

Psychological Distress, Negative Life Event and Personality Trait as Predictors of Substance Abuse among Youths in Ibadan Metropolis

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ABSTRACT

This study examined the role of psychological distress, negative life event and personality traits as predictors of substance abuse among youths in Ibadan metropolis. This study employed a descriptive, cross sectional and purposive sampling technique design. Data was collected through quantitative using questionnaire survey. A standardized questionnaire was administered to a total of 267 respondents. The statistical package for the social science (SPSS version 23) was used to analyze using descriptive and inferential statistics (Univariate, bivariate and multivariate regression analyses). Persons' r moment correlation coefficient-test analysis, and multiple regression analysis were used to analyze the data obtained. Five objectives were stated to guild this study. The theoretical framework for this study was biological model, transactional model of stress coping and big five trait theory. Instrumentation included the psychological distress scale (K6). A 6- items self – constructed questionnaire was developed by the researchers. It had a general reliability coefficient of 0.87 using Cronbach alpha. Hypothesis one was tested using Zero order correlation relationship analysis, hypothesis two and five was tested using independent sample T-test while hypothesis three and four was tested using multiple regression analysis. The findings revealed that psychological distress, negative life event and personality traits with psychotropic substances, antagonism mental health state examination of the youths stands as the key indicators of substance abuse. Early assessment, specific diagnosis might help patient vulnerably and elevated risk to psychoactive substances. Interventions designed to build effective coping skills, emotional intelligence, and positive emotional mental wellbeing will serve as an effective coping skill to prevent substance abuse.

Keywords: Psychological distress, negative life events, personality traits, substance abuse.

INTRODUCTION

From physical observation in most areas in Ibadan, substance abuse has become an enticing act among youths and hardly would you go to a particular area without seeing youths abusing substances such as marijuana, alcohol, cigarette, and others. According to Abayomi *et al.* (2018), people who engaged in substance abuse are deeply involved in anti-social disorder in their community. Most times after consuming these psychotropic substances it affects their brain mechanism leading to abnormal behaviors, total depart from social norms, impulsivity thoughts, reckless, liability to anger, quarrelsome, lack of guilt and remorse. To add to this, some of these youths will have problems planning-ahead and may be vulnerable to stealing in the neighborhood. Substance abuse can lead to changes in the brain neurons and neurotransmitters such as dopamine, which is one of the major causes of substance induced schizophrenia, and mood disorder and it has capacity to significantly impair occupation. When someone keeps abusing substance, it causes excess deposition of dopamine to be released in the brain. The amount of dopamine released is often much higher

than that of other rewards, and this creates “highness, misbehavior and loss of perceptual reality in all that is associated with life (NIDA, 2020). Negative life event can contribute significantly to the menace of substance abuse problems. For example, loss of employment by a parent can change the economic fortunes of an entire family and be quite stressful. Likewise, a youth that lost all he has gathered for years in a single fire outbreak can be so devastating to the point that frustration associated with it can make the individual vulnerable to substance use and repeatedly into abuse. Negative life event can be stressful and can make youths lose their true-identity and to behave in unusual manners. Most people experiencing negative life event are engage with substance use just to banish their painful experiences, but little do they know that when the effect of the substance is over, the real memory of the actual event would come back to memory to hurt more. Based on this, they repeatedly abuse alcohol and marijuana, yet their problem remains unsolved.

Just like negative life event romance with substance abuse, psychological distress causes more problem than expected leading to substance abuse problems. Some of the most well documented psychological distresses among youths include financial difficulties, peer pressure, poor physical health, social isolation, a. Less well documented factors include the circumstances involving changes in role demands, and conflict with other youths. In most cases, the impact psychological distress overpowers the individual’s coping mechanism, and the victim indulges in substance abuse. At this point, consumption of substances become a neurological wish fulfillment; a condition in which the victim consistently depends on psychotropic substances to maintain a normal lifestyle again.

