# EFFECTS OF FUNCTIONAL-ANALYTIC PSYCHOTHERAPY AND PSYCHOEDUCATION ON ALCOHOL ADDICTION AMONG NATIONAL UNION OF ROAD TRANSPORT WORKERS IN LAGOS STATE, NIGERIA

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## CERTIFICATION

I certify that Tolulope Ruth Okunlola in the Department of Counselling and Human Development Studies, Faculty of Education, University of Ibadan carried out this study under my supervision.

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## DEDICATION

I dedicate this study to God Almighty, my shield, comforter and shelter and to my loving heartthrob, Oluseyi Olasoji, may we always win together.

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## ABSTRACT

Alcohol addiction is the excessive and compulsive craving for and alcohol consumption which often results in lowered physical and mental alertness. Reports have shown that alcohol addiction is prevalent among members of the National Union of road Transport workers in Lagos State, Nigeria. Previous studies have focused more on triggers of alcohol addiction than on psychological interventions. This study, therefore, was carried out to determine the effects of Functional-Analytic Psychotherapy and Psychoeducation on the reduction of alcohol addiction among members of the National Union of Road Transport Workers in Lagos State. The moderating effects of self-efficacy and distress were also investigated.

The study was anchored to Self-determination Theory, while the pretest posttest control group quasi experimental design with a 3x3x3 factorial matrix was adopted. The multi-stage sampling procedure was used. The purposive sampling technique was used to select three local Government Areas (Alimosho, Ojodu, Agege) based on heavy traffic and easy access to alcohol. Ninety seven members of the National Union of Road Transport Workers who scored at least 10+ in Alcohol Use Disorder identification Test Questionnaire were selected and randomly assigned to Functional-Analytic Psychotherapy (32), Pscyhoeducation (35) and Control (30) groups. The instruments used were Alcohol Use Disorder identification Test ($\alpha = 077$). Socrates Alcohol Drinking ($\alpha = 0.72$), Self-Efficacy ($\alpha = 0.79$) and Distress ($\alpha = 0.81$) sclales. The treatment lasted eight weeks. Data were analysed using Analysis of covariance and Bonferroni pair-wise test at 0.05 level of significance.

The participant's age was $38.0 \pm 2.1$ years and all were male. There was a significant main effect of treatment ($F_{(2.78)}$=3.504 partial $\eta^2 = 0.127$). The Functional-Analytic Psychotherapy participants had the highest reduction in alcohol use, followed by participants in psychoeducation and control groups. There was a significant main effect of self-efficacy on alcohol addiction ($F_{(1.78)}$=6.779, partial $\eta^2 = 0.220$). The participants with high self-efficacy (39.81) had a better reduced alcohol addiction than their counterparts with low self-efficacy (25.72). There was no significant main effect of distress. There was a significant interaction effect of treatment and distress ($F_{(4.74)}$=4.098, $\eta^2$ =0.255) in favour of the participants with low level of distress in the Functional – Analytic-Psychotherapy group. The two-way interaction effect of treatment and self-efficacy was not significant. There was no significant interaction effect of self-efficacy and distress. The three-way interaction effects of treatment, self-efficacy and distress was not significant.

Functional-Analytic Psychotherapy, more than Psychoeducation, was effective in reducing alcohol addiction among National Union of Road Transport Workers in Lagos State Nigeria. Counselling psychologists and other helping professionals should adopt these intervention to control alcohol addiction.



**Keywords**: Functional-analytic-psychotherapy, psychoeducation, Alcohol addiction National Union of Road Transport Workers, Lagos State.

**Word Count**: 409

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| | |
|---|---|
| SAMHSA | Substance Abuse and Mental Health Services Administration |
| NIAAA | National Institute on Alcohol Abuse and Alcoholism |
| WHO | World Health Organisation |
| NURTW | National Union of Road Transport Workers |
| APC | All Progressives Congress |
| NBS | National Bureau of Statistics |
| FRSC | Federal Road Safety Commission |
| FAP | Functional Analytic Psychotherapy |
| CRBs | Clinically Relevant Behaviours |
| CNN | Cable News Network |
| MOALS | Motorcycle Operators Association of Lagos |
| NHSD | National Health Services Directory |
| SDT | Self-Determination Theory |
| CET | Cognitive Evaluative Theory |
| COT | Causality Orientation Theory |
| BPNT | Basic Psychological Needs Theory |
| SAD | Somatosensory Affectional Deprivations |
| OIT | Organismic Integration Theory |
| GCT | Goal Content Theory |
| FECT | FAP-Enhanced Cognitive Therapy |
| LIVE | Living through In-Vivo Experience |
| PET | Psycho-Educational Therapy |
| T-ASI | Teen-Addiction Severity Index |
| PTSD | Post-Traumatic Distress Disorder |
| PGT | Psychoeducation Group Therapy |
| TAU | Treatment-As-Usual |
| AA | Alcoholics Anonymous |
| NRC | Centres for Narcotic Rehabilitation |
| GES | General Efficacy Scale |

