



## HOSTILE BEHAVIOUR AMONG NIGERIAN PRISON INMATES: DIFFERENTIAL EFFECTS OF PSYCHOACTIVE SUBSTANCE USE AND INTERPERSONAL SENSITIVITY

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### Abstract:

Infrastructural challenges in Nigerian Prisons which do not allow stratification of inmates based on crime weight have often jeopardized correctional efforts. Bearing this in mind, this study examined the differential effects of psychoactive substance use and interpersonal sensitivity on hostile behaviour of prison inmates in Anambra State of Nigeria. 89 prison inmates comprising of 73 males and 16 females were participants of the study. Their ages ranged from 23 to 44 years with a mean age of 31.50 and standard deviation of 2.45. Purposive sampling technique was adopted to obtain inmates with history of psychoactive substance use from those without. Symptoms checklist (SCL-90R) by Derogatis, Lipman and Covi (1973) was administered as instrument for data collection using 2x2 factorial design and 2-way analysis of variance (2-Way ANOVA) as statistical tool. The result revealed that hostile behaviour was more with inmates with backgrounds of psychoactive substance use than those who are high on interpersonal sensitivity at  $F(1, 89) = 11.2, p < .05$  and  $6.85, p < .05$  respectively. Finding theoretically implicated lack of impulse control which seems to be higher with psychoactive substance use and higher levels of interpersonal sensitivity. It is recommended that the management staff of Nigerian Prisons understand the needs of inmates with these backgrounds to be able to reduce hostility occasioned by their backgrounds.

**Keywords:** hostile behaviour, inmates, Nigerian prisons, interpersonal sensitivity and psychoactive substance use

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## 1. Introduction

Managing inmates in any correction facility or remand home usually precipitate many problems in some instances leading to inmates' conflicts and jail-break. Jail breaks and internal conflicts among inmates have grievous implications on the society because the re-integration process of the inmates involved is yet to be completed. Without harmonious effort of stakeholders, the success rate of any justice administration system will remain minimal. In Nigeria, the gains of justice administration have not entirely yielded the desired fruits (Omagbemi & Odunewu, 2008), a situation more often attributed to physical (poor accommodation, poor sanitary conditions, poor feeding, poor educational and recreational facilities), systematic and administrative problems of Nigerian Prisons Service than the behavioural antecedents of both the inmates and the warders (Okwor, 2010). Considering the state of affairs amidst several jail breaks across the country, search into other factors have also begun and among them are exposure to psychoactive substances and interpersonal sensitivity of inmates.

Drug and psychoactive substance use and abuse in prisons have a long history (Adesanya, Oheri, Ogunlesi, Adamson, & Odejide, 1988; O'Mahony, 1997; Gillespie, 2005; Smith & Robert, 2014; Ugwoke & Otodo, 2016). Drug use and substance abuse has taken an alarming dimension among inmates in Nigerian Prisons with the influx of designer drugs (Ugwoke & Mfon, 2018). The modification of psychoactive substances to other substances such as synthetic cannabinoids (SC) with more half lives than the usual cannabis is a trend which has become worrisome especially with the abetting of third parties in the supply chain of these drugs to prison inmates through delivery vehicles, inmates on court attendance and visitors etc. (Ugwuoke & Otodo, 2016). The presence of drugs in the prison has no doubt increases inter-conflict among inmates (Dillion, 2001) and also increased interpersonal sensitivity. The two instances have been known to be precursors to various forms of hostile behaviour among inmates in prison yards. As much as the consequences of hostility are important, more importantly, it is critical to identify the causes in order to tailor a remedial management policy towards the anomaly. This study looks into the personality background of the inmates as a predisposing factor to hostile behavior. The search into the causes is what has driven the current research effort to consider inmates' behavioural antecedents and drug trait as possible criteria which could engender more hostile behaviour among inmates. Whether, this assertion has theoretical underpinning and an empirical support is the focus of the current study.

