

Investigation Of The Correlation Between Smoking Behaviour, Alcoholism, Psychosis, Educational Status And Aggression Of Local Security Operatives In Ibadan Metropolis

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Abstract: Aggression of local security is increasing in epidemic proportion and the range of the problem of aggression is wider than it seems. This problem is still on-going despite numerous researches on aggression of local security. It is pertinent to investigate the factors affecting aggression of local security. This study therefore investigates the correlation between smoking behaviour, alcoholism, psychosis, educational status and aggression of local security operatives in Ibadan metropolis in Oyo state. This study adopted a descriptive survey research design. One hundred and twenty participants were selected from three local governments in Ibadan metropolis using simple sampling technique. The ages of the participants ranged between 18 and 61 years with a mean of 12.88 years ($SD = 8.46$). Three research questions were tested using multiple regression analysis and Pearson Product Moment Correlation. The findings revealed there was significant relationship between smoking behaviour and aggression of local security operatives in Ibadan but an inverse relationship ($r = -.386^{**}$, $N = 120$, $p < .05$). There is significant relationship between alcoholism and aggression of local security operatives in Ibadan ($r = .302^{**}$, $N = 120$, $p > .05$), there is significant relationship between psychosis and aggression of local security operatives in Ibadan ($r = .496^{**}$, $N = 120$, $p < .05$). Also reveals significant relationship between educational attainment and aggression of local security operatives in Ibadan ($r = .274^{**}$, $N = 120$, $p < .05$). The three variables jointly accounted for 83.4% variance in the prediction of aggression of local security. The independent variables made positive relative contribution to aggression of local security in the following order: alcoholism contributed most to the prediction of aggression of security operatives ($\beta = 0.341$, $t = 5.284$, $p < 0.05$) followed by smoking behaviour ($\beta = 0.288$, $t = 3.782$, $p < 0.05$), followed by educational attainment ($\beta = 0.264$, $t = 3.451$, $p < 0.05$) and lastly psychosis ($\beta = -0.074$, $t = -1.326$; $p > 0.05$).

Based on this finding, it is recommended that the local security outfit administration should come up with progressive move of establishing mental health departments or consistently refer its subject to therapeutic settings for the responsibility of continuous mental evaluation of its members, prognosis and psychotherapy where necessary. Also, the government, traditional rulers and other security stakeholders should engage the operatives; hire professionals towards educating them (operatives) on the medical and psychological effect of smoking behaviour and alcoholism, towards a conduct change, ultimately leading to an adjusted personality.

Keywords: Aggression, Smoking behavior, Educational attainment, Alcoholism

Introduction

Security agents and law enforcers use force, regardless of whether verbal or physical, as a way to achieve their every day assignments. Vital to security personnel responsibility is the social support allowing them the consent, inside set rules, to utilize physical capabilities to control the public and curtail violence. Klockars (1996) contended that this approval is the principal trademark that sets security agents apart from the rest of society. Security work in dumbfounding circumstances, where brutality and aggression regularly turns into a need for settling violent circumstances or for forestalling violent circumstances from escalating (Sherman, 1980).

Literarily, aggression is any behaviour that is hostile, destructive, and/or violent. Aggression is defined as behaviours such as temperaments, fighting, violent, arguments and sarcasm (Eysenck & Wilson, 1975). Generally, aggressive behaviour has the potential to inflict injury or damage to the target person or object. Examples of aggressive behaviour include physical assault, throwing objects, property destruction, self-harming behaviours, and verbal threats (Pedneault, 2009). There are two broad categories of aggression. These include hostile, affective, or retaliatory aggression and another is instrumental, predatory, or goal-oriented aggression (Uzma, 2014). Empirical research indicates that there is a critical difference between the two, both psychologically and physiologically. Here, the expression "aggression" alludes to excessive physical behaviour, instead of the utilization of the term around the literature of violence where it incorporates the expectation to hurt (Anderson and Bushman, 2002; Geen, 2001). Security agents' utilization of savagery may, on occasion, be excessive of what is fundamental to deal with a public unlawful conduct (Anal, 2007). The obvious perception of security agent's utilization of force and exhibition of aggression caught the interest of the authors of this work, perceptions of security agents conducts drove the episodic advancement of likely causative factors that might be related with an un-legitimized security agents disposition of aggressive behaviour. One of such factors is smoking behaviour.

