

**SUBSTANCE ABUSE AND WORK SHIFT AS PREDICTORS  
OF PSYCHOLOGICAL WELLBEING AMONG  
PARAMILITARY PERSONNEL IN OWERRI**

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**ABSTRACT:** The study investigated substance abuse and work shift as predictors of psychological wellbeing among paramilitary personnel of the Nigeria Security and Civil Defence Corps (NSCDC) in Owerri, Imo State, Nigeria. Two hundred and six NSCDC personnel (119 males and 87 females) within the ages of 23 – 57 years (mean = 45.76, SD = 9.15) were selected through the convenience sampling technique for the study. Two instruments were used for data collection; the Drug Abuse Screening Test by Skinner (1982) and the Psychological Wellbeing Scale (PWB-S) by Ryff (1995). The cross sectional survey design was employed while data was analyzed using hierarchical multiple regression analysis. Findings revealed that high levels of substance use and rotational shift inversely predicted psychological wellbeing among NSCDC personnel in Owerri. The study recommends, among others, that the NSCDC should adopt the use of psycho-education in helping personnel who are vulnerable to substance induced behaviour so as to gain better insight and knowledge of how to withdraw from substance abuse.

**Keywords:** Substance Abuse, Work Shift, Psychological Wellbeing, Nigeria Security and Civil Defence Corps, Owerri.

## **INTRODUCTION**

Psychological health is essential for total wellbeing throughout human life. Psychological wellbeing (PWB) is majorly determined by the psychological health status of an individual which enables the ability to perform or function at maximum level while coping favourably with major life stressors. Psychological wellbeing, subjective wellbeing, psychological health and mental hygiene are all terms which are associated with psychological health and are often used interchangeably (Barenbaum & Winter, 2008).

Psychological wellbeing (PWB) is simultaneously the absence of the crippling elements of the human experience such as; depression, anxiety, anger, fear and the presence of enabling ones positive emotions, meaning, healthy relationships, environmental mastery, engagement, self actualization. It is above and beyond the absence of psychological ill-being and it considers a broader spectrum of constructs than what is traditionally conceived of as happiness (Seligman, 2011). Psychological wellbeing goes beyond the three domains of subjective wellbeing; it integrates hedonic and eudemonic wellbeing. Psychological wellbeing considers both subjective and objective measures of a broader set of domains. The development of an integral conception of psychological wellbeing that goes beyond emotional indicators (happiness, life satisfaction, affect balance) is the framework on which we base this chapter.

Psychological wellbeing is a term which has different meanings to different people. Well-being has been defined as a dynamic state characterized by a reasonable amount of harmony between an individual's abilities, needs and expectations, and environmental demands and opportunities (Levi, 1987). In their systematic review of the definitions, Pollard and Lee (2003) describe well-being as a "complex, multi faceted construct that has continued to elude the researchers' attempt to define and measure it." Broadly, well-being has been defined from two perspectives. The clinical perspective has generally operationalized wellbeing as the absence of negative conditions such as depression, distress or anxiety whereas the psychological perspective defines wellbeing as the prevalence of positive self attributes (Ryff & Singer, 1998). It is a person's evaluative reactions to his or her life – either in terms of life satisfaction, 'cognitive evaluations' or affect 'ongoing emotional reactions' (Diener & Diener, 1995). In general terms, it can be defined as the subjective feeling of contentment, happiness, satisfaction with life's experiences and of one's role in the world of work, sense of achievement, utility, belongingness and no distress, dissatisfaction or worry etc. It emphasizes positive characteristics of growth and development. Psychological well-being has been described as the cornerstone of mental health.

According to the World Health Organization (2018), mental health is, "a state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community". According to Ryff (1989) psychological wellbeing is active engagement in a number of existential challenges. Psychological wellbeing is a multidimensional construct comprised of six areas of positive functioning; Autonomy, Positive Relations with Others, Purpose in Life, Personal Growth, Environmental Mastery, and Self-Acceptance. Thriving in life depends on the degree one sees himself or herself competently functioning in these areas.