## 2. Review of Related Literature

### 2.1 Hostility among Prison Inmates

Hostile behaviour is both psychological and physical behaviour which is unfriendly with intent to threaten, ward-off or harm the wellbeing of others. It is also a voluntary withdrawal of goodness from others to make them suffer or experience deprivation

(Buss & Perry, 1992). It is also feeling of anger, hatred, repression and unfriendliness (Derogatis, Lipman & Covi, 1973). Hostility can metamorphose as verbal violence, failure to reward, withholding reward or affection, withholding treatment, biting, kicking or punching, using handheld or sophisticated weapons to harm others. Biologically, hostility-aggression dyad involves the inhibition of control circuits from the prefrontal cortex of the amygdale as bio-physiological formation. Hostility is impulsive often associated with rejection, abuse, injury, intent to harm and actual harm.

Hostility among inmates is well documented in modern day life of prisoners. For instance; [Mumola and Karberg \(2006\)](#) found that the most frequent offenses in the prison included homicide (27%), followed by robbery (41%), assault (24%) and sexual assault (17%) with all involving a form of hostile/violence behaviour to be perpetuated. Also, the risk of sexual and violent recidivism are so linked with hostility ([Firestone, Nunes, Moulden, Broom, & Bradford, 2005](#)), where the offender was charged or convicted for a repeated sexual or violent offense. Among formerly incarcerated populations, hostile behaviors may be learned and reinforced, issues which few researchers have investigated. Bearing in mind that researchers have determined that hostility is rooted in anger and defined this construct as multidimensional motivating aggressive tendencies which destroy and injure others (Spielberger, Jacobs, Russell, & Crane, 1983). In the views of [Keltikangas-Jarvinen & Heinonen \(2003\)](#), hostility may range from overt acts, i.e. physical and verbal to subtle behaviour.

Despite the worrisome nature of the dangers associated with hostility; for example, [Sabol, Couture and Harrison \(2007\)](#) and [West, Sabol and Greenman \(2010\)](#) opined that nearly 60% of the US prison increase was due to violent offenders, there are not much studies designed to link behavioural antecedents to the problem. This problem as much as it has created an academic problem; has equally presented a management problem for prison administrators.

## **2.2 Psychoactive Substance Use and Abuse**

Usually, half of the convicts and prison inmates have a history of serious abuse or addition to psychoactive substances. For instance, there is evidence in Mumola and Karberg (2006) that DSN-IV screening proved two-thirds of American prison inmates to have come in contact with psychoactive substances with half of the this population with history of abuse. In Nigerian prison, inmates' use of drugs is real as Ugwoke and Mfon (2018) and Adesanya, Oheri, Ogunlesi, Adamson and Odejide, (1988) identified alcohol, tobacco, marijuana, cannabis, opiates and hemp as common psychoactive substances which inmates use and abuse. Other designers in form of codeine tablets, tramadol and certain cough syrup are well used and abused in disguise.

Without doubt, the restiveness of some inmates and overreaction in trivial issues with inmates always portray hyper-reaction which trail psychoactive substance use or abuse. The consequences are implausible as much as it risks the lives of both inmates and warders due to: ill-fighting, assault, stabbing, homicide and manslaughter are common outcome behaviours of psychoactive substance users.

There is an argument among the academia that there is a close connection between hostility and substance use and dependency ([Gossop & Roy, 1977](#); [Gossop & Roy, 1976](#)); in fact, being under the influence of alcohol or drugs may be associated with hostility. [Gossop & Roy \(1976\)](#) found that high levels of hostility were found among barbiturate users, followed by opiate users and amphetamine users. Equally, [Valdez and Sifanek \(2004\)](#) found potentially significant contributor to hostility may be gang affiliation, which frequently potentiates hostility, criminality and incarceration. A qualitative study among Mexican Americans who were involved with 26 active gangs (N=160) in Texas found that when compared to non-gang affiliated members, gang members were more likely to use drugs ([Valdez & Sifanek, 2004](#)). [Valdez et al. \(2004\)](#) contend that members of gangs are expected to be involved in violent acts and those who do not meet those expectations likewise face physical violence and other repercussions.