Smoking is an important issue all around the world. There are several pharmacological, social, psychological perspectives or assumptions attached to the initiation and maintenance of smoking. It is the cause of many physical and psychological problems

as well (Uzma, 2011). The effects of smoking on human health are serious and in many cases, deadly. There are approximately 6000 chemicals at the burning of cigarettes, hundreds of which are toxic (ALA, 2011). The ingredients in cigarettes affect everything from the internal functioning of organs to the efficiency of the body's immune system (Jack, 2009). Smoking has been linked to psychological problems like depression, anxiety, stress, aggression and anger (Yazici 2008; Nazar, 2008). A survey was conducted on the population of New York City students found the factor of aggression as a predictor of smoking (Kenneth, Griffin, Botvin, Scheier, Doyle, & Williams, 2002). Some studies indicate that cannabis intoxication is associated with the elicitation of aggression (Howard & Menkes, 2007). However, interpretation of these findings is difficult as they are based on relatively small sample sizes (Howard & Menkes, 2007) or only included male respondents with self-reported anti-social tendencies (Cherek, Roache & Egli, 1993). Controlled studies using animal models of aggression or human experimental psychology protocols demonstrate tobacco, nicotine, and nicotine withdrawal might influence aggressive behaviour directly or influence processes such as mood and anxiety (Picciotto, Lewis, VanSchalkwyk & Mineur, 2015) impulsivity and emotional reactivity (Hughes, Dash & Callas, 2014) that indirectly regulate aggression and violence. Another similar factor that has been found to predict aggression is alcoholism.

Alcohol has been defined as any substance that when absorbed into a living organism may modify one or more of its physiological functions (Croen, 2017). The term is generally used in reference to a substance taken for a therapeutic purpose and as well as abused drug. Alcohol has also been defined as self-administration of drugs for non-medical reasons, in quantities and frequencies which may impart inability to function effectively and which may result in physical, social and/or emotional harm (Olatuwara, 2014). Alcohol is a global health and social problem. Alcohol has some immediate or short-term physical effects on the body as a whole, including the brain, the gut and pancreas, the heart and circulation, sleep control and sexual functions. The influence of alcohol on aggression has been studied amongst different population.

For students, Friedlander, Reid, Shupak and Cribbie (2007) found that alcoholism could act as a positive factor that could increase aggression among college students. Kelly and Emery (2003) in their finding shows that students with alcoholism problems portray obvious aggressive behaviours. This study is supported by the findings by Quomma and Greenberg (1994) who found that high alcoholism from these sources would lead to aggression. Rawson, Bloomer and Kendall (1994) on 184 students for example, found that students with alcoholism tend to have higher scores on aggression. Amongst employees, a correlation was found between alcoholism and aggression. The study reported that high level of alcoholism have been associated with high level of aggression among employees (Nahid & Sarkis, 1994). The study of Osarenren (1996) asserted that employees with regular alcohol intake are less skilful, perform poorly and portray increased aggression in the work place. Another factor that has been associated with aggressive behaviour is psychosis.

The general public perception is that an association exist between mental health problems and aggression/violence, however, the research evidence to support such a relationship is mixed. According to Volavka (2008), most patients with psychosis are not violent but have an increased risk compared with the general public, although there is a subgroup of potentially dangerous patients with a high risk for violence or aggression (Steadman, Mulvey & Monahan 1998). These subgroups of psychiatric patients, includes patients who use substance and are non-adherent to treatment (Swanson, Van Dorn, Monahan & Swartz, 2006). They were 2 to 3 times as likely to be assaultive compared with people without such illness (Fazel, Gulati, Linsell, & Grann, 2009).

Specifically, aggressive behaviour in schizophrenia was estimated to be two to ten times than that of the general population (Friedman, 2006). It was recognised as a challenging behaviour among bipolar patients that causes poor social interaction. Types of aggression recorded among psychotics include: verbal aggression, aggression towards property, self-harm/auto-aggression, and physical aggression (Abderhalden et al., 2007). Belete et al., (2016) observed a significance association between stress and psychiatric disorders which were are predominantly known by aggression manifestation. For example, a cross sectional study in Nigeria documented 24.5% of bipolar patient to be aggressive (Amoo & Fatoye, 2010).

