, tearing apart the societies, spawning crime, spreading diseases such as AIDS, and killing youths and the future of the country". Based on the above problems, the study will examine the impact of gender, parental socio-economic and locus of control on adolescents substance abuse in Awka metropolis.

Review of Related Literatures

Substance abuse which the adolescents could turn to, also known as drug abuse and substance use disorder is a patterned use of a drug in which the user consumes the substance in amounts or with methods which are harmful to themselves or others, and is a form of substance related behaviour disorder. Substance abuse also means harmful use of alcohol or other

drugs. It is a poorly adaptive behavior pattern, lasting more than one month, in which a person continues to use a substance after knowingly being harmed by it or uses it repeatedly in a hazardous situation. Abuse can lead to substance dependence (addition) which may be physiological or psychological, or both, and is likely to continue into adulthood (Papalia, Old & Feldman, 2001). Odianose (2009) commented that, drug abuse is the "arbitrary" over dependence or misuse of one particular drug with or without a prior medical prescription from qualified health practitioners. Substance abuse may also be defined as the "arbitrary" over dependence or miss-use of one particular drug with or without a prior medical diagnosis from qualified health practitioners (Lakhanpal, & Agnihotri, 2007). Oluremi (2012) stated that substance abuse is the harmful use of mind altering drugs. It added that the term usually refers to problem with illegal drugs, which also include harmful use of legal prescription drugs, Such as in self-medication. Majority of the Nigerian adolescents ignorantly or deliberately depend on one form of drug or the other for their various daily activities-social, educational, political, moral among others. Such drugs include: Tobacco, Indian hemp, cocaine, morphine, Heroine, Alcohol, ephedrine, Madras, Caffeine, Glue, Barbiturates, and Amphetamines. Other drug abused may include, Panadol, Benilyn, tramadol, codeine, Burukutu", or local beer, cigarette, solution, beer (Shehu, 2008). Moreover, the exact cause of substance abuse is not clear, with theories including: a genetic disposition; learned from others -or a habit which if addiction develops, manifests as a chronic debilitating disease. Because of these development, most parents and scholars are concerned about the way the adolescents behave, thus tend to be particular of their interactions.

Interestingly, Fatoye and Morakinyo (2002), noted that the most common substance abuse among adolescent in south Western Nigeria were salicylate analgesics (48.7 %), stimulants (20.9 %), antibiotics (16.6 %) alcohol (13.4 %), hypnotic sedatives (8.9%) and tobacco (3.0%) They equally noted that the current and lifetime use of alcohol and tobacco was significantly more common among the males and among those in the rural school for the majority of the students, initiation into drug use started at a very early age (under 14 years) and from parental influenced Otieno and Ofulla (2009) showed in their study that majority students who were abusing drugs were aged between 16-18 years. They also indicated by the age of 15 years some of the respondents were already abusing drugs. Research indicates that adolescents in families with low levels of cohesion and communication (disengaged) are at a higher risk for developing conduct/behaviour disorders (maladaptive behaviour), substance abuse or behaviour problems (Prange, Greenbaum, Silver, Friedman, Kutash & Duchnowski, 2002). From observation of adolescents, it can be noticed that some of them are excessively aggressive towards others and are often restless, thus paying less attention to lessons, some show signs of neurosis and constantly exhibit the ability to exploit others due to lack of appropriate communication between them and their parents at home. Adolescent who constantly exhibit various forms of anti-social behaviour is regarded as maladaptive. These forms of behaviours inhibit a person's ability to adjust to particular situations. A common type of maladaptive behaviour is turning to alcohol or drugs (substances) for refuge instead of working to address a challenge. Some other examples are murder, rape, robbery, theft and so on. Studies also that attempted to uncover the origins of the development of substance use behaviour

among adolescents found that family characteristics, and in particular, parental communication styles are being the strongest predictors of deviant behaviour (Fuller, 2000). Previous research discussed the influences of behavioural and emotional issues of parents and how these issues relate to their children. Research suggested that problem behaviour in adolescents has been identified in the early stages of their childhood (Van Der Geest & Biljeveld, 2011). Furthermore, children developing behaviour problems in school and their neighbourhoods seem to grow into adolescence with problem behaviours. These problem behaviors identified include: lack of respect, impulse control, poor self-esteem, masculinity development, and lack of social ties to community (Van Der Geest & Biljeveld, 2011). Additionally, these children that are continually experiencing emotional and behavioral problems seem to have a range of identified negative parental behaviours (i.e., domestic violence, being excessively drunk, drug abuse, and/or involvement with the justice system) (Dembo, 2007). Having discussed the key study variables, other variables include gender and locus of control.