### **2.3 Interpersonal Sensitivity**

Interpersonal sensitivity refers to discomfort in social situations which may be as a result of over awareness of the presence of others. The personality trait of interpersonal sensitivity is undue and excessive awareness of, and sensitivity to, the behaviour and feelings of others (Boyce & Parker, 1989). Individuals with this personality are preoccupied with their interpersonal relationships, vigilant to the behavior and moods of others, and overly sensitive to perceived or actual criticism or rejection and their behavior is modified with other's expectations to minimize the risk of criticism or rejection. It has been widely accepted that interpersonal sensitivity is a risk factor for depression. Moscovitch, McCabe, Antony, Rocca, & Swinson's (2008) study found that people suffering from social anxiety disorder (SAD) a severe case of interpersonal sensitivity show a relatively special pattern of anger experience and expression.

In comparison with a non-anxious control group, they are more susceptible to experience anger in various conditions. They also experience and express anger, possibly more without a trigger or stimulation: express their anger when they are criticized by others, and the possibility of anger suppression is higher among them with devastating consequences.

## **3. Theoretical Framework**

### **3.1 Differential Association Theory (Sutherland, Cressey & Luckenbill, 1992)**

Differential association theory is a sociological theory of deviance propounded by Sutherland, Cressey and Luckenbill (1992) to explain more variance in deviance (relationships among crimes and one form of crime predicting the other) especially among convicts or law offenders. The theoretical underpinning has been applied in the criminal behaviour of inside the prison premises especially in drug related behaviour of prison inmates as learned behaviour. The theory proposes that drug related behavior inside prison is learned in interaction with other persons through a process of

communication within intimate personal groups. Sutherland et al continued that learning to abuse drugs in prison is exposure to an association with certain patterns of behaviour including gang ring and the violence that flow from it. These behaviours are interconnected with the nuances of making, using, selling, or processing illegal substances which is not necessarily restricted to imitation. Within the process of these behaviours, hostile behaviours is also learned as part of the identity of belonging to this drug racketing group inside the prison.

The theory applies to the explanation that behavioural adaptations towards drug use (acquiring, making, using, selling, or processing) in prison facilitate higher chance of susceptibility to hostility. The theory further lays foundation for understanding that with inmates coming in contact with psychoactive substances in prison, chances of other crimes (fighting, raping, physical assault of other inmates, homicide, and manslaughter) are high; and these are precipitated by hostility.

Based on the above theoretical framework, the following hypotheses are tested to ascertain inter group differences on the hostile behaviour of inmates. They are:

1. Prison inmates who belong to psychoactive substance user group will significantly differ on hostile behaviour from prison inmates who belong to non-psychoactive substance user group.
2. Prison inmates with high interpersonal sensitivity will significantly differ from prison inmates with low interpersonal sensitivity on hostile behaviour.

### **3.2 Method**

89 prison inmates comprising of 73 males and 16 females were participants of the study. Their ages ranged from 23 to 44 years with a mean age of 31.50 and standard deviation of 2.45. Purposive sampling technique was adopted to obtain inmates with history of psychoactive substance use from those without. Symptoms checklist (SCL-90R) sub-sessions "C" and "F" by Derogatis, Lipman and Covi (1973) was administered as instrument for that collection for interpersonal sensitivity and hostility. Sample item wordings for Interpersonal sensitivity are: "feeling critical of others", "your feelings are easily hurt" and "feeling inferior to others". Sample item wordings for hostility are: "feeling easily annoyed or irritated", getting into frequent arguments" and "shouting or throwing things". Forced response scale was used for scoring 0-4 points on each of the items which are summed together to obtain the section score. The original authors, Derogatis, Lipman and Covi (1977) reported internal consistence of .90 for depression, .78 for hostility, .89 for anxiety. The validity of SCL-90 scale was enhanced and improved in Nigeria by Omoluabi (1993) who reported a general adult norm score of 11.85 (male) and 10.15 (female) for depression, 9.40 (male) and 8.35 (female) for anxiety and 5.75 (male) and 4.70 (female) for hostility using 80 participants from Nigerian adult sample. However, in order to use it in the current study, the researcher carried out a pilot study before using the instruments and reliability alpha coefficient of .68 was obtained. Classification of inmates into (a) psychoactive substance user group and (b) non psychoactive substance user group was facilitated by the prison administrators