Poor reflective and meta-cognitive functioning has also been shown to be frequently related to aggression in patients with severe mental disorders (SMD) (Bo et al., 2015; Abu-Akel & Abushua'leh, 2004), with impulsive aggression linked to difficulties in both the cognitive and affective processing of mental states (Bo et al., 2013; 2014) and premeditated aggression however was associated with relatively intact cognitive. In other words, relationship between meta-cognition and violence or aggression does not always go in the same direction, but may depend on the type of aggressive behaviour; premeditated or impulsive. It is noteworthy that aggression can be portrayed by anyone irrespective of their background or cultural exposure but can be managed subjectively with the influence of an individual's educational status.

Educational status can be determined by the quality of education an individual has been exposed to. It is believed that a highly educated individual is expected to be aggressive when confronted with an abnormal situation while an individual with low education displays detrimental aggression. This implies that the quality of education might be related to the level of aggression an individual exhibits. Empirically, Adeyemi (2016) investigated the perceived stressful events and individual belief system (which are perceptively mediated by level education) as predictors of aggressive behaviour among youths in rural secondary schools in Ibadan, Ibadan, Nigeria. The study revealed that there was a significant relationship between the variables and youth aggression. Likewise, Ernest-Ehibudu and Ezems-Amadi (2016) examined the influence of personality type which can be influenced by educational exposure on peer victimization and aggression among students in Obio/Akpor Local Government Area of Rivers State. The outcome revealed that joint and independent influence of types A and B personalities on peer victimization and aggression were statistically significant.

Purpose of the Study

The sole objective of this study is to investigate the correlation between smoking behaviour, alcoholism, psychosis, educational status and aggression of local security operatives in Ibadan. In specific terms, the objectives of this study are the following:

- (i) To investigate the correlation between smoking behaviour, alcoholism, psychosis, educational attainment and aggression of the members of local security organizations in Ibadan
- (ii) To determine the joint contribution of smoking behaviour, alcoholism, psychosis, educational attainment to the aggression of the members of local security organizations in Ibadan
- (iii) To ascertain the relative contributions of smoking behaviour, alcoholism, psychosis and educational attainment to the aggression of the members of local security organizations in Ibadan

Research Questions

- (i) What is the relationship between smoking behaviour, alcoholism, psychosis, educational attainment and aggression of the members of local security organizations in Ibadan?
- (ii) Is there joint contribution of smoking behaviour, alcoholism, psychosis, educational attainment to the aggression of the members of local security organizations in Ibadan?
- (iii) What is the relative contribution of smoking behaviour, alcoholism, psychosis and educational attainment to the aggression of the members of local security organizations in Ibadan?

Methodology

The study adopted the descriptive survey research design of the ex-post facto type to achieve the purpose of the study. The type of design is used to draw inference from a population towards a statistical outcome and it was perceived most suitable for the study for its ability to scrutinize the accuracy of the study phenomenon as resident in the respondents as well as providing precise description of responses without any form of manipulation of the variables.

Population of the Study

The population of the study comprises members of the local security organizations in Ibadan which are Oodua People's Congress (OPC), Soludero Hunters, Irorun Egbe Omo Oodua (IROD), and Vigilante Group of Nigeria (VGN). The rationale for the chosen population is the perceived prevalence of aggression amongst the operatives in line of duty.

Sample and Sampling Technique

The multi-stage sampling procedure was used to one hundred and twenty (120) respondents for the study. The first stage involved the use of simple random sampling technique in selecting three Local Government Areas (Ona-Ara, Ibadan North and Egbeda) from the eleven (11) existing Local Governments in Ibadan. Also, the same randomization process was used to select forty (40) respondents from each of the selected local government areas.

Instrumentation

The questionnaire used for data collection in this study comprised of three standardized instruments divided into four sections. The Section A contains bio-data which sought demographic information such as age, gender and educational qualification. The other sections contain the following:

Section B: Aggression Scale

The Aggression Questionnaire by Buss and Perry (1992) was used to collect data on the aggression of the respondents. The scale contains 29 self report items in four factors (Physical Aggression, Verbal Aggression, Anger and Hostility) rated on a five point Likert response format ranging from strongly agree (SA) to strongly disagree (SD). Sample items include *"If I have to resort to violence to protect my rights, I will"* and *"Given enough provocation, I may hit another person"*. For the localization of the instrument, 20 copies of the instrument were administered on a separate population different from the main study (youth smokers). Through the use of Cronbach alpha internal consistency method, the instrument yielded .82.