| | |
|---|---|
| PPMC | Pearson Product Moments Correlation |
| AEs | Alcohol Expectancies |
| DRSE | Drinking Refusal Self-Efficacy |
| DEQ-A | Drinking Expectancy Questionnaire-Adolescent |
| DRSEQ-RA | Drinking Refusal Self-Efficacy Questionnaire-Revised Adolescent |
| SE | Self-Efficacy |
| MSPSS | Multidimensional Scale of Perceived Social Support |
| KCCAD | Kaunas County Centre for Addictive Disorders |
| AUD | Alcohol Use Disorder |
| DDD | Drinks per Drinking Day |
| PDA | Percent Days of Abstinence |
| SEAPSAS | Self-Efficacy in the Prevention of Substance Abuse Scale |
| NESARC | National Epidemiologic Survey on Alcohol and Related Conditions |
| SUD | Substance Use Disorder |
| DAST | Drug Abuse Surveillance Test |
| GHQ-12 | General Health Questionnaire |
| MSSQ-20 | Medical Students Distress Questionnaire |
| AUDIT | Alcohol Use Disorder Identification Test |
| AASE | Alcohol Abstinence Self-Efficacy Scale |
| PSS | Perceived Distress Scale |
| IEC | Information Education and Communication |
| ANCOVA | Analysis of Covariance |
| RTAs | Road Traffic Accidents |

# CHAPTER ONE

# INTRODUCTION

## 1.1 Background to the Study

Alcohol can be delineated as a liquid substance that can make a person drunk. Alcoholic beverages can come in two broad categories which are distilled and undistilled drinks. The undistilled drinks such as wine and beer are those that are fermented, having averagely lower intoxicating properties than those that are distilled such as liquors and spirits which possess a concentrated level of alcohol. Alcohol addiction involves the habitual intake of alcoholic substances thereby reducing the capability of individuals to optimize potential in any sector or endeavour. The medicinal usage of alcohol has been in existence for ages but the excessive use of it set in with civilization enslaving man to the intoxicant content of alcohol leading to loss of control as to the quantity to be consumed, the time spent in consumption as well as the timing of consumption and resultantly adversely affecting human health.

Additionally, addiction to alcohol is to some extent significantly rooted in the cultural perception of Nigerians as it is believed that alcohol is an essential requirement in celebrating good news and important ceremonies such as marriages, naming, coronation, burial, festivals, as well as a way of expressing spirituality such as offering libation to the gods, and so on. Landmark events are celebrated with the provision of surplus locally brewed alcohol such that the financial prowess of the celebrant is determined based on the quality and quantity of alcohol available for the consumption of guests. Also, in the ancient Yoruba setting, alcohol was used in consolidating the initiation of new business and war pact tribute agreement.

Furthermore, the use of alcohol is also essential in displaying hospitality to visitors which is a norm in the Yoruba cultural heritage and other cultures in Nigeria. It is also important to state that alcoholic beverages are used to define the nature of an occasion as in the Nigerian culture, champagne is synonymous with celebrations, Schinapps is majorly for spiritual obligations such as offering libations to the gods, palm wine is preferably to accompany a meal, and beer is perceived as the most appropriate drink for informal, relaxation-oriented occasions (Nwagu, Dibia and Odo, 2017). However, no Nigerian culture absolutely approves irresponsible use of alcohol but in contrast covertly creates avenues for intoxication as alcohol use translates to the determination of social class, masculinity, religiosity, and social popularity.

Consequently, based on the position of societal norms, alcohol consumption is culturally approved, optimally preferred as a more effective health intervention for certain illnesses, collectively applauded as a means of social cohesion, religiously embraced as a means of assessing the gods, and psychologically perceived as a necessity to unwind and escape certain emotional incongruences such that even the approach to Nigerian musical pattern echoes this maximally as both ancient music and presently trendy ones are woven around ‘drinking to forget your problems’ but realistically, it is drinking to suppress the problems. Furthermore, culturally, alcohol consumption is also gender biased in the Nigerian traditional perspectives which probably is largely tied to the gender specific roles and responsibilities as structured by the society. Therefore, while the society frowns at alcohol consumption for the feminine gender, it embraces such for the male counterparts. This is expressed through the adverts for alcohol as men would most often than not be used in advertising various alcoholic brands. Hence, setting the platform for more alcohol addiction among the masculine gender than the feminine gender.

Addiction is the impulsive and compulsory craving for a substance (alcohol) or behavior therefore impairing the psychical, physical, mental, and emotional wellness of the addict. According to the World Health Organization (2014), addiction occurs as a result of the continuous ingestion of intoxicating substances up to such extent that the victim is frequently or repeatedly inebriated, displays an extreme desire to acquire the desired object of addiction, exhibits pronounced distress in deliberately abstaining from or altering intoxicant’s use, indicates resoluteness to acquire intoxicating substances at all costs, and displays withdrawal

syndrome anytime substance use is interspersed. Similarly, Substance Abuse and Mental Health Services Administration SAMHSA (2015) opined that alcohol addiction occurs when the repeated taking of alcohol creates medically and physiologically visibly disturbing deterioration displayed through health challenges, physical and mental deficiency, and inability to successfully handle delegated or self-assigned duties at work, school or home. The irresistible desire to ingest psychoactive substances that permeate the blood brain barrier, tentatively changing the victim's brain chemical balance, is referred to as alcohol addiction. Also, alcohol addiction causes harm not only to the addict but also to his or her family, community, and wider society, including physical harm, severe health destructive conditions, untimely death, ferocity, child abuse, divorce and marital challenges, reduced effectiveness at work, and road traffic accidents. Hence, implying that addicted individuals experience a distorted mindset and an unstable brain function that trigger high risk behaviours expressed through neglect of caution even in highly sensitive activities where caution is highly required.