who identified inmates with psychoactive substance background from other for administration of SCL-90R. Seeking a group difference, the study employed 2x2 factorial design and 2-way analysis of variance (2-Way ANOVA) as statistical tool.

#### 4. Result

**Table 1:** Frequency table showing number of participants in the each group for psychoactive substance and interpersonal sensitivity

Between-Subjects Factors		
	Value Label	N
Psychoactive Substance Use	1.00 Psychoactive Substance User Group	42
	2.00 Non-Psychoactive Substance User Group	47
Inter-Personal Sensitivity	1.00 High Interpersonal Sensitivity Group	44
	2.00 Low Interpersonal Sensitivity Group	45

**Table 2:** Descriptive statistics showing mean, standard deviation and number of cases for groups tested on hostility

Descriptive Statistics				
Dependent Variable: Hostility				
Psychoactive Substance Use	Inter-Personal Sensitivity	Mean	Std. Deviation	N
Psychoactive Substance User Group	High Interpersonal Sensitivity Group	9.1875	1.47054	31
	Low Interpersonal Sensitivity Group	8.0000	1.43025	11
	Total	8.5576	1.45269	42
Non-Psycho Active Substance User Group	High Interpersonal Sensitivity Group	8.4000	3.46410	13
	Low Interpersonal Sensitivity Group	8.0211	1.53897	34
	Total	8.2000	1.79284	47
Total	High Interpersonal Sensitivity Group	8.6842	2.13574	44
	Low Interpersonal Sensitivity Group	8.0102	1.60509	45
	Total	8.4069	2.44287	89

**Table 3:** Tests of Between-Subjects Effects showing type II sum of squares, degrees of freedom (df), mean square, factor values (F) and significant coefficient and the values of adjusted R squared

Tests of Between-Subjects Effects					
Dependent Variable: Hostility					
Source	Type II Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	127.700 <sup>a</sup>	3	42.567	15.038	.000
Intercept	47985.231	1	47985.231	16952.647	.000
PSYCHAC	31.731	1	31.731	11.210	.002
INTERPSEN	19.940	1	19.940	6.85	.013
PSYCHAC * INTERPSEN	16.256	1	16.256	4.90	.040
Error	99.069	85	2.831		
Total	48212.000	89			
Corrected Total	226.769	88			

a. R Squared = .563 (Adjusted R Squared = .526)

Table 1 revealed that in the psychoactive substance user group, there are 42 inmates while the non-psychoactive substance user group is 47. Among two groups, 44 disclosed high interpersonal sensitivity whereas 45 disclosed low interpersonal sensitivity. Descriptive analysis in Table 2 revealed that significant differences were observed among the groups. The psychoactive user group had a mean of 8.55 on hostility whereas the non-psychoactive substance user group had a mean of 8.20 on hostility. Also, high interpersonal sensitivity group had a mean of 8.68 which differed from the mean recorded for low interpersonal sensitivity group at 8.01. Overall, the survey on prison inmates' hostility showed a general mean of 8.40 and from this general mean, it could be ascertained that the psychoactive substance user group has higher mean than the general mean whereas non-psychoactive substance user group has lower mean than the general mean so, also, is the interpersonal group.

