

# THE INFLUENCE OF PERSONALITY TRAITS ON SUBSTANCE ADDICTION AMONG SOBER HOUSE INMATES IN THE URBAN WESTERN REGION OF ZANZIBAR

AHMAD RASHID RAMADHAN

DOI: <https://doi.org/10.5281/zenodo.8405182>

Published Date: 04-October-2023

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**Abstract:** The study employed cross-sectional research design which was facilitated by mixed method approach. And therefore study used both qualitative and quantitative methods. Simple randomly sampling was used to obtain 68 respondents. Quantitative data were obtained from respondents through questionnaire while qualitative data were obtained from respondents by using semi-structure interview. Furthermore, SPSS was used to analyse quantitative data and then presented as descriptive statistic in graphs and tables while qualitative data was analysed by using content analysis and presented by using direct quotes from respondents. Data findings revealed that addiction was highly prevalent 88% in Zanzibar, which was facilitated by the easy access of substances, a family history of addiction, peer pressure and neglectful and inappropriate parental supervision. Findings also reveal that neuroticism, extroversion and openness personality are positively associated to addiction. While, conscientiousness and agreeableness had negative correlation with addiction. Recommendation as per study findings, it was recommended that, the ministry of health should support school and community-based initiatives to curb the high prevalence of addiction in Zanzibar. Also the Ministry of health and Drug commissioner should utilize the media to reach families and sensitize them on appropriate parenting to curb addiction and drug abuse.

**Keywords:** quantitative data, Data findings, inappropriate parental supervision, ministry of health, Drug commissioner, drug abuse.

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## 1. INTRODUCTION

According to the global health risk report, drug addiction is among the top 20 risk factors for mortality and disability. Globally, one in 10 people who use illicit drugs are identified as suffering from a form of Substance Use Disorder (SUD) that causes critical health issues for affected individuals, their families, and the community. In line with the current population growth trends, it is projected that the number of people who use drugs will soar to 299 million in United National Office on Drugs and crime in 2030 (UNODC,2021).

In Germany, the Germany Country Drug Report (2019) estimates that more than a quarter of the adult population has used illicit drugs during their lifetime. Amphetamines are the most commonly used stimulant by German adults, followed by cocaine and MDMA/ecstasy. About 2.8 % of adults in Germany have used some kind of New Psychoactive substance (NPS), while about 2.2 % of young adults (aged 18-25 years) have used these substances in the past. Large geographical variations have also been observed in the rates of human immunodeficiency virus (HIV, ) Hepatitis C virus(HCV) and Hepatitis b virus( HBV) infection among people who inject drugs from eight cities, which is attributed to variations in use patterns, age structures and local conditions.

In South Africa, Peltzer&Phaswan (2018) report that the country has the highest rate of alcohol consumption in the southern African region. About a third of adults report harmful use, while alcohol abuse in adolescents is associated with risky sexual behaviours, academic failure, absenteeism, and increased risk of drug use. In 2015, over 13,000 people died in road traffic accidents of which almost 60% were alcohol-related. South Africa also has the highest prevalence of foetal alcohol spectrum disorder (FASD) globally. Alcohol abuse is linked to domestic and interpersonal violence, intentional and unintentional accidents, and premature deaths. Substance abuse is also widespread, with 15% of the population estimated to use drugs regularly. Substance use is linked to many forms of crime and violence, suicide, HIV/AIDS, and premature death, particularly among youths.

In Tanzania, Ndayongeje (2018) observes that drug use and dependence is a major and growing problem. The drug control commission (2011) reported that the number of people who are addicted ranged from 150,000 and 500,000. The National guideline for a comprehensive package of HIV interventions for key and vulnerable populations in Tanzania estimates that in 2017, there were 25,000 to 50,000 injecting drug users in Tanzania which contributes immensely to the unending burden of HIV in the country. Most of the people who are involved in drug abuse in Tanzania are youths, who often engage in trafficking and consuming illegal drugs like cannabis and, they are mostly found in major cities of the country. Cannabis is the most widely used illegal drug in Tanzania.