Gender and Substance Abuse: Gender is generally conceived as a set of characteristics or traits that are associated with a certain biological sex (male or female). In non-western countries, gender is not always conceived as binary, or strictly linked to biological sex. As a result, in some cultures there are third, fourth, fifth or "some" genders. The characteristics that generally define gender are referred to as masculine or feminine. According to some research, risk and protective factors are basically the same for girls and boys, and they function identically regardless of gender (Arthur, Hawkins, Pollard, Catalano & Baglioni, 2002; Bra"nstro"m, Sjo"stro"m & Andr'easson, 2007; El-Khouri, Sundell, & Strandberg, 2005), while other studies have indicated gender differences for several factors (Amaro, 2001; Stone, 2012). Evidence have shown that substance abuse is generally higher among boys than girls, and boys are usually overrepresented in substance abuse treatment (Andersson, 1993; Dembo & Muck 2009; Hsieh & Hollister, 2004; James, 2013; Opland, Winters, & Stinchfield, 1995; Richert, 2007; Shillington & Clapp, 2003; Stone, 2012). With regard to substance choice, researchers have found that boys are more likely to smoke cannabis, while girls use "harder" drugs, such as amphetamines and opiates, more often and more extensively (Brunelle, Tremblay, Blanchette-Martin, Gendron, & Tessier, 2014; Dean, McBride, McDonald, Connolly, & McDermott, 2010; Dembo & Muck, 2009; Kloos, 2009; Opland, 1995; Pedersen, 2009; Shane, Diamond, Mensinger, Shera, & Wintersteen, 2006; Shillington & Clapp, 2003; So"derholm Carpelan, 1992; Thomas, 2003). Alcohol abuse appears to be more evenly divided between the sexes (Andersson, 1993; Opland, 1995; Rounds-Bryant, Kristiansen, Fairbank, & Hubbard, 1998). The age at onset of alcohol and cannabis use was 12 and 13 years, respectively, for both sexes (Pedersen, 2009; Opland, 1995).

More so, another study found no major gender differences either for choice of drug or usage patterns (Mitchell, 2016). However, it was found that girls with substance abuse problems had been subjected to various forms of violent victimisation to a much greater extent (Anderberg & Dahlberg, 2016; Mitchell et al., 2016; Rounds-Bryant, 1998; Shane, 2006; Titus, Dennis, White, Scott, & Funk, 2003). Other studies show that girls are more often victims of sexual abuse, while boys more commonly experience physical violence and these Girls experience traumatic events and victimisation more frequently than do boys, which in turn typically manifests as an increase in mental health problems. Consequently, girls generally report more pervasive mental health problems than do boys (Grella & Joshi, 2003; Hawke, Jainchill, & De Leon, 2003; Hsieh & Hollister, 2004). With regard to various mental health problems associated with substance abuse, girls report a higher incidence of depression, anxiety, self-harm, suicidal ideation, and suicide attempts (Hodgin, 2014; Jacobsson, Richter, Tengstro^{-m}, & Borg, 2011; Pedersen, 2009; Richert, 2007; Toray, 1991), and have riskier sexual behaviour (Stevens, 2003). Boys report greater difficulties controlling violent behaviour (Hodgins, 2014; James, 2013).

Locus of Control and Substance Abuse: Additional variable to consider in this study is locus of control: which refers to "the degree to which persons expect that a reinforcement or an outcome of their behaviour is contingent on their own behaviour or personal characteristics versus the degree to which persons expect that reinforcement is a function of chance, luck or fate, is under the control of powerful others, or is simply unpredictable" (Rotter, 1990). And it can be internal versus external control. Locus of control (LOC) has been report over the years as a major construct in individual's life that play a major role in many aspects of human behavior such as self-control, socially adjustment, independence, expectancy, achievement motivation and success-orientation. It is seen as the degree to which individual believes that their behaviours are controlled by external or internal factors. The findings of Carrim, Basson, & Coetzee, (2006), Gizir&Avdin (2009), Tella, Tella, &Adeyinka, (2008) have shown that individuals with a high external locus of control believe that fate or chance determine the outcome of events while individuals with a high internal locus of control believe that the results of events are caused by their own actions and behaviour (Boone, van Olffen& van Witteloostuijn, 2005; Carrim, Basson, & Coetzee, 2006). People having internal orientations are more likely to be aware of and to use good health practices. Health is one of the many areas in which there has been a significant amount of interest in relating locus of control beliefs to a variety of relevant behaviours. The prevalence rates of alcohol, tobacco, and marijuana use typically increase over the adolescent years and reach a peak during late adolescence and early adulthood. Alcohol use is the most prevalent substance use behaviour among teens, and marijuana is the most prevalent illicit drug used (Adekeye, Adeusi, Chenube, Ahmadu & Sholarin, 2015). These rates of use are alarming in light of the many serious consequences of adolescent substance use in relation to locus of control, which include a range of health, social, psychological, and neurocognitive problems that can interfere with normative development (Newcomb & Locke, 2005). Based on the above deduction, this study will investigate the impact of gender, parental socio-economic status and locus of control on adolescent substance abuse in Awka metropolis.