Given the above observed differences, the tests of between subjects' effects was conducted to establish if these observed differences reached significant proportion and the result revealed that hostile behaviour was more with inmates with background of psychoactive substance use and those who are high on interpersonal sensitivity than the non-psychoactive substance user group and the inmates with low interpersonal sensitivity respectively at  $F(1, 89) = 11.2, p < .05$  and  $6.85, p < .05$ . Consequently, hypotheses I & II were confirmed.

## 5. Discussion

The study explored group differences owing the extensive survey of literature and the theoretical background which supports that exposure to psychoactive substances and interpersonal sensitivity well advance susceptibility to hostile behavior. Two hypotheses were formulated and tested as follows: (i) Prison inmates who belong to psychoactive substance user group will significantly differ on hostile behaviour from prison inmates who belong to non-psychoactive substance user group and (ii) Prison inmates with high interpersonal sensitivity will significantly differ from prison inmates with low interpersonal sensitivity on hostile behaviour. Statistical evidence revealed from the data obtained among inmates revealed that both hypotheses were confirmed with significant observable differential effects on the group means.

Descriptive statistics revealed that significant differences were observed among the psychoactive user group who had means significantly higher than those of the on-psychoactive substance user group on hostility. Significant difference observed among the groups was also confirmed using tests of between subject's effects. The finding partly supported by the Differential association theory by Sutherland, Cressey and Luckenbill (1992) which emphasized that there is a relationship between the variance of inmates deviance because abusing psychoactive substances is a deviance which increases vulnerability to hostility behaviour which is another deviance with possibilities of fighting, assault and homicide inside the prison if not handled effectively. This finding collaborates Dillion's (2001) study on harm reduction in prison

which identified availability and usage of drugs in prisons as the cause and source of violence in prisons. In view of Dillion's study, no violence will be possible without a form of hostile behaviour which precedes all violent acts within and outside the prison.

Also, Zawilsk and Andrzejczak's (2015) study identified the availability of next generation of novel psychoactive substances in prison as the cause of inmates' violent conduct in prisons. In Nigeria, Ugwoke and Otodo (2016) through their study on drug use pattern among inmates identified that the presence of drugs alter behavioural patterns of prison inmate in some cases to an uncontrollable and difficult situation endangering the lives of others. Earlier, Okwor (2010) found that aggression-violent conduct in the prison has a pattern associated with drug abuse inside the prison.

In hypothesis II, it was also confirmed that prison inmates with high interpersonal sensitivity significantly differed from prison inmates with low interpersonal sensitivity on hostile behaviour. The observed differences was also confirmed during tests of between subjects' effects which established that observed differences in the group mean reached significant proportion. This is also supported by Ejikeme and Ejikeme's (2015) study on psychosocial problems of victims of violence which identified one of the causes to be related to personality related. Also, García-Sancho, Salguero, and Fernández-Berrocal's (2014) finding on the relationship between emotion control and aggression correlates the current study that disposition towards others such as in interpersonal sensitivity may as well determine hostility behaviour.

### **5.1 Implications of the Study**

The finding theoretically implicated the relationship between variance of deviance because abusing psychoactive substances is a deviance which increases vulnerability to another deviance, hostility and lack of impulse control which seems to be higher with psychoactive substance use with high levels of interpersonal sensitivity. Practically, there is danger of life of inmates and warders if psychoactive substances continue to find their way into the prison. Occurrences such as, fighting, stabbing, homicide and jail break might quite become common.

### **5.2 Limitations**

The researchers relied on the information provided by the prison management regarding inmates which were classified as group with psychoactive substance use; only preliminary verification of their drug status and history was conducted before they were allowed to participate in the study. Half live of the drugs they were exposed to was not ascertained to ascertain the impact of the psychoactive substance on their behavioural outcome.

### **5.3 Recommendation**

It is recommended that the management staff of Nigerian Prisons understand the needs of inmates with these backgrounds to be able to reduce hostility occasioned by their backgrounds. There is also greater need to institute a strict punishment for officers who

collaborate with inmates to smuggle, process, use and sell psychoactive substances inside the prison because no inmate can get any psychoactive substance without being abetted by an officer.

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