Zanzibar is also affected by drug abuse and its effects on individuals, families and society in general. Basically, Zanzibar is a predominantly Muslim island and Islam forbids the use of any kind of alcohol or intoxicants. Becker leg et al. (2006) note that, before the 1980s tobacco, alcohol and cannabis were the only known drugs in Zanzibar. Personality factors are often considered as strong indicators of individual differences in susceptibility to substance reinforcement in the previous theoretical framework of substance use (Kotov et al, 2010). In previous years, a large body of studies was interested in the relationships between personality factors of the five-factor model (Stautz& Cooper, 2013) and substance use problems. The FFM personality factors include openness to experience, extraversion, neuroticism, agreeableness, and conscientiousness. Some of these studies have revealed that FFM personality factors were influential for alcohol use. For example, it was consistently found that high neuroticism, low agreeableness, and low conscientiousness were significantly associated with alcohol use problems (Gonzalez et al, 2011).

Regarding illicit drug use problems, previous studies have identified the same influential FFM personality factors. For instance, Mezquita et al(2015) found that women's drug craving was negatively related to conscientiousness and agreeableness, others found that compared with non-clinical participants, opioid-dependent individuals showed higher neuroticism, lower extraversion and lower conscientiousness, but similar levels of openness to experience and agreeableness. Similarly, cocaine/heroin users were found to show very high neuroticism and very low conscientiousness, and marijuana users were found to show high openness to experience, and low agreeableness and conscientiousness. In summary, regardless of the drug types, high neuroticism and low conscientiousness were found to be the common personality traits exhibited by users with problematic substance use across studies (Mendez, 2010).

Although studies from elsewhere cite the important predictive role personality traits play in substance addiction as cited above, studies on substance addiction are emerging in Tanzania, with none having explored the contribution of the big five personality traits on substance addiction in Tanzania and especially in Zanzibar. This leave a lot unknown about the influence personality traits in drugs addiction which if such information comes to awareness. It will help to pre-mitigate the addiction. Based on that, the study intend to answer the following question

- i. What is the factors influence the high prevalence of substance addiction in the Urban Western Region of Zanzibar?
- ii. What is the relationship between the five major personalities and substance addiction in the Urban Western Region of Zanzibar?

## 2. METHODOLOGY

### Research Design

cross-sectional study design was utilized in the study. The choice of the cross-sectional design is informed by the fact that is relatively quick, cheap and easy to apply. The researcher expects to obtain useful information using this design, since the study involved a large number of respondents in the sample frame. Further, more owing to the time constrain, the cross-sectional design allows the researcher to complete the entire study in a single phase, and the design is also well suited for the research objectives, since they can be achieved at a single point in time.

**Instrumentation.**

Quantitative Data was collected by using a questionnaires this because questionnaire cover large population in short time and less expensive while on other hand qualitative data was collected by using semi-structure interview

**Validity and Reliability**

Data validity of the study was established by asking an expert in the field to review the instrument and to identify if the instrument is accurate, clear and it could produce the intended results in order to meet the research objectives and was adjusted according to his/her suggestion and recommendations. The researcher also adopted standard tools that have been validated to be applicable across cultural contexts such as the DSM5 to determine addiction and the Big Five personality trait model. The researcher also triangulated data collection by using two different tools namely the questionnaire and the semi structured interview.

**Population and Sampling**

The target population is the specific, conceptually bounded group of potential participants to whom the researcher may have access that represents the nature of the population of interest (Kumar, 2018). The target population for the study included men, and adolescents currently admitted at participating sober houses owing to their drug dependence problems. The three sober houses include, free at last sober house, Nyarugusu sober house, Bububu sober house. This particular population is most suited for the study since they have lived experiences with drug addiction thus; they provided accurate data for the study.

Both probability and non-probability sampling techniques was applied in the selection of respondents that informed the study. Also known as subjective sampling, purposive sampling is a non-probability sampling technique where the researcher relies on their discretion to choose variables for the sample population. Here, the entire sampling process depends on the researcher's judgment and knowledge of the context. If done right, purposive sampling helps the researcher filter out irrelevant responses that do not fit into the context of the study (Lambart, 2020). A simple random sample is a subset of a statistical population in which each member of the subset has an equal probability of being chosen. A simple random sample is meant to be an unbiased representation of a group. (Foley, 2018).

In the study, the study area. Thirdly, respondents at each of the sober houses was selected using sample random sampling techniques thus; all participants was given an equal chance to participate in the study. Fourthly, 3 key informants selected from each of the three selected sober houses was purposively selected based on their experience in exploring mental health issues facing their clients.