However, personality traits could be more destructive and when it combines with substance abuse youths will likely act of proportion. Personality traits aggravate substance abuse and result into behaviors conflicting with social set standards in the community. Youth whose core personality trait is governed by neuroticism has potentials to be more suspicious in nature and can easily harm other who never planned for any evil against. When this individual abuse substances, the effects or the impact will be much higher than expected. Apart from this, some core factors of personality trait make some people vulnerable to substance abuse. And when they take these substances, they lose consciousness and may cause social nuisance. With the foregoing, this study investigated the effects of psychological distress, negative life events and personality traits on substance abuse among youths in Ibadan metropolis, Oyo State, Southwest, and Nigeria. The study revealed understanding of the risk factors that are related to youth substance use and will assist in establishing effective intervention, prevention, and treatment programs on how to reduce substance use among youths in the society.

METHODOLOGY

The study employed Cross Sectional survey method design. The study was carried out in three local government areas, namely Ibadan-North, Ibadan Northeast, and Akinyele. These three local governments were purposefully selected by the researcher so to validate results and to increase generalization. The study participants were male and female youths, from age 18 years and above, whose reside at the study area. The researcher perceives youths to be suitable for the study; due to youths’ risk-taking potentials and drive for new experiment is undeniable in their world, especially with psychotropic substances when they are among their peers. The sample size was determined using Cochran’s Sample Size to be two hundred and sixty-seven (267) youths. The participants were selected using purposive sampling techniques in which they were chosen indiscriminately by walking up to any psychotropic substance abusers/groups to solicit for his /her attention. Survey questionnaire was administered to the respondents mostly at beer parlors and some hidden locations where youths converge to abuse substances. The respondents were adequately briefed and made to understand that all information supplied will be treated confidentiality and only for the purpose of the study.

The questionnaire was divided into five sections, namely Section A, B, C, D, and E. Section A measured socio-demographic variables of the participants, Section B, Psychological distress, Section C, negative life event, Section D, personality traits, and Section E Substance abuse. The study employed both descriptive

and inferential statistics for data analyses.

RESULTS AND DISCUSSIONS

Table 1: Distribution of demographic variables of the study participants.

Demographic variables		N	%
Gender	Male	178	66.7
	Female	89	33.3
	Total	267	100.0
Age	18-28	119	44.6
	29-39	106	
	40-50	26	9.7
	51-61	13	4.9
	62-Above	3	1.1
	Total	267	100.0
Marital Status	Single	103	38.6
	Married	119	
	Widowed	12	4.5
	Separated	33	12.4
	Total	267	100.0
Education	Primary	72	27.0
	SSCE	119	44.6
	OND/NCE/Diploma	52	19.5
	BSc/HND	20	7.5
	Postgraduate	4	1.5
	Total	267	100.0
Ethnicity	Yoruba	167	62.5
	Igbo	67	25.1
	Hausa/Fulani	8	3.0
	Others	25	9.4
Total	267	100	
Religion	Christian	118	44.2
	Muslim	127	47.6
	Traditional	13	4.9
	Others	9	3.4
Total	267	100	
Occupation	Civil service	71	26.6
	Self employed	150	56.2
	Unemployed	46	17.2
	Total	267	100

Local government areas	Ibadan North	90	33.7
	Akinyele	89	33.3
	Ibadan east	88	33.0
	Total	267	100

Hypothesis one: There is a significant positive relationship between psychological distress, negative life event, personality trait and substance abuse among the participants in the study.

This hypothesis was tested with Person moment correlation test at alpha significance level (p-value) of 0.05.

Table 2: Zero-order correlation matrix showing relationship between psychological distress, negative life event, personality trait and substance abuse.

Variables	Descriptive		Correlation r			
	Mean	±SD	1	2	3	4
1 Substance abuse	12.7453	1.79251	1			
2 Psychological distress	12.5618	2.22235	.683**	1		
3 Negative life event	21.9326	2.57138	.101	.026	1	
4 Personality trait	14.0037	3.48628	.273**	.215**	-.052	1

Note: **. Correlation is significant at the 0.01 level (2-tailed).