Autonomy stands for the degree to which someone is, "self-determining and independent; able to resist social pressures to think and act in certain ways; regulate behaviour from within; and evaluate self by personal standards" (Ryff, 1989). Purpose in Life stands for the degree to which someone, "has goals in life and a sense of directedness; feels there is meaning to present and past life; holds beliefs that give life purpose; and has aims and objectives for living". Positive Relations with Others stands for the degree to which someone, "has warm, satisfying, trusting relationships with others; is concerned about the welfare of others; is capable of strong empathy, affection, and intimacy; and understands the give and take of human relationships" Personal Growth stands for the degree to which someone, "has a feeling of continued development; sees self as growing and expanding; is open to new experiences; has sense of realizing his or her potential; sees improvement in self and behaviour over time; and is changing in ways that reflect more self-knowledge and effectiveness". Environmental Mastery stands for the degree to which someone, "has a sense of mastery and competence in managing the environment; controls complex array of external activities; makes effective use of surrounding opportunities; and is able to choose or create contexts suitable to personal needs and values" while Self-Acceptance stands for the degree to which someone, "possesses a positive toward the self; acknowledges and accepts multiple aspects of self including good and bad qualities; and feels positive about past life" (Ryff, 1989).

Psychological well-being appears to be a relatively broad concept. According to Bar-On (1988) the most important reliable factorial components of psychological well being are self regard, interpersonal relationships, independence, problem solving, assertiveness, reality

testing, stress tolerance, self-actualization and happiness. The term psychological well-being is often used interchangeably with the term “mental health” and when done so it designates one who is functioning at a high level of behavioural and emotional adjustment and adaptiveness, and not one who is simply not ill (Reber & Reber, 2001). Individuals with higher than average psychological well-being are regarded as more successful in meeting environmental demands and pressures, while a deficiency in psychological well-being can mean a lack of success, indulge in substance misuse and the existence of emotional problems (Bar-On, 1988).

The relationship between substance abuse and psychological well-being is a complex one. Both variables are affected by the interaction of biological, psychological, and social factors (Green & Shellenberger, 1991). Substance abuse is both a social and health problem in almost all the countries in the world including Nigeria. It can be defined as “a maladaptive pattern of substance use leading to clinically significant impairment or distress, manifest by one or more of the following symptoms within a 12 month period; recurrent substance use in situations that cause physical danger to the user, recurrent substance use in the face of obvious impairment in school or work situations, recurrent substance use despite resulting legal problems, or recurrent substance use despite social or interpersonal problems” (American Psychiatric Association, 2013). Substance abuse includes both the misuse and abuse of legal substances such as nicotine, alcohol, over-the counter drugs, prescribed drugs, alcohol concoctions, indigenous plants, solvents, inhalants, as well as the use of illicit drugs. Simply put, substance abuse can be used to refer to any substance that when taken by a person modifies perception, mood, cognition, behaviour or motor functions (American Psychiatric Association, 2013).

Drug abuse is one of the socio-psychological issues of the current global community. Drug abuse causes different physiological, organic and also psychological problems, distinctive sort of drugs and their items cause diverse issues like stimulant and hallucinogenic drugs produce mental illness with suspicions, intemperate fears, mood disorders and depression and in general causes poor psychological wellbeing. Narcotics and liquor damage the liver, stomach, brain and nerves which results memory loss, restlessness and so forth. Essentially cannabis items likewise prompt emotional instability or a general loss of enthusiasm among clients. Drug dependence influences the client as well as cause physical and enthusiastic trouble in the family (Flora & Stalikas, 2012).

In Nigeria, some of the most commonly abused substances included alcohol, tobacco (cigarette), marijuana (ganja), various kinds of cough syrups, sedative tablets, heroin, cocaine, etc. Substance abuse is also known as drug abuse. A pharmaceutical preparation or a naturally occurring substance used primarily to bring about a change in an existing process or state (physiological, psychological or biochemical) can be called a drug. In simpler terms, any chemical that alters the physical or mental functioning of an individual is a drug. A drug may or may not have medical uses; its use may or may not be legal. The use of a drug to cure an illness, prevent a disease or improve health is termed ‘drug use’. But when a drug is taken for reasons other than medical, in an amount, strength, frequency or manner that causes damage to the physical or mental functioning of an individual, it becomes ‘drug abuse’ (Sahu & Sahu, 2012). Any type of drug can be abused; drugs with medical uses can also be abused. Illegal drugs like brown sugar and ganja have no medical use at all. To use them, is to abuse them.