Section C: Smoking Behaviour Scale

The Cigarette Dependence Scale (CDS) developed by Etter, Houezec and Permegeer (2003) was used in this study to measure the smoking behaviour of the respondents. The CDS is a seventeen (17) items self-report instrument adapted on a five point Likert response format ranging from strongly disagree (SD) to strongly agree (SA). Sample item include *"feeling nervous, irritable, anxious, stressed, impatient, and aggressive in a bad mood when lacking cigarettes"*. Cronbach alpha reliability value of .89 was reported for the instrument by the authors. An attempt was made to localize and revalidate the instrument, 20 copies were administered to different population (youth smokers), Cronbach alpha reliability method was used to analyze the data collected and the value yielded .86.

Section D: Psychosis Scale

The Schizophrenia positive and negative symptom by Lancu, Poreh and Lehman (2005) was adapted for this study. The scale is a self-report measure developed to assess the symptoms of mental illness and psychosis in a respondent. 20 items were adapted from the instrument on a five point Likert response format ranging from strongly disagree (SD) to strongly agree (SA). Sample items include *"I hear voices inside my head"* and *"People broadcast thoughts inside my head"*. The scale was revalidated after it was administered on 20 youth smokers who are not part of the main study, the Cronbach alpha value yielded .84.

Section E: Alcoholism Scale

This scale was developed by Paul Moberg (2005) and it consists of 20 items and has a response format ranging from 1 to 4 response format. The developer reported a cronbach alpha of 0.89. Typical item on the scale reads; *Have you used drugs other than those required for medical reasons, Have you abused prescription drugs, Has drug abuse created problems between you and your friends, Does your friends ever complain about your involvement with drugs and Have you been in trouble at work because of drug abuse.* The scale as used in this study was subjected to item total analysis and the researcher obtained an alpha coefficient of 0.86. Guttman split half = 0.72, alpha for part 1 = 0.77 while alpha for part 2=0.82. This implies that this section is also reliable for this study.

Method of Data Analysis

The study mad use of descriptive and inferential statistics to analyze the data collected from the field. This includes Pearson Product Moment Correlation and Multiple Regression Analysis. Frequency count was used to analyse the demographic characteristics of the respondents. Person Product Moment Correlation was used to test the relationship between the independent variables and the independent variable. Multiple regression analysis was used to analyse the joint contribution and the relative effect of the independent variables on the dependent variable. The research questions were analysed and tested at 0.05 level of significance.

Results

This chapter presents the outcome of the findings. The study investigated the correlation between smoking behaviour, alcoholism, psychosis, educational status and aggression of local security operatives in Ibadan, Nigeria. Three research questions were examined using the Pearson Product Moment Correlation (PPMC) and Multiple Regression Analysis at 0.05 level of significance. The findings are summarized below:

Table 1: The Age distribution of the respondents

Age	Frequency	Percent
18-35	75	62.5
36-60	40	33.33
61 and above	5	4.16
Total	120	100

Table 1 shows that 75 respondents 62.5% are between 18-35 years, 40 (33.33%) respondents falls between 36-60 years, while 5 (4.16%) are aged 61 and above. This finding reveals that the majority of the respondents are between the ages of 18 and 35.