The dangers of addictive alcohol intake are massively enormous since not a single aspect of the victim's life is spared, most especially health. This is supported by Imtiaz, Shield, Roerecke, Samokhvalov and Rehm (2017) that excessive alcohol intake is a predisposing factor for tuberculosis, affirming the assertion of National Institute on Alcohol Abuse and Alcoholism (NIAAA) (2016) which warned that alcoholics are predisposed to heightened risks to contract diseases like pneumonia and tuberculosis than moderate and non-drinkers and that binge drinking or uncontrolled intake of alcohol impairs the body's ability to ward off infections, even up to 24 hours after the drink. Alcohol addiction has significant health consequences on the sufferer such that it reduces the ability of the body to fight illnesses and diseases and increases chances of contracting sexually transmitted diseases. It has also been medically proven that addictive drinking can increase the risk of developing certain kinds of cancers such as oral, oesophagus and hypopharyngeal cancer as well as hepatocellular and invasive ductal carcinoma. In the same vein, medical experts have warned against the destructive effect of alcohol addiction on the liver which according to them involve the following: having excessive fats in the liver, liver inflammation, Fibrosis (scaring) and Cirrhosis (damage of liver cells). It has also been discovered that the heart can also suffer some vital damage from alcohol addiction and such damages include cardiomyopathy with symptoms such as

breathlessness, fatigue, rapid heartbeat, etc. Arrhythmias (irregular heartbeats) with signs including pain in the chest, breath shortness, and shakings in the chest.

Moreover, alcohol addiction is displayed through an insatiable longing or desire for alcohol to the extent that it interferes with the normal functioning of the victim such that it impairs the individual's reasoning capability and sense of judgment thereby making such a person to be incompetent in discharging his duties and undermining his productivity as well as his creative potentials. Expatiating the effects of addictive alcohol intake, the Diagnostic and Statistical Manual of Mental Disorder Fifth Edition expatiated alcohol use impairment to connote a term used in the diagnosis of severe problem drinking which ranges from Mild through Moderate to Severe with the victim experiencing any of the following; drinking uncontrollably; had severally tried to cut down on drinking without success, experiencing a compulsive or insatiable craving to drink, discovered alcohol drinking as being more often than not responsible for the inability to take care of the home, meeting job or school demands, also, more than once had led into situation after drinking that included chances of getting hurt, with the usual quantity of drinks having reduced effect than it used to, continued to drink even when it causes depression and health problems, and so on. Also, alcohol addiction alters the brain's communication pattern affecting the way it functions and resulting in the disruptions that can lead to mood and behavior changes making clear thinking difficult and affecting thought processes. Supportively, Tapert, Caldwell and Burke (2012) reported that heavy drinking may affect brain functioning in individuals, especially, in physically healthy youths.

There are different forms of addiction, as identified by Giffin (2010) as primary and secondary addiction in which primary addiction relates to a situation whereby an individual is addicted to the activity itself to get stimulated, charged, or thrilled. Such behaviours may include gambling, smoking, drinking, sex, or playing video games while secondary addiction occurs when a person compulsively engage in an addictive behaviour in an attempt to resolve other life difficulties making the addictive behaviour a reaction to basically underlying problems such that compulsive alcohol intake or any other behaviour of addiction is engaged in with an intention to live in denial or fantasy, to get unconscious, to reduce distress and or for leisure. This existing disparity between secondary and primary addicts unveils the hypothetical, theoretical and pragmatic relationship with other proponents of the

school of thought of addiction like Skog's (2003) argument on the difference between "clinical addicts" and "happy addicts" in which Skog referred to happy addicts as those whose lives may be in ruin as a consequence of a long history of heavy drinking and whose circumstances are such that there is no further motivation to quit, having the belief that as individuals, there will be less unhappiness experienced with their continual addictive behaviour than without such, while buttressing clinical addicts as those engaged in the struggle to change behavior and may well have sought treatment or other assistance to help quit addiction. Also, the views of Glasser (1976) cited in Connor (2014) on "positive addiction" revealed that positive addiction is an oxymoron and a contradiction in terms. In all these scholarly submissions, whether primary, secondary, or positive, addiction remains a limitation which is detrimental to national development.

Although alcohol consumption is socially acceptable in Nigerian culture and is usually part of festivities, given the rate of consumption over the last few decades, there is a possibility of an increased rate of production in the quantity of alcohol brewed locally as well as those imported into the country, resulting in increased consumption among all age groups. The statistics of alcohol consumption in 1996 indicated a growth rate of about 8-9 percent per annum, with the undocumented alcohol consumption being approximately estimated to be up to 3.5million liters (WHO, 2012) and the level of beer consumption rose to about 19.5 million liters in 2012. Alarmingly, Nigeria's over 200 million people were reported as the world's highest consumer of both local and foreign gins. This is substantiated by Shakirudeen's (2017) submission that the consumption of beer in the Africa community has been speculated to grow at a rate of five percent annum between 2015 and 2020 which has been adjudged to be the highest rate of growth across the continents in the world.