It is essential to note that psychological wellbeing cannot be studied in isolation as there are several active factors that determine individual psychological health and wellbeing. A major factor which is of interest to this research work and has the tendency of influencing an individual's state of psychological wellbeing is work shift.

According to the International Labour Office (1990), shift work is defined as: 'a method of work organization under which groups or crews of workers succeed each other at the same workstations to perform the same operations, each crew working a certain schedule or shift so that the undertaking can operate longer than the stipulated weekly hours for any worker. Often the term is used when more than one work period is scheduled in a workday or when most of the working hours fall outside the standard workday, such as evening, night or weekend shifts'. The shift system can be generally classified into a fixed shift system and a rotating one (Occupational Safety and Health Branch, Labour Department, 2008). Work shift is demanded by 24-hour job that gives big and more impact not only on the organizations but also to the nation. Those workers, who are often rotated through sets of the period throughout the day, typically perform the same kind of work.

The past few decades have witnessed a tremendous growth in the population of shift workers, specially, in developed and highly industrialized countries. In the security and health care system, work shift is considered necessary and indispensable to ensure continuity of care in hospitals and residential facilities. Rotating and scheduling are the main characteristics of shift work and nurses are largely locked into schedules that provide 24-hour care and include night shift work (Korompeli, Muurlink, Tzavara, Velonakis, Lemonidou & Sourtzi, 2014).

Shift work and night shift in particular, is one of the most frequent reasons for the disruption of circadian rhythms, causing significant alterations of sleep and biological functions, which, in turn, can affect the physical and psychological well-being and negatively condition work performance (Costa, 2010). Many studies have analyzed the impact of shift work on the physical health of workers. In particular, some authors identified a maladaptation syndrome related to shift work, characterized by impaired sleeping/waking, gastrointestinal disorders, and an increased risk of cardiovascular diseases (Matheson, O'Brien & Reid, 2014). Recently, a syndrome called "shift work disorder" has been identified by the presence of the following symptoms: alteration of circadian rhythm of sleep/wake, insomnia, excessive day sleepiness, and fatigue (Black, Hull, Tiller, Yang & Harsh, 2010). Different percentages of shift work disorder have been reported in cross-sectional studies, ranging from 24.4% to 44.3% (Asaoka, Aritake & Komada, 2010). Night shift work induces sleep deprivation which, in turn, alters the daily levels of alertness and job performance, favouring fatigue (Akerstedt & Wright, 2009). This condition, often associated with shifts is probably due to the desynchronization of circadian rhythm or reduced sleep similar to jet lag syndrome. The sleep alterations related to shift work have been included among the Circadian Rhythm Sleep-Wake Disorders, irregular type of the Diagnostic and Statistical Manual of Mental Disorders (5th ed.; DSM-5; American Psychiatric Association, 2013), which reports a high frequency of this disorder among the night shift worker population of 5%–10% of the workforce.

Health professionals who worked night shifts showed more psychological and mental health problems than day workers: irritability, somatization, obsessive-compulsive disorder, interpersonal sensitivity, anxiety, altered mood, and paranoid disorders were significantly

higher. These data indicate that shift work has a negative impact on psychological health and social life (Shields, 2002).

### **Statement of the Problems**

Over the years, several work sectors have adopted the idea of work shift or employee work rotation in order to improve productivity. The major reason why this idea has been seriously considered is because most organizations such as hospitals, security agencies etc are designed to function regularly (day and night) and run 24-hourly. Considering the nature of the work, employees' work in shift so as to cover and meet up with the work demands. This means that most employees' stay awake at night to carry out their duties without considering their psychological wellbeing. Prolong work shift according to researches lead to sleep deprivation, fatigue, excessive day sleep, and disruption of circadian rhythms, causing significant alterations of sleep and biological functions, which, in turn, can affect physical and psychological well-being (Akerstedt & Wright, 2009).