**Statistical Treatment of data**

Data analysis usually involves reducing accumulated data to a manageable size, developing summaries, looking for patterns, and applying statistical techniques (Ashley, 2019). Since the mixed method approach was adopted in the study, both quantitative and qualitative methods of data analysis were undertaken qualitative data were analyzed in five basic steps of content analysis. On the other hand, quantitative data was analyzed by using SPSS and presented on tables and figures

**Ethical Consideration**

According to Kothari (2012) adherence to research ethics is essential for obtaining reliable and valid results therefore, respondents were fully informed that the study is solely for academic purposes and all information obtained was treated with utmost confidentiality. Moreover, the researcher ensured that confidentiality is maintained, thus, confidentiality was ensured by cautioning respondents against transcribing their names on the data collection tool. The researcher was polite whenever in contact with respondents and no respondent was forced to take part. Prior to engaging in the data collection process, the researcher obtained permission from the university and selected sober centres in urban, West Zanzibar.

**Factors influencing the prevalence of addiction in Zanzibar**

The study set out to determine that attributes influencing addiction in Zanzibar and findings are as demonstrated in

**Table 1: Factors Influencing the Prevalence of Addiction in Zanzibar.**

	SA	A	N	D	SD	TOTAL
A family history of alcohol and substance use increases addiction prevalence	50(73.5%)	10(14.7%)	4(5.9%)	0(0.0%)	4(5.9%)	68(100%)
Easy and increased access to alcohol and illegal drugs increases addiction prevalence	44(64.7%)	9(13.2%)	8(11.8%)	6(8.8%)	1(1.5%)	68(100%)
The Influence of drug using peers increase the prevalence of addiction	38(55.9%)	21(30.9%)	1(1.5%)	3(4.4%)	5(7.4%)	68(100%)
Neglectful parenting and poor parental monitoring increases addiction	38(55.9%)	21(30.9%)	1(1.5%)	3(4.4%)	5(7.4%)	68(100)

**Source:** (research data, 2023)

As demonstrated in Table 5, 50(73.5%) strongly agreed that a family history of alcohol and substance use increases the prevalence of addiction in Zanzibar. To this same statement, 10(14.7%) respondents agreed, 4(5.9%) respondents were neutral, while 4(5.9%) strongly disagreed. These findings imply that the presence of drug using members may actually enable non-using members to access drugs, marking their onset of substance use and addiction. This findings are also supported by one interviewee who said “ of course, families where members use drugs are a major reason why others also begin using” Grant (2020) similarly conducted a study on 576 participants (aged 18–29 years) who gambled at least five times in the preceding year undertook clinical and neurocognitive evaluations. Those with a first-degree relative with a SUD were compared to those without on a number of demographics, clinical and cognitive measures. We used Partial Least Squares (PLS) regression to identify which variables (if any) were significantly associated with family history of SUDs.

Second item, the study sought to determine whether easy and increased access to alcohol and illegal drugs increases the prevalence of addiction in Zanzibar. As demonstrated in Table 5, 44(64.7%) strongly agreed to this assertion,9(13.2%) agreed,8(11.8%) were neutral,6(8.8%) disagreed while 1(1.5%) respondent strongly disagreed. In support of current study findings, Warren et al (2015) found that easy access to drugs indeed accounts for the increased prevalence of addiction and that for middle school students, a significant difference in perceived ease of access was found for each substance, with rural students reporting greater access to smoking tobacco, chewing tobacco, and steroids, and urban students reporting greater access to alcohol, marijuana, cocaine, inhalants, ecstasy, methamphetamine, hallucinogens, and prescription drugs. For further support of this findings, one interviewee had this to say “Drugs are accessible because users are involved in a network of other users who sell drugs, once someone is introduced, they will also be introduced to suppliers so there is a network of suppliers and users”

Table 5 also depicts that 38(55.9%) respondents strongly agreed that the influence of drug using peers increased the prevalence of drug addiction in Zanzibar, 21(30.9%) respondents agreed to this statement,1(1.5%) Respondent was neutral, 3(4.4%) disagreed to this statement while 5(7.4%) strongly disagreed to the statement. This finding also supported by this interviewee “the friends I used to go clubbing with introduced me to cannabis, they would tell me that enjoyment increased after taking cannabis, the music sounded better and louder when one is high on drugs”. For further support from literature, Mirjana (2020) also found that peer pressure can affect adolescents in various ways. In a negative context, peer pressure can be expressed in ways favored by the adolescents’ characteristics of growth – they are often insecure and they need to feel accepted and belonging to the group. Peer pressure increases in the period of adolescence and may manifest as a very negative impact on the adolescent. The study highlights that peer pressure may affect adolescents adversely and they may begin to abuse addictive substances and become drug addicts.