Two billion people around the world have been estimated to consume alcohol with one third of these consumers having the likelihood of suffering severe disorders triggered by the incessant or unregulated consumption of alcohol (Girish, Kavita, Guruaj and Benegal, 2010). The misuse of alcohol has caused about 3.3 mortality every year, or 6 percent of deaths across the continents of the world with its harmful effects far reaching and ranging from one individual to the other in terms of health-related risks, mortality and morbidity as well as consequences for friends, families, and the society at large. Alcohol addictive intake can lead to distorted thoughts, lack

of muscle control, loss of social inhibition and at times aggression resulting in traumatic injuries caused by fall, fights, or accidents. According to research, any individual who is addicted to alcohol will be deficient in performing his duties to himself, his family, and society at large. Alcohol addiction to a large extent is basically job oriented as there is the prevalence of this addiction in certain jobs compared to others, while many researchers see it as a perceived means to meet certain job requirements, (Giang and Lubin, 2011) and O'Cathail and O'Callaghan (2013), some simply see it as a culture resident in the practice of some jobs (Arango and Descoteaux, 2014). One of such in Nigeria that has high level of alcohol addiction is the commercial drivers' occupation.

The National Union of Road Transport Workers (NURTW) is known as one of the trade unions that shoulder the responsibility of providing commercial transport services to the Nigerian citizens. Geographically, the NURTW has offices in all states and branches with sub-units in various local governments as well as motor parks established in various units and branches. The NURTW membership comprise majorly male and very few females and it requires certain level of commitment such as payment of dues and loyalty to the authorities of the NURTW. NURTW members drive vehicles such as buses, trucks, tricycles, and taxis. Most members of the NURTW have no exposure to formal education while a few has low level of education and the leadership is based on periodic election usually laced with violence. The members of the NURTW are usually vulnerable to violence due to constant intake of alcohol which suitably position these transport workers as viable tools of social unrests by ill meaning members of the society. Hence, it is therefore not unusual to find captions such as 'one dead many injured in fresh Lagos crisis (June 18th, 2019, Guardian Newspaper)', 'NURTW chairman convicted of killing policeman gets death sentence (Punch News)', 'NURTW chieftain declared wanted by Police over violence at Lagos APC governorship campaign rally (Sahara Reporters)', 'MC Oluomo; A notorious NURTW official was wounded with a poison soaked knife when attending a Lagos All Progressives Congress (APC) campaign rally (Pulse.ng news, Jan, 9th, 2019)', 'Oshodi violence; NURTW activities indefinitely Suspended in Lagos (Silverbirdtv.com. 2017)', 'Violence Unleashed by Members of the NURTW at inauguration' (The Nations Newspaper, 30th May, 2019) and so on.

A major factor that supports addictive alcohol consumption among the NURTW is availability. Alcoholic drinks are often sold in different forms in all motor parks making it easily accessible. Consequently, an average member of the road transport worker is addicted to alcohol such that it has become a regular routine which has dangerously contributed to the high levels of mishaps on the Nigerian roads. This informed the Lagos State Chapter to temporarily ban the sale of alcoholic beverages and drinks in all motor parks ahead of a festive period in order to avert highway accidents. The majority of NURTW members believe that consuming substances such as alcohol, cigarettes, marijuana, kola nuts, and other stimulants would significantly enhance work performance and decrease the probability of falling asleep at work. One of the urgent public health concerns in Nigeria is alcohol abuse among the National Union of Road Transport Workers members as studies have shown that the NURTW comprise individuals who over the years have been reported to develop compulsive behavioural patterns tied to alcohol (Oluwadiya and Fatoye, 2012). The members of the NURTW have difficulty ceasing this high level of alcohol use because it has become an addictive behaviour that is associated with both environmental and social factors in addition to the complex interaction between thereby affecting the NURTW members' health adversely, rendering them incapable of proficiency and efficiency in the delivery of their service as the commercial transport service provider in Nigeria causing series of road accidents.

The members of the NURTW are also victims of social labelling as most of them are negatively perceived as touts, thugs, area boys, etc. This negative perception reduces the motivation for culturally approved conducts among the NURTW. Hence, most are found useful for perpetrating evil in the society especially during elections. Also, the pressure on the Lagos roads due to poor transportation network, bad roads, poor conditions of vehicles and the incessant Lagos State Traffic Management Agency, "LASTMA" trauma are contributory factors to poor behavioural conduct among the NURTW. Hence, since societal expectations of moral uprightness is extremely low or zero, some NURTW members display with disregard attitude that are incongruent with the norms and culture of the society. It is also important to state that their look and physical coordination while at work are also affected. Physical appearance and tone of voice speak volumes about their personality and temperament.