Also, the increasing production, distribution, promotion and easy availability of substances together with the changing values of society has resulted in rising cases of substance use related problems emerging as a major public health concern in Nigeria. Psychologists, Social Workers, Psychiatrists and other mental health professionals are identifying substance use and abuse as a critical public health crisis in Nigeria. Despite attempts by government agencies like the National Drug Law Enforcement Agency (NDLEA) to limit access to psychoactive substances, the use of such substances is now so common among adults and adolescents. Even within the Nigerian military and paramilitary organisations, access to psychoactive drugs has resulted to several health and mental impairments such as depression, substance induced psychosis, memory impairment and poor job performance, which in turn causes decline in the victims' psychological and mental wellbeing. It is therefore imperative to ascertain the impact of substance use and shift work on the psychological wellbeing of paramilitary personnel in Nigeria.

### **Purpose of the Study**

This study sought to examine whether substance abuse and work shift could predict psychological wellbeing of NSCDC personnel. Specifically, this research aims at;

1. ascertaining if substance abuse predicts psychological wellbeing among the NSCDC Personnel in Owerri
2. examining if shift work predicts psychological wellbeing among the NSCDC Personnel in Owerri

### **Empirical Review**

#### **Substance Abuse and Psychological wellbeing**

Previous studies on substance abuse and psychological wellbeing had mainly identified the negative effect of substance use on psychological wellbeing. For instance, in a study by Rajalakshmy, *et al.*, (2018) on psychological wellbeing and substance abuse among adolescents in Central Kerala clearly identified that participants who were not under the influence of alcohol had better wellbeing when compared to those who consumed alcohol



( $p=0.0016$ ). Similarly, Pia, Kirsimarja and Kristian (2014) in their study on the links between different aspects of alcohol use and positive and negative aspects of mental health and the effect of protective social factors on these links found that binge drinking and particularly hazardous drinking were associated with different aspects of mental health. The proportion of respondents with poor mental well-being increased when binge drinking was more frequent than monthly and when respondents scored  $\geq 6$  on the AUDIT scale. In another study, Adejimi (2021) identified significant association between socio-demographic variables, clinical variables, negative life events and substance abuse. Green, Zebrak, Fothergill, Robertson and Ensminger (2012) confirmed that substance use predicts psychological distress in young adults for men but no cross-lag associations for women. A study on substance abuse and psychological wellbeing among South Africans by Leigh-Anne (2005) found that substance abuse (drinking, binge drinking, drug use) increases with age and that nearly twice as many male adolescents abuse substances. The result showed that adolescents who used drugs had significantly lower levels of psychological wellbeing and life satisfaction.

### **Work Shift and Psychological wellbeing**

Ajayi and Babasola (2019) researched on work shift, burnout and perceived vulnerability as predictors of psychological health among nurses in a teaching hospital in Oyo state, Nigeria. Their findings showed that work shift, burnout and perceived vulnerability jointly accounted for 10.3% variation in psychological health. Independently, perceived vulnerability was the major predictor of psychological health. However, burnout and shift work did not independently predict psychological health. Further analysis revealed that when combined together gender, age and educational qualification accounted for 11.2% variation in psychological health. Albeit, result revealed that only educational qualification independently predicted psychological health among nurses. In another study, Awosoga, et al. (2020) in their study found that professional caregivers on night shift experience poor health status. Their study provided further evidence that night shift workers' health is at risk as participants reported negative evaluations of their physical, mental/emotional health, lower ratings of their quality of life, and negative responses to questions concerning whether they engage in healthy behaviours.

In a Norwegian study on the effects of shift work on psychological and social work factors on psychological wellbeing of onshore/offshore workers and nurses conducted by Berthelsen (2017), no statistical significant effects of shift schedules on anxiety and depression were found. However, differences in work exposures between shift schedules were demonstrated. Nurses working nights reported higher levels of role clarity and job demands, and lower levels of decision authority compared to non-night workers. Nurses working rotating-shifts reported higher levels of job demands, role clarity, and skill discretion, and lower levels of role clarity and decision authority compared to permanent-shift nurses. No statistically significant moderation effects between night work and rotating-shift work, and work content on psychological wellbeing were demonstrated.