In Table 2, psychological distress showed positive relationship with substance abuse [$r = .683, < .01$] which is an indication that higher scores of psychological distresses correlated with higher substance abuse among the participants. Similarly, negative life event shows positive relationship with substance abuse [$r = .101, p < .01$]. This also indicates that high negative life event correlates with high level of substance use among the participants. Furthermore, personality trait showed positive relationship with substance abuse [$r = .273, < .01$], which also indicates that high score on substance abuse leads to increase on substance abuse among participants in the study.

Hypothesis two: Youths high on psychological distress will score significantly high on substance abuse than youths low on psychological distress.

Table 3: Independent t-Test showing levels (low & High) of psychological distress on substance abuse.

Psychological distress	N		Df	t	Sig
Low	244	12.48	265	-9.001	<.000
High	23	15.57			

Table 3 shows that participants high on psychological distress scored significantly high on substance abuse [$t(265) = -9.001, p < .000$] than participants low. Additionally, participants high on psychological distress recorded a mean score of ($\bar{x} = 15.57$) while participants low recorded a mean score of ($\bar{x} = 12.48$). This result implies that people high on psychological distress would abuse substances more than people low on psychological distress.

Hypothesis three: Psychological distress, negative life event, and personality trait would have a joint and independently predict on substance abuse among the youths in the study.

Table 4: Multiple Regression Analysis showing joint and independent influence of psychological distress, negative life event and personality trait on substance abuse.

Predictors	R	R ²	F	P	β	T	P
Psychological distress					0.65	14.429	< .000
Negative life event	.701	0.485	84.543	<01	.091	2.068	< .040
Personality trait					0.138	3.067	< .002

Table 4 shows that psychological distress, negative life event and personality trait jointly and independently predict substance abuse among the participants $F(3,263) = 84.543$; $P < .000$. Furthermore, observation of the R^2 shows that independent variables (psychological distress, negative life event and personality trait) accounted for about 48.5% of the total variance observed in substance abuse. Also on individual prediction, results show that all predictors significantly contributed to the prediction of substance abuse in magnitude in decreasing order psychological distress ($\beta = .650$; $t = 14.429$; $P < .000$), followed by personality trait ($\beta = .138$; $t = 6.067$; $P < .002$), and the least potent contributor negative life event ($\beta = .091$; $t = 2.068$; $P < .040$).

Hypothesis four: Personality traits (Neuroticism, agreeable, extraversion, openness, and conscientiousness) would jointly and independently predict substance abuse among the youths in the study.

Table 5: Summary of Multiple regression analysis showing joint and independent Influence of the big 5 personality traits (Neuroticism, agreeable, extraversion, openness, and conscientiousness) on substance abuse among participants.

Personality traits	R	R ²	F	P	β	T	P
Extraversion					.040	.648	.518
Agreeable					.062	1.039	.300
Conscientiousness	.311	.097	5.539	<.000	.202	3.280	.001
Neuroticism					.066	1.104	.271
Openness					.172	2.837	.005

Result on Table 5 indicated that significantly neuroticism, agreeable, extraversion, openness and conscientiousness jointly predicted substance abuse among the participants [$R^2 = .097$, $F(5, 258) = 5.539$; $P < .000$]. In addition, observation of the R^2 shows neuroticism, agreeable, extraversion, openness and conscientiousness collectively accounted for 0.9% to the total variance observed on substance abuse among the participants. Furthermore, looking at unique individual contribution of the predictors on substance abuse, results show that conscientiousness ($\beta = .202$, $t = 3.280$, $P < .001$), and openness ($\beta = .192$, $t = 2.837$, $P < .005$), were significant potent predictors of substance abuse. While in decreasing order neuroticism ($\beta = .066$, $t = 1.104$, $P > .271$), agreeable ($\beta = .062$, $t = 1.039$; $P > .300$), and conscientiousness ($\beta = .040$, $t = .648$; $P < .518$), were insignificant and did not contribute to the prediction of substance abuse.

Hypothesis five: Male participants will significantly score high on substance abuse than their female counterparts. This was tested with T-test for independent samples.

Table 6: Summary of Independent t-Test showing influence gender on substance abuse.