Statistics on the rate of road accidents are disheartening as World Health Organization (WHO) predicted that a sum of causality resulting from road accidents will increase by 60% with 80% of it coming from Africa, and road injuries ranking third among the causes of injury related disability by the year 2020. The National Bureau of Statistics (NBS) (2016) reported 11,363 incidents of road accidents with a total of 30,105 Nigerians sustaining various degrees of injuries in road accidents in the same year out of which 22,705 were male, that is, 75%, while 7,400 were female, that is, 25% with 5,053 of victims killed, among which 4,696 i.e. 93% were adults while the remaining 357 representing 7% were children. Also, Boboye (2016) confirmed that the FRSC recorded 4005 deaths in 7,657 crashes as at the end of week 47 of 2016 and also in 2016, 70 personnel of the corps lost their lives in the course of their duties while on the road through road traffic clashes. Boboye's assertion however corroborated the findings of WHO (2013) which rated Nigeria as the least safe country African country with an alarming statistic of 33.2 deaths per every 100,000 persons in the population each year reporting that out of every four deaths in Africa, one is from Nigeria. It is completely absurd that over a million people are killed and more than 50 million are injured on the world's roads each year.

Road accidents are devastating resultant effects of addictive alcohol consumption by commercial transport workers, having a highly disturbing statistics predicting that it has cost many Nigerian homes their loved ones or in some cases making them face the traumatic experiences of having able bodied and vibrant member of the family reduced to a mere vegetable who would be dependent on others for normal life needs, for instance, movement, feeding, clothing, bathing, etc. The most pathetic aspect of road fatal accident is that most things lost are irrecoverable, examples are; lives, limbs, loss of senses of the body such as the sense of sight, hearing, feeling etc. Also, road fire accidents that totally deform victims leaving them as shadows of their formal selves. These pains are such that time may not be able to heal because it comes up as fresh as ever each time victims are deprived of their abilities to perform actions that ordinarily would have been effortlessly performed by them before the ugly incident of the accident.

There is a direct relationship among addictions, road accident, social vices, and hooliganism among commercial drivers. For instance, in view of the high statistics of accidents, violence and anti-social behaviours among commercial transport workers in Nigeria, Omolase (2011) reported that there exists a prevalence

of 32% alcohol drinking usually before driving. The majority of Nigerian drivers drink before driving, and some even drive while under the influence of psychoactive substances. Also, the World Health Organization (WHO, 2009) has reported a positive nexus between the recurrence rate of traffic collision in Nigeria and drivers' addictive use of alcohol. Furthermore, assertions have been made that alcohol use is responsible for up to half of automobile collision and its resultant impacts on the Nigerian roadways (Atubi and Onokala, 2009). Those who drive after having consumed an alcoholic beverage are more likely to be involved in a two-vehicle collision than those whose driving patterns are not influenced by any intoxicating substance. These reflect the fact that many accidents that occur on the roads are caused by drivers whose performances are impaired by psychoactive substances (alcohol, illicit drugs or a combination of the two) as the influence of alcohol addiction triggers neglect of caution while driving, therefore necessitating a need to reduce its occurrence using awareness and education as well as assisting victims of alcohol addictions to overcome addiction through psychotherapy.

The problems of alcohol use and addiction have drawn the attention of scholars for decades. For instance, Laosebikan and Ola's (2016) work on Prevalence and Correlates of Alcohol Use Among a Sample of Nigerian Semirural Community Dwellers in Nigeria, Dumbili's (2013) work on Changing Patterns and Determinants of Alcohol Consumption in Nigeria: An Exploration of Responsible Factors and Consequences, Ebirim and Morakinyo's (2011) work on Prevalence and Perceived Health Effect of Alcohol Use Among Male Undergraduate Students in Owerri, South-East, Nigeria. Unlike Laosebikan and Ola (2016) that studied the Prevalence and Correlate of Alcohol Use in Semi-rural Area, this academic piece focuses on Reducing Alcohol Addiction in an Urban Area. Also, Dumbili (2013) conducted a survey study while this study uses an experimental design. In the same vein, Ebirim and Morakinyo (2011) investigated the Prevalence and Perceived Health Effect of Alcohol while this study intends to Reduce Alcohol Addiction, not in the South-East as Ebirim et al but in the South-West. Majority of other studies were also foreign based and cannot be generalized to the Nigerian society and some other studies did not institute a treatment because they were surveys.

One treatment therapy that has the potency to reduce alcohol addiction according to reviewed literature is Functional Analytic Psychotherapy (FAP), a concept developed by Kohlenberg and Tsai in 1991. It was established on the school

of thought of radical behaviourism which proposes that psychology should focus on behaviour rather than on mental state. FAP is a contextual cognitive-behavioral therapy that emphasizes the need of developing a solid interpersonal bond through the therapeutic connection and holds that adapting psychotherapy interventions to the client's actual behavior is the key to achieving change. FAP therapists are concerned with developing therapeutic relationships that are deep, meaningful, and influential. FAP also believes that reinforcement is the cause of all our behaviours which implies that an alcohol addict enjoys some responses encouraging the act of alcohol addiction and since reinforcement is either to raise or lower the occurrence of a behavior, the therapist engages a reinforcement which instead of increasing the occurrences of alcohol addiction, reduces it. FAP identifies the root causes of alcohol addiction by creating a therapeutic relationship that allows client elicit problem behaviours which are discouraged by the use of reinforcement. The therapist also encourages the clients as efforts are made in replacing problem behaviour with improvements which are contingently and naturally reinforced by the therapist. A FAP therapist evaluates, or observes the extent to which impacts made have helped in correcting erroneous behaviours of the client. This enables the therapist generate behaviours that are functionally relevant to clients out of session life in the counselling session.