Yarmohammadi, Pourmohammadi, Sohrabi, *et al.* (2016) conducted a study on work shift and its effect on nurses' psychological Health and Wellbeing. Results showed that work shift could act as a risk factor in development of physical and psychological disorders in nurses. The impact of shift work on the psychological and physical health of nurses in a general hospital was conducted by Paola, Matteo, Luigi, Sara, Daniela and Rosaria (2016). The result reported that nurses that engage in night shift had the lowest mean score in the items of job

satisfaction, quality and quantity of sleep, with more frequent chronic fatigue, psychological, and cardiovascular symptoms in comparison with the day shift workers, in a statistically significant way.

Waggoner (2012) examined the effects of consecutive night shift work on police officer performance using a unique research design combining controlled laboratory measures of performance and police officers working actual night shifts in the field. Measures included simulated routine driving, psychomotor vigilance, and simulated deadly force decision making as well as subjective sleepiness. Mixed-effects analysis of variance revealed degraded simulated driving ( $F_{1, 78}=6.78$ ;  $p=.011$ ), vigilance ( $F_{1, 161}=14.06$ ;  $p<0.001$ ), and increased subjective sleepiness ( $F_{1, 84}=96.99$ ;  $p=.001$ ) following five consecutive night shifts on duty compared to three days off duty. Repeated measures ANOVA also showed significantly different false alarm rates with higher instances of false alarms occurring following the night shift condition, and sensitivity, or ability to detect a threat presented with increased signal sensitivity seen during the control condition. Police officers experienced degraded simulated driving and psychomotor vigilance, impaired simulated deadly force decision making performance, and higher subjective sleepiness following consecutive night shifts on duty. These results indicate that police officers were suffering the effects of night shift work on operational performance, creating a safety risk for themselves and the public.

Barton, Spelten and Totterdell (1995) examined the impact of number of consecutive nights work on psychological ill-health and well-being of nurses. They found that while shift work was not related to burnout among nurses, those on rotating and night shifts suffer more seriously in terms of psychological well-being. Nurses on permanent night work had higher rates of burnout and psychological distress than those on other shift patterns.

### **Hypotheses**

1. Substance abuse will not significantly predict psychological wellbeing among the NSCDC Personnel in Owerri
2. Work shift will not significantly predict psychological wellbeing among the NSCDC Personnel in Owerri

### **METHOD**

#### **Participants**

The participants for this study comprised of 206 paramilitary personnel selected from the NSCDC Imo State office at Owerri. The participants were made up of 119 males and 87 females with ages ranging from 23 to 57 (mean age = 45.76 and standard deviation = 9.15). The participants were selected using the convenience sampling technique.

#### **Instruments**

Two instruments were used for the study. They were the Drug Abuse Screening Test (DAST) by Skinner (1982) and the Psychological Wellbeing Scale (PWB-S) by Ryff (1995)

The Drug Abuse Screening Test (DAST) was developed by Skinner (1982) to assess symptoms of substance dependence. DAST is a 28-items self-report scale that consists of items that parallel those of the Michigan Alcoholism Screening Test (MAST). Skinner (1982) reported internal consistency of .92 while Sydney-Agbor, Ebeh and Onyeonu (2018) reported internal consistency of .72 among Nigerian Samples. DAST has exhibited valid psychometric properties and has been found to be a sensitive screening instrument for the abuse of drugs other than alcohol (Adekeye, Adeusi, Chenube, Ahmadu & Sholarin, 2015).

Psychological wellbeing was measured using the 18-item Psychological Well-Being Scale (PWB-S) developed by Ryff (1995). This scale is a structured, self-report instrument based on the six dimensions of psychological well-being: Autonomy, environmental mastery, personal growth, positive relationships with others, purpose in life and self-acceptance. The scale is 18-item scale. Some items on the scale are: "I tend to be influenced by people with strong opinion", and "I am quite good at managing the many responsibilities of my daily life". Each item were scored using a 7-point Likert-scale format. Mefoh, Odo, Ezeh and Ezeah (2016) obtained Cronbach's alphas for self-acceptance .72, positive relations .50, autonomy .46, environmental mastery .60, purpose in life .62, and personal growth .57. They also obtained a reliability coefficient .87 for the overall PWB-S. Similarly, Fagbenro, Olasupo and Kenku (2019) reported a Cronbach alpha of .81 was reported for the overall PWB-S.