Sex	N	\bar{x}	df	t	P
Male	196	12.6888			
			265	-.856	.393
Female	71	12.9014			

Mean differences using t-test

Result on Table 6 shows that male participants did not significantly score high than their female counterparts in the study [$t(259) = 0.297$; $p > .03$]. Also, in addition to the result, observation of their mean scores, show that male participants have a mean score of ($\bar{x} = 12.6888$) while their female counterparts have ($\bar{x} = 12.9014$). This result implies that male participants did not abuse substances more than their female counterpart did. Based on this evidence, the hypothesis is rejected, and the null hypothesis accepted.

DISCUSSIONS

This study investigated psychological distress, negative life event, and personality traits as predictors of substance abuse among youths in Ibadan metropolis. First hypothesis stated that there is a significant positive relationship between psychological distress, negative life event, personality trait and substance abuse among youths that participate in the study. This hypothesis was tested with Person moment correlation test. Results revealed that psychological distress, negative life event, personality trait showed positive relationship with substance abuse. Also, this result implies that as effects of the variables psychological distress, negative life event and personality trait increase substance abuse would also increase among the youths. This result is correlated with Bojanic *et al.* (2021) and Stacey *et al.* (2017); precisely Bojanic *et al.* (2021) revealed that psychological stressors such as anxiety and painful life experiences increase the vulnerability for substance abuse among youths. Psychological distress is a disorder that has a negative impact on someone's life. Also, negative life event is more powerful and disorganizes pleasurable life experiences, and some core factors of personality traits lead impulsivity behaviors. The implications of all these negative outcomes associated with psychological distress, negative life event and personality trait is that they increase the propensity for substance abuse. Apart from this, some aspects of human personality traits are by nature susceptible to substance abuse. Risk factors for substance abuse are related to individual personality and Neuroticism and openness to experience have been identified to promote substance use (Steele, 2021). People experiencing psychological distress would display emotional turbulence, depressive symptoms, anxiety and poor mental evaluation, People experiencing this by nature would do any-thing to erase the memory from consciousness, and in most cases, they see substance such as cigarette, alcohol, and others as a way out while their problems will resurface again in their consciousness immediately the effect of the substance is over.

It is not surprising that the more the impacts of psychological distress, negative live events, and personality traits, the more the individual is engaged with these substances. This is so because their influence places life is a state of disorganization and reduce consciousness. An increase in anxiety that are promoted by one's core personality trait is responsible for an increase in anti-social behavior and substance abuse is one of the most talk about issues in the social domain. This shows that an increase on psychological disorders would lead to increase in substance abuse (Steele, 2021), which is supported explanation in the study.

Hypothesis two stated that participants high on psychological distress would score high on substance abuse than participants low on psychological distress. This hypothesis was tested with T-test for independent samples. Result showed that participants high on psychological distress scored significantly high on substance abuse than participants low. This result implies that there is significant difference on the levels of psychological distress and those participants high on psychological distress are more vulnerable to substance abuse. In support of this evidence, some studies had documentations from various academic fields that high-level psychological wellbeing distress leads to substance abuse. Someone high on psychological distress is operating on reduced mental functioning, and the situation may lead the person to seek out drug to experience intoxication. As the drug use continues, the brain may not achieve the same high, and so larger amounts of the drug may be required to trigger the reward system. From this, one can easily conclude that people high on substance abuse would lead to precursor or a sequel to psychological wellbeing, and degrading aspects of psychological wellbeing may directly contribute to craving for high substance abuse,

which is one of the major reasons why those experiencing psychological disturbances may likely see substance abuse is the way out (Bojanic *et al.*, 2021).