Functional Analysis in FAP intends to provide an answer to the question, 'what is the function of a behaviour?' This enables an individualized approach in psychotherapy as focus shifts from the type or form of behaviour to what problems the behaviour helps the client to solve or basically what goal does a particular addictive behaviour help the client achieve, the answer to which gives the function of a behaviour which is the focus of FAP. Understanding the function of a behavior rather than just its form allows for more effective and individualized therapeutic intervention. Therefore, FAP is rooted in the creation of an intense client-therapist relationship with an attempt to establish behaviour change. The main focus of FAP is targeted at replacing client's undesirable behaviours to desirable ones.

Furthermore, a unique feature of FAP is that it concentrates on patients' Clinically Relevant Behaviours (CRBs, that is, behaviours of clients within the treatment period are the true pictures of real life day-to-day behaviours). FAP becomes therapeutically productive when problem behaviours labeled CRB1s are discouraged by the contingent reinforcing of intended behavioural change known as

CRB2s. Therefore, FAP establishes the blueprints to assist therapists identify and trigger the eliciting of Clinically Relevant Behaviours, to naturally reinforce CRB2s and also give clinically relevant elucidations as well as assign homework such that clients can extend the positive changes experienced during therapeutic sessions to everyday living experiences (Tsai, Kohlenberg, Kanter, Holman and Plummer, 2012; Tsai, Callaghan and Kohlenberg, 2013). In the same vein, FAP therapists religiously effect some specific rules that serve as guides as well as the principles upon which FAP is practised. Such rules include 'watching out for CRBs' which entails the therapist to demonstrate awareness, 'evoke CRBs' involving the ability of the therapist to display courage and be emotionally present, 'naturally reinforce CRBs' whereby FAP therapists would be therapeutically loving, 'evaluate impact' in which therapists use emotional intelligence and interpersonal relationship skills in determining the effect of their responses to client 's emotions, and lastly 'provide practically applicable interpretations of behaviour as well as implement generalization strategies', which helps client effect changes experienced in the counselling to real life situations.

Functional Analytic Psychotherapy (FAP) enriched therapeutic procedures have been discovered to be efficient for a range of problems with similar features which includes managing anxiety disorder and phobic avoidance, and in promoting coping responses, interpersonal issues, anxiety disorder or panic, fostering academic self-efficacy and psychological wellbeing, Obsessive-Compulsive Disorder, major depression, alongside different types of personality syndrome. Though, it has not been used in Nigeria in treating alcohol addiction, these evidences suggest that if effectively applied, FAP may have the potency to reduce alcohol addiction.

Another therapy that may have the tendency to reduce alcohol addiction is Psychoeducation therapy. This is because psychoeducation is a combination of psychological based treatment and education. Psychoeducation has been considered in literature to empower individuals through by providing enlightenment about a certain situation which is pathological thereby causing psychological distress (Sin, Spain, Furuta, Murrells and Norman, 2015; Bauml, 2006). Psychoeducation is an enlightening awareness about the nature, etymology, consequences and prevention of broad category of illness beyond mental illness which it was initially employed to remediate. In order to help people develop a strong sense of self-awareness about their strengths and weaknesses and coping mechanisms in relation to the nature and

stage of their illness, psychoeducation therapy basically teaches them about psychological impairment or physical illness in-depth. This helps the patients feel thoroughly guided and mentally capable in addressing their problems, which improves their emotional health.

Psychoeducation is a combination of psychology and education representing two broad terms which have high potentials to achieve a desired change in behaviour. The critical examination of human thought, behavior, development, personality, motivation, and emotion, as well as all other significant aspects of human life, is included in the broad field of study known as psychology. Education is the process of fostering a person's interests and abilities so they can make a constructive contribution to society. Therefore, Psychoeducation presents a robust therapy that poses a high tendency of being able to effect a change not by external motivation or presentation of aversive stimulus for nonconformity but through the understanding of the inherent abilities and potentials to live a quality life and impart the society positively. Therefore, alcohol addicts receive a clear demarcation and clarification through Psychoeducation on what are myths and truths about addictive alcohol consumption thereby enabling clients develop a self-motivated desire to quit excessive alcohol consumption. Psychoeducation in this context is firmly grounded in the mainstream public health tradition in which individuals are informed about potential health problems, given information about symptoms of such problems, as well as behaviors that may increase the risks of developing the problems, and provided with knowledge about how to reduce risk and when and how to seek treatment if needed.

Cummings and Cummings (2008) revealed that psychoeducation is a blend of health psychology and behavioural counselling as well as psychotherapy which may be structured or open-ended depending on which is more appropriate. The aspect of psychoeducation that relates to behaviour focuses on coping, self-care, perceptions, relaxation and emotions while the educational component provides enlightenment as regards the psychological or physical condition that is peculiar to the participants in a given group. Psychoeducation comprise four main components, these components are however subjected to changes based on the condition being addressed. Psychoeducation comprise four main components, these components are however subjected to changes based on the condition being addressed. Adherence to psychological and medical instructions; the avoidance of relapse or progression are

components of psychoeducation; and treatment, managing the health condition (especially those that are chronic and incurable). Therefore, psychoeducation has been shown to improve health and lower healthcare expenses in individuals with severe physical illnesses, psychiatric problems, high medical service users, alcohol abusers, etc.