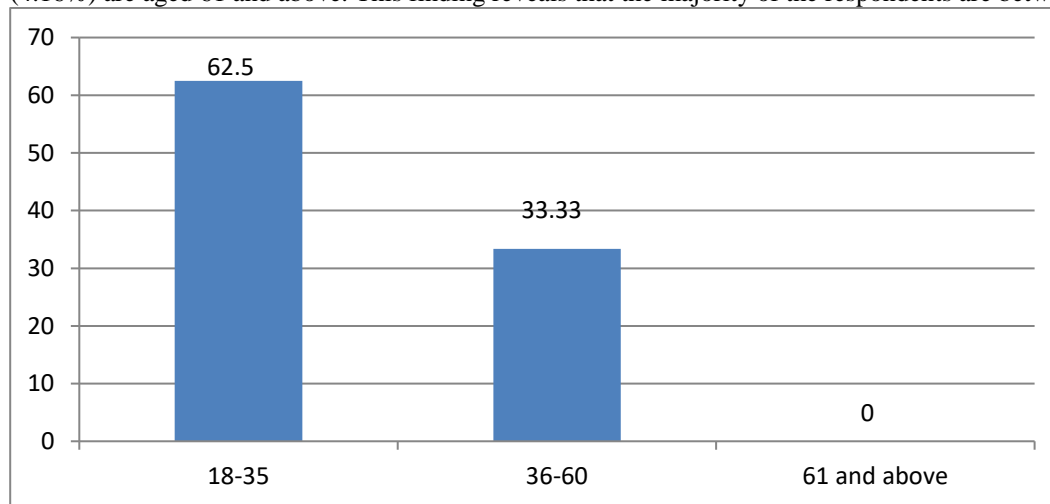


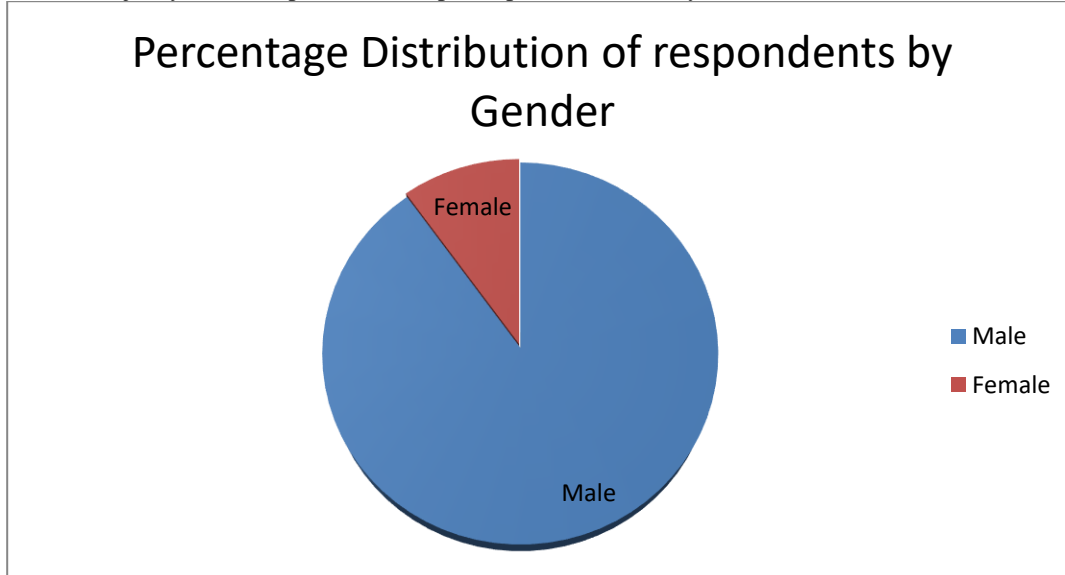
Figure 1: Bar Chart showing the percentage distribution of respondents by age

Table 2: The distribution of the respondents by Gender

	Frequency	Percent
Male	108	90

Female	12	10
Total	120	100.0

Table 2 reveals that 108 of the respondents representing 90% were male while 12 (10%) of the respondents were female. This implies that the majority of the respondents that participated in this study were males.



. Figure 2: Pie Chart revealing the percentage distribution of respondents by Gender

Table 3: The distribution of the respondents by Educational Attainment

Educational Attainment	Frequency	Percentage
Primary/PSLC	62	51.66
Secondary/O'level	44	36.66
OND/NCE	12	10
HND/First Degree	2	1.66
Post Graduate	0	0
Total	120	100.0

Table 3 reveals that 62 of the respondents representing 51.66% are primary school leaving certificate holders, 44 (36.66) holds secondary school leaving (O'level), 12 (10%) of the respondents are Ordinary National Diploma (OND) and National Certificate in Education holders, while only 2 (1.66%) of the respondents are holders of HND and First degree. This implies that the majority of the respondents that participated in this study were primary school leaving certificate holders.