Hypothesis three stated that psychological distress, negative life event, and personality trait would have a joint and individual influence on substance abuse among the participants. Result showed that psychological distress, negative life event and personality trait jointly and individually predicted substance abuse among the participants. This result confirmed the stated hypothesis in the study and significantly related to Michael *et al.* (2017). This result emphasized so much on joint effects of size on the prediction of substance abuse. Normally, when variables are combined for prediction, their effects are usually large on the criterion variable on interest and the obtained result has no demarcation from this reality in the study. The joint effects psychological distress, negative life event, and personality trait lead to high propensity for substance abuse due to each variable was acting on joint efforts and, in most cases, it amplifies or worsen the situation. On a more serious note, psychological distress, negative life event, and personality trait can individually predict substance use, so their joint effects could be severe on the individual. Imagine someone who lost all he has worked for in life, mentally stressed and has with neuroticism personality trait, these factors have the potentials change perception and cognition to key into serious substance abuse to manage or banish this experience into unconscious mind. Moreover, since there is a joint effect of factors, the individual would be a serious abuser of various kinds of substances. Therefore, there is no doubt that when variables act as joint predictor, their effects are usually large on the criteria variable. So, one possible explanation for substance abuse is in joint/ magnitude of psychological distress, negative life event, and personality trait of the individual involved.

Hypothesis four stated that personality traits (Neuroticism, agreeable, extraversion, openness and consciousness) would jointly and independently predict substance abuse among the participants. Result indicated that significantly neuroticism, agreeable, extraversion, openness and consciousness jointly predicted substance abuse among the participants. This result is correlated to Victor *et al.* (2020) and Stephen (2018). The implication of this result as obtained in the study is that personality traits of people influence substance abuse. Personality trait plays a significant role in human behavior. Personality traits are “dimensions of individual differences in tendencies to show consistent patterns of thoughts, feelings, and actions. In terms of the Five-Factor Model of personality, individuals prone to substance abuse have been characterized by low neuroticism, extraversion, and openness while agreeable and consciousness were insignificant. However, jointly they all predicted substance use that has the potential to lead to progress to substance abuse.

Considering the current rate of multiple psychoactive substance use among youths without history of mental health challenges, is an evident that personality traits would be responsible for such act considering their function in human behavior. Some personality traits have been reported to control some important aspects of human reasoning, thereby significantly influencing decisions that import antisocial behavior such as alcohol, cigarette, tramadol, and other dangerous chemicals harmful to human body and wellness. For example, an individual whose personality make up is governed by neuroticism, this person would have tendency to experience negative emotions such as nervousness, tension, anxiety, and depression. And in a way to cope, he/she may decide to be associated with alcohol, cigarette, marijuana, codeine, etc. to calm or reduce tension. Same goes to a person governed by openness to experience. People with open to experience are imaginative in thoughts and are influenced by social developments. They like doing what colleagues are doing, therefore, they easily imitate act of alcohol, cigarette smoking and others from the society. This trend is applicable to all core factors of personality traits. And for this reason, they influence substance abuse.

Hypothesis five stated that male participants will significantly score high on substance abuse than their female counterparts. This was tested with T-test for independent samples. Result showed that male participants did not significantly score high than their female counterparts on substance abuse. This result is supported by Jennifer *et al.* (2019). Though there is no argument that men abuse substances more when compared to their female counterparts according to reported evidence from various studies (Winokur *et al.*,

2022; Ouimette & Brown, 2003). But result of this study has created a gap for argument that needs more investigation. Substance abuse may not be dependent of sex, but by individual factors such as peer influence, modeling, and other psychosocial factors. These factors could influence any one into substance abuse irrespective of gender, and the researcher assumed it same factors influenced participants in the study leading to no significance difference between male and female on substance abuse.

CONCLUSION

Based on the findings of the study, the following conclusions were drawn:

- Psychological distress, negative life event, and personality traits are positively related to substance abuse among youths.
- Youths high on psychological distress would abuse substances more than youths low on psychological distress.
- Psychological distress, negative life event, and personality traits jointly and independent predicted substance abuse among the participants.
- The big 5 personality traits domains (Neuroticism, agreeable, extraversion, openness, and conscientiousness) jointly and independently predicted substance abuse among the youths, but at individual levels conscientiousness and openness are significant predictors of substance abuse, while neuroticism agreeable, and extroversion were insignificant contributors to the prediction of substance abuse.
- Male participants abuse psychotropic substances more when compared to their female counterparts.

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