Lastly, the study sought to determine whether neglectful parenting and poor parental monitoring increased the prevalence of addiction in Zanzibar. As demonstrated in table 5 above, 38(55.9%) respondents strongly agreed to this statement, 21(30.9%) respondents agreed, 1(1.5%) respondent was neutral,3(4.4%) respondents disagreed while 5(7.4%) respondents strongly disagreed. These findings imply that to a great extent, inappropriate parenting fosters use and addiction to drugs and in this regard. In line with these findings, Berge (2016) also found that the neglectful parenting style was associated with worse substance use outcomes across all substances. After adjusting for other proximal risk factors in multivariate

analyses, parenting style was found to be unrelated to substance use outcomes with one exception: authoritative parenting style was associated with less frequent drinking. Association with deviant peers, delinquent behavior, provision of alcohol by parents, and previous use of other substances were associated with substance use outcomes at follow-up

### The relationship between personality traits and substance addiction in Zanzibar

The current study also sought to determine whether personality traits influence substance addiction. Two main features from each of the big 5 personality traits were considered and findings are as depicted in Table 2 below.

**Table 2: The Relationship between Personality Traits and Substance Addiction**

The relationship of personality traits on substance addiction	SA	A	N	D	SD	TOTAL
I find it difficult to manage my emotions both negative and positive	56(81.4%)	4(5.9%)	0(0.0%)	6(8.8%)	2(2.9%)	68(100%)
I am an impulsive person, I act emotionally and I regret later	54(79.4%)	6(8.8%)	0(0.0%)	4(5.9%)	4(5.9%)	68(100%)
I enjoy social situations such as parties, I am easily bored by solitude	48(70.6%)	12(17.6%)	5(7.4%)	2(2.9%)	1(1.5%)	68(100%)
I am emotionally affected by what others think of me, I sometimes do things to please my friends	50(73.5%)	8(11.8%)	1(1.5%)	5(7.4%)	4(5.9%)	68(100%)
I am adventurous and like trying new experiences	38(55.9%)	6(8.8%)	9(13.2%)	7(10.3%)	8(11.8%)	68(100%)
I am generally curious, I first used drugs out of curiosity	36(52.9%)	16(23.5%)	11(16.2%)	2(2.9%)	3(4.4%)	68(100%)
I often behave responsibly	2(2.9%)	6(8.8%)	2(2.9%)	13(19.1%)	45(66.2%)	68(100%)
I think carefully about consequences before acting	3(4.4%)	12(17.6%)	6(8.8%)	14(20.6%)	33(48.5%)	68(100%)
I am kind and care deeply about how others feel	9(13.2%)	4(5.9%)	0(0.0%)	13(19.1%)	42(61.8%)	68(100%)
I am trustworthy and love helping others	12(17.6%)	7(10.3%)	3(4.4%)	11(16.2%)	35(51.5%)	68(100%)

### Source: research data (2023)

As revealed in Table 6 above, 56(81.4%) respondents strongly agreed that they find it difficult to manage my emotions, regardless of whether they are negative or positive, 4(5.9%) respondents agreed to this statement, 6(8.8%) respondents disagreed to the statement while 2(2.9%) strongly disagreed to the statement. These findings imply that the inability to regulate emotions, which is a common feature of neurotic 1 personality trait, may consequently cause individuals to use drugs as a maladaptive coping mechanism. In light of this interviewee stated that. Dash et al (2021) examined whether High neuroticism, low agreeableness, and low conscientiousness are consistent correlates of drug use. In the study, 980 same-sex twin pairs from the Australian Twin Registry Cohort III ( $M_{age} = 31.70$ , 71% female) were interviewed regarding lifetime misuse of cannabis, cocaine/crack, prescription and illicit stimulants, prescription and illicit opioids, sedatives, hallucinogens, dissociative drugs, inhalants, and solvents, and completed a Big Five inventory. Co-twin control analyses predicted the use of each drug from all traits simultaneously. The findings revealed that among all other personality traits, neuroticism was the most significantly associated with drug use