The flexibility of the psychoeducation therapy is a plus to psychotherapy and counselling as it can be adapted to suit different prevailing circumstances and implemented via various avenues. Psychoeducation can be provided in a variety of settings, including hospitals, jails, religious worship centers, market places, offices, psychiatric homes, social media platforms, and intentionally adapted to meet the needs of individuals, families, or groups, as the case may be, and is primarily made possible by its components, which include dispensing relevant information and applying the principles of several therapeutic modalities such as a compulsion. A psychoeducation therapist discharges the duty of determining the goals and activities of therapeutic sessions and for directing intervention towards meeting the needs, motivations, and relative strengths and weaknesses of each client. Psychoeducation is effective in achieving various skills that can encourage resistance and decline in engaging in substance addiction such as increasing individual's willpower against drug addiction, removing the stigma attached to addiction preventing addiction victims from seeking help, enlightening sufferers of addiction on addiction risk factors and possibility of relapse, inculcating of effective problem solving skills, the absence of which can trigger substance addiction and relapse, providing information and guides about how to cope with or avoid relapse.

Psychoeducation intervention programmes in this study is directed towards a comprehensive analysis of client's needs and strengths together with weaknesses as well as the therapist forming a relationship with the client to acquire valuable understanding of how to tailor the therapy to suit him/her. This stage is followed by a didactic component which may be inform of a lecture or group discussion using various interactive and interesting methods to educate or give information. Psycho-Education engages the clients with series of knowledge imparting sessions that enable the in-depth understanding and acceptance of their addictions which enables them benefit maximally from therapy. This implies that clients are made to embark on a radical process of cognitive restructuring that unveils all forms of denial as to the state of their addiction thereby enabling clients develop a sense of responsibility

in quitting their addictive alcohol intake. Furthermore, Psycho-education avails clients the opportunity to understand the history and nature of their addictive alcohol intake as well as realize the effects of their addiction on family members, social relationship, and self-image thereby aiding quick recovery from addiction by addressing the psychological source of it through education.

Empirical evidences abound to applaud the potency of psychoeducation therapy in various studies such as Anyamene, Nwokolo and Madegbuna's (2015) work on Effects of sychoeducation Technique on Examination Misconduct Tendencies of Secondary School Students, Casañas, Catalan, Val, Real, Valero and Casas' (2012) Effectiveness of a Psychoeducation Therapy Group Programme for Major Depression in Primary Care: A Randomized Psychoeducation Controlled Trial, as well as Bisbee and Vikar's (2012) study on The Effectiveness of Brief Psychoeducation for People with Serious Mental Illness. The effectiveness of psychoeducation in these studies suggests that it may have the capacity to reduce alcohol addiction among the NURTW.

According to preliminary research, self-efficacy may help to moderate alcohol addiction. Self-efficacy is an individual's confident assurance that they will be able to successfully engage in a behavior that will result in the desired outcome. Self-efficacy is a human's inherent belief in his or her ability to carry out specific behaviors and achieve the desired outcome. Individuals with high self-efficacy and coping skills are more likely to put forth the effort required to successfully renounce situations that pose a high risk for addictive alcohol use. Also, Adeyemo (2005) averred that self-efficacy is delineated as the certainty that human being has as regards his tendency to exhibit a particular pattern of behaviour with positive expectations of achieving success. Individuals who have a high enough level of self-efficacy have the potential to recover from relapse quickly by rationally viewing it as a temporary setback and regaining control, whereas those who have a low level of self-efficacy view the relapse as a permanent and uncontrollable setback, leading to full-blown relapse and an abrupt farewell to an attempt at quitting alcohol addiction.

Self-efficacious individuals have been described as having significant life coping skills, commendable adaptive capability, and a high level of effectiveness in task performance and resilience. When clients are taught coping mechanisms like problem-solving, social, and communication skills, such persons successfully apply their newly acquired abilities to refrain from alcohol addiction and thereby increase

their self-efficacy in this area. Thus, it becomes safe therefore to state that self-efficacy is a necessity at each stage of substance use disorder treatment from the preventive therapeutic stage to the corrective stage. This is confirmed by the submission of Mackinnon, Lockwood, Hoffman, West and Sheets (2002) which affirms that high levels of self-efficacy serve as an empowerment to the reduction of addictive use of alcohol. They believe that it is grossly inadequate for people to possess the desired knowledge, skills and ability to carry out a task without the confidence that they possess such commendable abilities required to successfully complete such tasks. This therefore establishes the fact that possessing the skill to embark on and complete a task successfully is not sufficient to enhance success in such an endeavour if the knowledge is absent. The will may therefore have a stronger positive force as regards quitting of alcohol addiction than just the ability to do. In an instance in which self-efficacy is high, there exists a motivational drive to achieve a successful quit and reduce the danger of relapse.

Self-efficacy may prove invaluable in helping individuals with addictive alcohol use among the members of the NURTW through its four basic major foundations of efficacious beliefs which include performance attainments based on past evidences of goals achieved despite challenges; observing the performance of others who decisively challenged themselves to quit alcohol addiction; Verbal persuasion used by the therapist to convince individuals in doubt of their capabilities to quit alcohol addiction of their inherent potentials to quit any addictive behaviour including alcohol addiction; and the physiological states by which individuals assess their abilities, weaknesses and strengths which may be objective or subjective but produces a basis for understanding the perceived self-efficacy and an indication for therapeutic intervention.