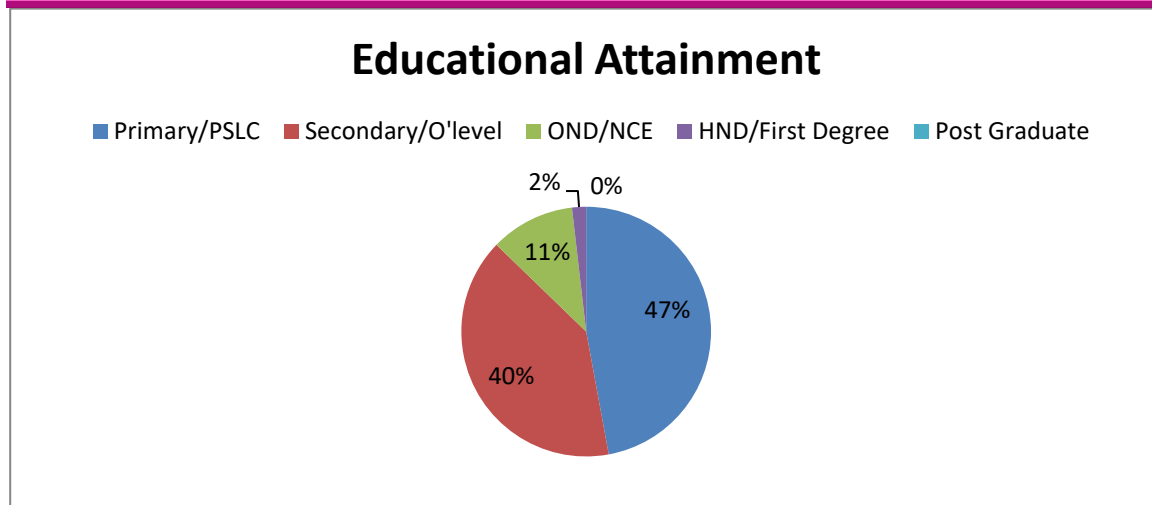


Figure 3: Pie Chart revealing the percentage distribution of respondents by Educational Attainment

Research Question One

What is the relationship between smoking behaviour, alcoholism, psychosis, educational attainment and aggression of the members of local security organizations in Ibadan?

Table 4: Correlation computation of smoking behaviour and aggression of local security operatives

Variable	Mean	Std. Dev.	N	R	P	Remark
Aggression	92.39	13.6	120	-.386**	.000	Sig.
Smoking Behaviour	54.57	8.54				

** Sig. at .05 level

It is shown in the table that there was significant relationship between smoking behaviour and aggression of local security operatives in Ibadan but an inverse relationship ($r = -.386^{**}$, $N = 120$, $p < .05$). That is to say the finding revealed significant relationship but an inverse type between smoking behaviour and aggression among the respondents.

Table 5: Correlation computation of alcoholism and aggression of local security operatives

Variable	Mean	Std. Dev.	N	R	P	Remark
Alcoholism	91.42	16.2	120	.302**	.000	Not Sig.
Aggression	26.84	5.32				

** Sig. at .05 level

Table 5 above revealed a significant relationship between alcoholism and aggression of local security operatives in Ibadan ($r = .302^{**}$, $N = 120$, $p > .05$). Expressly, the finding proved a significant relationship between alcoholism and aggression among the respondents.

Table 6: Correlation computation of psychosis and aggression of local security operatives

Variable	Mean	Std. Dev.	N	R	P	Remark
Psychosis	91.42	16.5	120	.496**	.000	Sig.
Aggression	27.54	6.91				

** Sig. at .05 level

Table 6 above spelt out a significant relationship between psychosis and aggression of local security operatives in Ibadan ($r = .496^{**}$, $N = 120$, $p < .05$). Statistically, a significant relationship between psychosis and aggression was proven among the respondents.

Table 7: Correlation computation of educational status and aggression of respondents

Variable	Mean	Std. Dev.	N	R	P	Remark
Educational status	96.47	14.7	120	.274**	.000	Sig.
Personal Factors	38.16	7.42				

** Sig. at .05 level

Table 7 above also reveals significant relationship between educational attainment and aggression of local security operatives in Ibadan ($r = .274^{**}$, $N = 120$, $p < .05$). In other words, the finding proved a significant relationship between educational attainment and aggression among the respondents.

Research Question Two

Is there joint contribution of smoking behaviour, alcoholism, psychosis, educational attainment to the aggression of the members of local security organizations in Ibadan?

Table 8: Multiple Regression Analysis on the joint contribution of the variables

Multiple R	=	0.927			
Multiple R ²	=	0.846			
Multiple R ² (Adjusted)	=	0.894			
Standard Error of Estimate	=	3.74352			
Source of Variation	Sum of Squares	df	Mean of Squares	F-Ratio	P
Regression	24352.035	4	5346.248	422.591	.000
Residual	4642.763	268	12.9842		
Total	28994.798	272			

Table 8 above shows that there was a joint effect of the independent variables i.e. smoking behaviour, alcoholism, psychosis and educational attainment on aggression of local security operatives ($R = 0.927$, $p < .05$). The combination of the independent variables accounted for 83.4% (adjusted $R^2 = 0.846$) of the total variance in the prediction of aggression of local security operatives. The analysis of variance of the multiple regression data yielded an F-ratio value which was found to be significant at 0.05 Alpha level ($F = 422.591$, $p < 0.05$). This shows that the independent variables jointly contributed to aggression.