As further revealed, 48(70.6%) respondents strongly agreed they enjoy social situations such as parties, and that they easily got bored by solitude, which influenced their addictive behavior. To this statement, 12(17.6%) respondents agreed, 5(7.4%) were neutral, 2(2.9%) disagreed while 1(1.5%) respondent strongly disagreed. These findings imply that the majority of addicts with some extrovert traits, particularly being energized by the presence of friends are likely to exhibit addictive behavior. Chen (2019) explored how personality factors affect substance use disorders (SUDs) using explanatory item response modeling (EIRM) in China. The results indicated that gender, alcohol use, and their interaction significantly predicted the SUD level. The only personality factor that strongly predicted the SUD level was sensation seeking, a common trait among extroverts. The finding are also supported by interviewee who said "Back then when I was using drugs and alcohol, my worst episodes of intoxication would happen during a part, or in the company of friends. Some of my friends came from very rich families, they would throw birthday parties with all sorts of food, drinks and even drugs"

Table 6 also reveals that 38(55.9%) respondents strongly agreed that they were adventurous and liked trying out new things, which was in part associated to their addictive behavior, 6(8.8%) respondents agreed to this statement, 9(13.2%) were neutral, 7(10.3%) disagreed while 8(11.8%) strongly disagreed. Zeghami et al (2021) conducted a study to predict addiction susceptibility regarding students' personality traits at Qazvin universities. In this cross-sectional study, 227 students from Qazvin universities were selected using the multistage random stratified sampling method. It was revealed that among others, agreeableness ( $P = 0.038$ ) had a significant relationship with drug use among Iranian college students. This finding is also supported by interviewee who said "Curious people may experiment with various drugs at the same time, they are likely to get addicted to various types of drugs at the same time"

Table 2 above demonstrates that 12(17%) respondents strongly agreed they are trustworthy and love helping others, 7(10.3%) agreed, 3(4.4%) were neutral, 11(16.2%) disagreed while 35(51.5%) strongly disagreed with the statement. These findings imply that to considerable extent, agreeableness is negatively or not associated to addictive behavior. Cook et al. (2020) also investigated the relationship between narcissism, extraversion, and agreeableness, three personality qualities, and exercise addiction. The findings showed a low proportion of people classified as at risk for exercise addiction (7%), but a high incidence of people who were exhibiting symptoms (75%). The findings revealed that extraversion and narcissism may be the root causes of exercise addiction, with agreeableness having little bearing. This finding is further supported by quotation from an interviewee who said "Well addiction makes one selfish, practically those addicted hurt those who love them multiple times. Another interviewee added: "addiction has made us do several unkind things, we have stolen, harassed and beaten people just so we can feed our addiction"

### 3. RECOMMENDATION AND CONCLUSION

#### Conclusion

Substance addiction has still remained to existing social problem and associating factors influencing this includes, the easy access of illicit drugs, particularly those that are inexpensive, legally accessible such as alcohol and illegally grown in some parts of Tanzania such as cannabis. The high prevalence of addiction is also enabled by a family history of addiction where substance use is normalized within a family system and also, addiction is influenced by peer pressure and the strong desire to belong especially among adolescents and young people. There is also a significant association between some personality traits and drug addiction, neurotic traits, characterized by the inability to regulate emotions or act impulsively are associated to addiction. Furthermore, high in extroverted personality traits featured by a strong need for the company of peers and being energized by external stimulants such as parties were all influencers of addiction. High in Openness to experience, particularly the curiosity associated to the personality. Furthermore, high levels of conscientiousness and agreeableness are negatively associated to addiction thus, they minimize the risk of drug use and addiction.

#### Recommendation

Since the study revealed that the prevalence of substance addiction in Zanzibar is high owing to such occurrences such as a family history of addiction, easy access and peer pressure, the ministry of health should engage in mass sensitization of the people through school and community-based projects. The ministry should support the establishment of school clubs aimed at fighting drug abuse in schools, where issues such as peer pressure will be addressed. Moreover The ministry of health should also engage in family sensitization through the mass media, where television stations, radios and online media will be used to reach families and educate them on effective parenting, and the role of parental supervision in preventing substance addiction at the family level.

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