EMPIRICAL REVIEW

Gender and Substance Abuse: Agu, Nwankwo, Obi, Sydney-Agbor. And Mgbenkemdi (2013), investigated effect of gender and locality on alcohol abuse among secondary school students. 130 adolescents males and females selected from urban (n=77) and rural (n=53) were used for the study. The participants were between 14-20 years with a mean age of 17 years. 15 items questionnaire designed to measure substance abuse was for data collection. 2 x 2 factorial design was adopted while 2 x 2 analysis of variance F-test was used for

data analysis. Findings revealed a significant influence of gender on substance abuse [F (1,126) = 11.8, p<.01]. A significant influence of locality was also observed on substance abuse [F $(1,126) = 48.9 \ p<.01$]. The study also showed a significant interaction effect of gender and locality on substance abuse among adolescents [F, (1,126) = 2565, p<.01].

Locus of Control and Substance Abuse: Adekeve, Adeusi, Chenube, Ahmadu and Sholarin (2015), examined assessment of alcohol and substance use among undergraduates in selected private Universities in Southwest Nigeria. Data from 574 students between ages 18 and 27 (n = 574, mean= 21.15 (+/-1.8 years) was collected from five tertiary institutions in Ado-Odo-Ota LGA, Nigeria. An adapted and validated version of the World Health Organization (WHO) questionnaire on drug use surveys and the multidimensional health locus of control (MHLC) which was designed to measure the degree to which an individual feels they are in control of their own health were employed for data collection. Data collected were analyzed using descriptive and inferential statistics. Three research hypotheses were raised and tested. Data collected were analyzed using descriptive and inferential statistics. The preliminary result shows that there is no significant difference in the health-related locus of control between substance users and non-users, and between heavy and occasional drinkers, but there exist significant differences based on gender.

Hypotheses

- There will be no significant difference between boys and girls on adolescent substance abuse in Awka metropolis.
- There will be no significant difference between those that have external and internal locus of control on adolescent substance abuse in Awka metropolis.
- There will be no significant interaction effect between gender and locus of control on adolescent substance abuse in Awka metropolis.

MATERIALS AND METHODS

Participants: A total number of one hundred and fifty-three (153) secondary school students in Awka metropolis; served as participant for the study. 61 (39.9%) were females while 92 (60.1%) were boys. Simple random sampling technique was used to select the secondary schools and the participants. To select the schools, the researcher wrote, in different pieces of papers, the names of the schools he could remember. The papers were folded and put in a black bag. From the pool, four schools were picked. To select the students from the schools, the sampling technique used involved presenting blue and black pen and allowing the students to pick one. Those that picked blue were given the questionnaire to fill. The ages of the participants ranged from 11 to 18 years with a mean age of 14.86 years and standard deviation of 2.28.

Instruments: The instrument adopted for the study was Substance Craving Scale developed by Mazza (2004), a 12 items scale: designed to measure individual nervous, urge, crave now, perfect, no better, overwhelming, taste it, all want, do anything, can't think, use soon toward drugs. And it has a response scale of "Yes=1, and No=2". The instrument generally was valid at 0.63 as was determined by Mazza

(2004), Winsteps estimation showed a mediocre personreliability of .70 for the measure. The Cronbach's alpha for the Substance craving scale was 0.93. And its use in this study was adopted through a reliability test using fifty-three students from secondary schools in Nnewi urban for the pilot test. And Crombach alpha reliability coefficient analysis of .70 was confirmed. The second instrument is Levenson Multidimensional Locus of Control (LMLC) Scales; a 24 items, Levenson (1973): designed to measures Internality, Powerful Others, and Chance. The scale has high reliability, with test-retest correlation value between .82 and .88 above. For its use in this study, using fifty-three students from secondary schools in Nnewi urban for the pilot study, a Cronbach's alpha reliability coefficient of .73 was confirmed.

Procedures: The researcher selected four secondary schools via simple sampling techniques (Igwebuike grammar school, Kenneth Dike comprehensive secondary school, Amaenyi Girls Secondary school, and Capital city secondary school) out of nineteen (19) government secondary schools in Awka south Local Government Area, Anambra. The researcher sought the permissions of the school principals to conduct the research. On the agreed date, the researcher went to the schools to conduct the research. The researcher, with the aid of some of the school teachers met the students in their schools during their free period. Before the administration of the instrument to the students, the researcher first obtained the attentions of the students through the help of the school teachers who were teaching the students. When the attentions of the students were obtained, the researcher did appropriate introduction before the questionnaires were administered to the students. On the whole 160 questionnaires were administered. Out of the total questionnaires administered, 153 were properly answered and as such were used in the study. And the process took the researcher 7 working days.