### **Procedure**

The researcher presented a letter of introduction to the office of the NSCDC State Commandant seeking for approval to carry out a study. Further explanations on the purpose and relevance of the study were orally supplied. When permission was granted, the researcher approached available officers and presented them with the questionnaires and an attached consent letter explaining the purpose of the study. NSCDC personnel who accepted to participate in the study were guided on the nature of the study, how to complete the set of questionnaires and were assured of the confidentiality of their responses. They were also encouraged to return them to the researcher on the same day to be eligible for a recharge card token from the researcher. Respondents who successfully completed and returned their questionnaires were thanked for participating in the study.

### **Design and Statistics**

The cross sectional survey research design was adopted for the study. The statistics employed was the hierarchical multiple regression analysis.



**RESULTS**

**Table 1: Correlations for the Key Variables Used in the Study**

	Age	Shift Work	Substance Abuse	Psychological Wellbeing
Age	1.0	-.032	-.080	.005
Shift Work		1.0	.917*	-.874*
Substance Abuse			1.0	-.878*
Psychological Wellbeing				1.0

Note:  $N = 206$ ,  $* = p < .05$

The Pearson correlation for all variables used in the study is presented in Table 1 above. The table showed a significant positive relationship between substance abuse and shift work ( $r = -.917$ ,  $n = 206$ ,  $p < .05$ ) implying that the sampled NSCDC personnel who were engaged in shift work were more involved in substance abuse. However, significant inverse relationships were found between shift work and psychological wellbeing ( $r = -.874$ ,  $n = 206$ ,  $p < .05$ ); psychological wellbeing and substance abuse ( $r = -.878$ ,  $n = 206$ ,  $p < .05$ ) implying that higher psychological wellbeing was predominant among NSCDC personnel who were not involved in shift work and those who do not engage in substance abuse.

**Table 2: Results of a Two-Step Hierarchical Multiple Regression Analyses for Psychological Wellbeing on Substance Abuse and Shift Work**

	Step 1 $\beta$	Step 2 $\beta$
<b>Step 1</b>		
Substance Abuse	-.878*	-.482*
<b>Step 2</b>		
Shift Work		-.432*
$\Delta F$	685.22*	30.37*
$R^2$	.77*	.80*
$\Delta R^2$		.03*
Df	1,204	2, 205
Dublin Watson	1.99	

Note:  $N = 206$ ,  $* = p < .05$

The result of a two-step hierarchical multiple regression analysis as presented in Table 2 above tested the two hypotheses of the study. The overall model of the two step hierarchical regression analysis was significant for substance abuse [ $R^2 = .77$ ,  $F(1, 204) = 685.22$ ,  $p < .05$ ] and for shift work [ $R^2 = .80$ ,  $F(2, 205) = 407.13$ ,  $p < .05$ ]. The overall fit of the model shows that only 79.8% of the variation in psychological wellbeing scores among NSCDC Personnel in Owerri has been explained. Similarly, the Durbin-Watson of 1.99 falls within the accepted range ( $1.5 < D < 2.5$ ), indicating that there is no autocorrelation problem in the data and that the error term is independent.

In the first hypothesis, substance abuse was regressed into the model and it explained 76.9% variation in psychological wellbeing scores among NSCDC Personnel in Owerri. Substance abuse also significantly and inversely predicted psychological wellbeing scores among NSCDC Personnel in Owerri ( $\beta = -.878, p < .05, t = -26.17$ ) with the resulting implying that as drug abuse increases, psychological wellbeing decreases.

Similarly, analysis of the second hypothesis shows that shift work only explained 3% of the variations in psychological wellbeing scores among NSCDC Personnel in Owerri. The result further shows that shift work is a significant inverse predictor of psychological wellbeing scores among NSCDC Personnel in Owerri ( $\beta = -.432, p < .05; t = -5.51$ ) implying that NSCDC personnel on rotational shifts tend to report lower psychological wellbeing.