Research Question Three

What is the relative contribution of smoking behaviour, alcoholism, psychosis and educational attainment to the aggression of the members of local security organizations in Ibadan?

Table 9: The relative contribution of each of the independent variables in the prediction of the aggression of local security operatives

Variables	B	Std. Error	Beta	T	Sig	P
(Constant)	78.081	7.582		12.142	.000	<.05
Alcoholism	.5362	.0828	.341	5.284	.000	<.05
Smoking Behaviour	.831	.242	.288	3.782	.000	<.05
Educational attainment	.821	.221	.264	3.451	.000	<.05
Psychosis	-.220	.142	-.074	-1.326	.148	>.05

Dependent variable: Aggression

Table 9 indicates the contributions of each of the independent variables to the prediction of aggression. In terms of magnitude of the contribution: alcoholism contributed most to the prediction of aggression of security operatives ($\beta = 0.341$, $t = 5.284$, $p < 0.05$) followed by smoking behaviour ($\beta = 0.288$, $t = 3.782$, $p < 0.05$), followed by educational attainment ($\beta = 0.264$, $t = 3.451$, $p < 0.05$) and lastly psychosis ($\beta = -0.074$, $t = -1.326$; $p > 0.05$).

Discussion

In light of the first research question which was directed at the investigation of the correlation between smoking behaviour, alcoholism, psychosis, educational attainment and aggression amongst local security operatives in Ibadan. The finding revealed that there is a significant relationship between smoking behaviour and aggression. In other words, aggression is affirmed to be precipitated by smoking behaviour. This finding goes in line with the study of Johnson, Cohen, Pine, Klein, Kasen and Brook (2000) which laid emphasis on the relationship between smoking behaviour and panic disorder. The study outcome asserted that smoking constitutes a strong risk factor for panic disorder and aggressive behaviours though the mechanisms responsible for the connections were not envisaged. However, on the contrary, a study by Valenca, Nardi, Nascimento, Mezzasalma, Lopes, and Zin (2001) stated that the consumption of tobacco should be considered as the causative factor for aggression until further examinations are carried out to give clarity on the etiopathogenic structures that smoking and aggression have in common. This finding can be rationalised, nicotine tends to orchestrate increased brain activities, in people who have aggressive tendencies or personalities, nicotine can serve as triggers. Again, some of the respondents are Cannabis smokers. Cannabis is known to secrete Cannabinoid into the brain and activates violent behaviour through increased aggressiveness, paranoia and personality changes.

Furthermore the study also revealed a significant relationship between alcoholism and aggression. Studies have again shown varying numbers of relationship between the two variables. For instance, Friedland, Reid, Shapak and Cribble (2007) found that alcohol could act a predictive factor that could increase aggression. Again, alcoholism is a predictive factor of aggression as this was the assertion of Quomma and Greenberg (1994) who posited that high alcoholism leads to aggressive behaviours. Alcohol has a way

of inhibiting normal functioning of the brain. Alcohol intake often distorts the normal function of the brain structure responsible for the regulation of the perception of aggressive stimuli. Also, looking at this from the three personality structure point of view, an acute use of alcohol is capable of altering full consciousness and normal functioning of the ego system. For these reasons, this finding is valid.

In the same vein, a significant relationship between psychosis and aggression was observed in the study. Although the study is limited in screening the participants for psychotic disorders, implying that if they had been, and greater percentage of the participants would have been positive. The assertion is because several studies have documented relationship between psychosis and aggression. For example, Amoo and Fatoye, 2010 posited that people with psychoses are more likely to engage in acts of aggression than people with non-psychotic disorders. Psychotic disorders could be a contributing factor to aggression, which was also the observation of Colasanti et al., (2010) that living with psychotic symptoms could contribute to aggressive behaviour, poor impulse control, and violence.

The findings also established a significant relationship between educational attainment and aggression of local security operatives in Ibadan. This finding buttressed the finding of Adeyemi (2016) which established that perceived stressful events and belief systems (which are perceptively mediated by level of education) had significant relationship with youth aggression. The finding also supported the findings of Ernest-Ehibudu and Ezems-Amadi (2016) that educational exposure had a statistically significant influence peer victimization and aggression based on personality type. Basically, it was observed that majority of the local security operatives have low educational attainment or status and often times account for their detrimental aggression.