Design and Statistics: The study adopted Two by Two (2×2) Factorial Design was adopted: Two-way Analysis of Variance (ANOVA) statistic was used to analyze the data.

RESULTS

The results were presented in the order in which the research hypotheses were tested.

Table 1. Summary table of mean and standard deviation of studied variables

Dependent Variable: Adolescent Substance Abuse

Gender	Mean	Std. Deviation	Ν
Girls	17.0000	.98319	61
Boys	17.1957	1.07150	92
Total	17.1176	1.03835	153
Locus of Control	Mean	Std. Deviation	Ν
External	16.8889	.91010	45
Internal	17.2130	1.07695	108
Total	17.1176	1.03835	153

Interpretation: Based on the above tables, the first hypothesis which stated there will be no significant difference between boys and girls on adolescent substance abuse in Awka metropolis was confirmed at $(F_{1,141})=.663p>.05$. Also the mean differences and standard deviation within the gender: M=17.00, SD= .98 (girls) and M=17.19, SD=1.07 (boys), N=153. This means that girls abuse substance more than boys.

The second hypothesis which stated that there will be no significant difference between those that have external and internal locus of control on adolescent substance abuse in Awka metropolis was confirmed at $(F_{1,141})=3.000$, p>.05. Also the mean differences and standard deviation within the locus of control: M=16.89, SD=.91 (external) and M=17.21, SD=1.08 (internal), N=153. This means that adolescent with external locus of control abuse substance more than those with internal locus of control. The fourth hypothesis which stated that there will be no significant interaction effect between gender and locus of control on adolescent substance abuse in Awka metropolis was confirmed at $(F_{1,141})=.870$, p>.05.

Table 2. Summary table of two-way Analysis of Variance ofGender, Parental Socio-Economic Status and Locus of Control onAdolescent Substance Abuse

Dependent Variable: Adolescent Substance Abuse

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	11.621	11	1.056	.978	.469
Gender	.716	1	.716	.663	.417
Locus of Control	3.239	1	3.239	3.000	.085
Gender * Locus of Control	.064	1	.064	.059	.809
Error	152.261	141	1.080		
Total	44995.000	153			

DISCUSSION AND CONCLUSION

Based on the findings, it is evident that none of the factors evaluated in this study displayed a significant impact on adolescent substance abuse. The first hypothesis which stated there will be no significant difference between boys and girls on adolescent substance abuse in Awka metropolis was confirmed. This finding also is in line with finding of Agu et al, (2013), they investigated effect of gender and locality on alcohol abuse among secondary school students. Their Findings revealed a significant influence of gender on substance abuse. This implies that boys and girls abused substance at the same parameter, and that there is no difference between both sexes in relation to mental health problem they experience today. Also, perhaps this might be the reasons boys and girls of today engage in cultism and illicit behavioural which also affect their studies. The second hypothesis which stated that there will be no significant difference between those that have external and internal locus of control on adolescent substance abuse in Awka metropolis was confirmed. This is in line with the finding of Adekeye et al,. (2015), they examined assessment of alcohol and substance use among undergraduates in selected private Universities in Southwest Nigeria. Their preliminary result shows that there is no significant difference in the health-related locus of control between substance users and non-users, and between heavy and occasional drinkers, but there exist significant differences based on gender. This shows that locus of control of adolescent whether external or internal plays a role on their abuse of substance this may be because locus of control plays a major role in many aspects of human behaviour such as self-control, socially adjustment, independence, expectancy, achievement motivation and success-orientation. Finally, the third hypothesis which stated that there will be no significant interaction effect between gender and locus of control on adolescent substance abuse in Awka metropolis was confirmed.

Implications of the Study: The result revealed that the outcome of the study will aid the forensic counsellors, counselling psychologists, and educational psychologists in counselling adolescent on how to eschew substance abuse, mainly when the impulse to do so is stimulated in them either by internal or external factor. More so, this study will widen the knowledge of adolescent and society at large, on the why, and what make people to abuse substance, even its consequences. More so, the study will set pace for future research in this area.

Recommendations: Establishment of mental health centre in every community should be encouraged by the government or private Individuals in order to help alleviate drug addicts or those dependent on drugs by giving them advice on ways to reduce hazardous substance intake. Public campaign against substance abuse should be intensifying in order to have a substance and crime free society.

Conclusion: The rate of abuse of substances among adolescents who represent the future of the nation is disturbing. The colossal cost to society and the influence on the fabric of society in the future can never be quantified. Effort should be made to address this challenge. Thus, this study concludes by establishing that gender and locus of control had no impact on adolescent substance abuse in Awka metropolis. Further, the study also establishes the implications and recommendations of the study.

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