## DISCUSSION

This study was centred on substance abuse and work shift as predictors of psychological wellbeing among paramilitary personnel of the Nigeria Security and Civil Defence Corps (NSCDC) in Owerri, Imo State, Nigeria. Two hypotheses were analyzed using Statistical Package for Social Sciences (SPSS) and the findings are discussed below.

The first hypothesis which stated that substance abuse will not significantly predict psychological wellbeing among the NSCDC Personnel in Owerri was rejected. The result implied that as drug abuse increases, psychological wellbeing decreases. Substance abuse which occurs when a substance impairs the user's social, physical, mental and emotional wellbeing results to harm either to the user or to their society thereby affecting their psychological wellbeing. This finding was in congruence to earlier studies that were reviewed. The findings of Rajalakshmy, *et al.*, (2018) revealed that those who were not under the influence of alcohol had better wellbeing when compared to those who consumed alcohol. Similarly, Pia *et al.*, (2014) revealed that binge drinking and particularly hazardous drinking were associated with different aspects of mental health issues with the proportion of participants with poor mental wellbeing increasing when binge drinking was more frequent. The finding of Green, *et al.*, (2012) showed that greater adolescent substance use predicts psychological distress. Considering this result, it is plausible to state that the more addicted a person is towards substances, the higher the tendency that their psychological wellbeing will be impaired.

The second hypothesis which stated that work shift will not significantly predict psychological wellbeing among the NSCDC Personnel in Owerri was also rejected. The result showed that paramilitary personnel on rotational shifts tend to report lower psychological wellbeing. Most previous studies support this finding. For instance Barton, *et al.*, (1995) identified that nurses on permanent night work had higher rates of burnout and psychological distress than those on other shift patterns while Paola, *et al.*, (2016) indicated that nurses that engage in night shift experience poor psychological wellbeing, and cardiovascular symptoms in comparison with the day shift workers. Based on the researcher finding, the researcher that working hours or work rotation should be considered in managing psychological wellbeing.

The researcher's findings have interesting implications which vital considering its educational and health importance. The findings imply that NSCDC personnel who indulge in the abuse of substances tend to suffer poor psychological wellbeing. In other words, how

these paramilitary personnel use and abuse substances determines their state of psychological health and wellbeing. Therefore, by understanding the negative implications of substance abuse on psychological wellbeing, paramilitary personnel should be encouraged to withdraw from the use and abuse of drugs especially during operations. In the case of work shift, the finding identified that work shift seems to have effect on NSCDC personnel as those who work rotational shifts tend to experience poor psychological health than those that work at regular work times. Work shift is therefore a significant factor that causes sleeplessness, burnout, psychological distress and fatigue which in turn results to significant poor psychological wellbeing.

### **Recommendations**

Based on the findings of this study, the researcher recommends that;

1. To promote positive psychological wellbeing, NSCDC personnel should be properly counselled and educated on the negative impact of substance abuse on overall mental health.
2. NSCDC should adopt the use of psycho-education in helping employees who are vulnerable to substance induced behaviour to gain insight and knowledge of how to withdraw from substance use and abuse.
3. Work shift should be planned in a rotational form whereby paramilitary personnel are switched from day shift to night shift and vice versa with adequate time given to them to recover from the changes in work times. This will help to control the effect of work shift on their psychological wellbeing.
4. There should be regular assessment and evaluation of these personnel so as to assess the state of their psychological health in order to manage or control any likely psychological distress when diagnosed.

### **Conclusion**

The current study has shown the importance and predictive strength of substance abuse and work shift on psychological wellbeing. Substance abuse and work shift as factors have been shown to significantly predict psychological wellbeing among NSCDC personnel in Owerri. Future studies should focus on more specific aspects involved in predicting poor psychological wellbeing, and in developing long-term interventions that assist in reducing the negative effects of these factors and their impacts on current and later physical wellbeing. By identifying NSCDC personnel at risk of substance abuse and by providing them with necessary skills to cope effectively, researchers can minimize the tendency of poor psychological wellbeing among these paramilitary personnel.

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