The research question two was directed towards the examination of the joint contribution of smoking behaviour, alcoholism, psychosis and educational attainment on aggression of respondents. The finding revealed a joint effect of the independent variables (smoking behaviour, alcoholism, psychosis and educational attainment) on aggression of respondents. In other words, the outcome of this investigation confirmed the joint contribution of the study independent factors on aggressive behaviours of local security operatives. The relationship between the independent factors of this study is obvious and cannot be overemphasised. Smoking behaviour and alcoholism often goes together, most subjects who smoke tends to be alcohol takers. The complicated intoxication becomes very significant, from the biological alteration of behaviour to mental dissension through the secretion of certain chemicals into the brain, creating cerebrospinal fluid concentrations of serotonin and distorting the functions of amygdale (a brain region responsible for regulating and inhibiting aggression), thereby leading to maladaptive dispositions. Laying emphasis on the connection between alcoholism and psychosis, alcohol induced psychosis itself does not possess specific mortality or morbidity; it connects with certain risk factors that speculates higher mortality and morbidity in subjects. Psychosis related with alcohol use can occur with severe intoxication and is capable of inducing aggression. It can also be noted that alcohol abuse can cause signs and symptoms of anxiety and antisocial tendencies during intoxication and the process of withdrawal. Furthermore, it is not a gainsaying that low education can precipitate smoking behaviour and alcohol use. Educational attainment can likely influence the exposure to substance use and alcoholism risk factors, by implication, individuals with little or no formal education are likely to engage severe alcohol use. For these envisaged connections amongst these variables, the outcome of this finding is rationalized.

The third research question investigated the relative contributions of the independent factors on aggression of local security operatives. The outcome of the relative contribution of each of the independent variables to aggression is also significant. In other words, each of the independent variables was found to have a relative contribution to aggression of local security agents in Ibadan. Alcoholism had the highest and most significant contribution to aggression, followed by smoking behaviour while psychosis had the lowest but significant contribution to aggression of respondents. The findings of this study is corroborated by the studies of Yacizi, 2008; Fazel, Gulati, Linsell, and Grann, 2009; Uzma, 2011; Olatuwara, 2014; Adeyemi, 2016; Belete et al., 2016; Croen, 2017 who in their independent investigations found this study predicting variables to have independent contributions to aggression.

The reason why smoking behaviour took the highest position in relative contribution to aggression could be culturally motivated. It is believed by majority in this contextual environment that responsibilities around security jobs and deviant activities cannot be successfully implemented without the use of substance, an internal drive, psychoactive circumstance that could precipitate certain level of motivation. People in this category hold the urge to engage substance, smoking behaviour towards boosting their self-esteem in the line of duty. Furthermore, psychosis as the lowest contributor to aggression can also be rationalised, other variables such as smoking behaviour, alcoholism are behaviours that are very common amongst security operatives especially amongst the less educated ones. The consistency of these relative variables could be the reason for the outcome of this study.

Conclusion

The following are the conclusions drawn from this study:

- Smoking behaviour contributed to aggression. Smoking has a major adverse behavioural effect on personal adjustment. Easy access to substances facilitates smoking behaviour and drug use. The use of nicotine and other substances increases aggressive behaviours especially amongst those who are vulnerable to the disease.
- The use of alcohol often alters normal cognitive and behavioural functioning leading to unhealthy dispositions. Respondent's characteristics such as low education, disorganized exposures and cultural antecedents might have prompted their excessive use of alcohol.
- Psychosis was also a contributing factor to aggression. The possibility of further screening for psychotic disorders could have exposed the manifestations of the mental health condition in the participants as precipitators of aggression

- Educational attainment took its turn in predicting aggression. Greater percentages of the participants were lightly educated which could have influenced their perception, cognitive ability, coping skills and other cogent characteristics crucial for personal adjustment against aggression.

Recommendations

The study recommends the following:

- The government, traditional rulers and other security stakeholders should engage the operatives; hire professionals towards educating them (operatives) on the medical and psychological effect of smoking behaviour and alcoholism, towards a conduct change, ultimately leading to an adjusted personality
- Access to substances and alcohol should be further restricted with sustainable approach by the authorities through the enactment of realistic policies and apt enforcement.
- The local security outfit administration should come up with progressive move of establishing mental health departments or consistently refer its subject to therapeutic settings for the responsibility of continuous mental evaluation of its members, prognosis and psychotherapy where necessary.
- The same study should be replicated on a wider population, especially amongst the government security agents who engages the public more for the generalization of the study outcome and recommendation for progress. An experimental investigation is advised amongst this study population towards a proper management of aggression.

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