Self-efficacy has an objective approach to problem solving as it does not rule out the possibility of encountering mountainous challenges in accomplishing tasks but as argued by Bandura (1977), it is an individual's firm sureness in his capability to pursue a goal such as successfully accomplishing a task notwithstanding the obviously existing stumbling blocks or impossibilities surrounding such tasks. Hence, low self-efficacy may be portrayed through the indulgence of an individual in alcohol addiction as well as the weaknesses as regard quitting thereby suggesting the necessary direction for therapeutic intervention. A member of the NURTW may experience a reduced level of self-efficacy as to his ability to successfully quit

alcohol addiction considering the understanding acquired through vicarious learning in which the immediate environment poses a grave challenge as there exists many negative influences in terms of individuals who had tried quitting but failed.

A plethora of studies on self-efficacy in Nigeria abounds such as achievement motivation and self-regulated learning strategies on students' academic achievement. These include works done on the relationship between self-efficacy and academic achievement in high school students (Motlagh, Yazdani and Souri, 2011), parental involvement, interest in schooling and school environment as predictors of academic self-efficacy among fresh secondary school students in Oyo State, Nigeria (Adeyemo, 2005), the impact of selfefficacy as well as Academic self-efficacy from educational theory to instructional practice (Artino, 2012). However, there is paucity of studies as refers the moderating effectualness of self-efficacy on reducing alcohol addiction among the NURTW in Lagos State.

Another variable of interest which may moderate treatment outcome is distress. Distress is an inappropriate negative response to distressors, and it is a major cause of addiction initiation, obsession, relapse, and treatment failure. Life's distressful events, intense, unforeseen long-term distressors, or devastating life occurrences associated with poor coping skills have a proclivity to trigger addiction. Excessive alcohol consumption is one way people have learned to cope with distress. Al'Absi (2007) also argued that there is confirmed evidence for the positive relationship existing between distress and the trigger to engage in addictive intake of alcoholic substances. Research in Human Studies have also validated the correlation between traumatic antecedents at childhood like family dysfunction, sexual and physical assault, domestic violence, neglect and addiction. Early or late childhood exposure to distress, as well as an unhappy marriage and job dissatisfaction, are key risk factors for addiction. Hence, this study suggests distress as a key moderating variable as most members of the NURTW have behavioural dispositions that may be anchored to distress. These behaviours have their triggers rooted in distressful factors that are either systemic or organismic.

Furthermore, distress for the member of the NURTW may span from the deplorable condition of most of the Nigerian roads, aged vehicles, hike in the prices of vehicle parts, unethical conduct of traffic officials on the road, irrational demand for money by the "agberos", fuel scarcity and hike in fuel price, to aggressiveness of passengers, and so on. This is supported by a recent survey which ranked Nigeria as

the nation with the highest level of distress among 74 countries based on eight well measured variables such as statistics of homicide, inequality of income earned by citizens, embezzlement of public fund, unemployment and under-employment, global warming caused by urban air pollution, rate of life expectancy, disparity in economic and purchasing power, and gross domestic product per-capita (Bloomberg Visual Data, 2013). Also, a recently conducted study by CNN ranked Lagos as the 3rd most distressful city in the world, consequently suggesting that Lagos commercial transport workers may be the most distressed commercial transport workers in Nigeria.

Low level of satisfaction in life as a result of distress is positively related with excessive alcohol use. Alcohol dependence is positively related to reccuringly exacerbating distressful life experiences. Also, an earlier research by Hasking (2002) averred that alcohol has been hypothesized to reduce distress and serve as a coping mechanism against distressful life events. There is no doubt about the magnanimity of the continuously increasing level of distress endured by members of the NURTW considering the nature of their jobs thereby triggering the need for a means of escape for which continuous and obsessive intake of alcohol has been a preferred option. Also, individuals who are distressed often neglect healthy lifestyle practices; engage in addictive drinking as distressors have the tendency to increase the possibility of persons to engage in high risk taking behaviours.

An appreciable number of research has also been conducted on distress such as: The Effect of Distress on Health: New Insights into Molecular Mechanisms of Brain-Body Communication (Mariotti, 2015), Psychoneuroendrocrinological Studies on Chronic Distress and Depression (Tafet and Jaime, 2009), Life Event, Distress and Illness (Salleh, 2008). However, despite the commendable efforts of these researchers, there still exists an aspect of the moderating role distress may play in alcohol addiction especially among the NURTW that needs to be unraveled. The outcome of this study would have practical and theoretical implications for counselling psychologists, NURTW management, Policy makers and other researchers as the study would be able to present valid and reliable statistics which would be beneficial to policy makers, social health workers and springboard other research in relevant fields and most importantly reduce addiction level among the NURTW.

## 1.2 Statement of the Problem

Addictive intake of alcohol among the NURTW results in constant mismanagement of vehicles through over speeding, neglect of vehicle maintenance, impatience while driving, and so on. Thereby reducing the roadworthiness of the vehicle and amassing debts for owners due to constant needs for repairs, hence making the transport business less lucrative and highly distressful. Investors thereby perceive the transport business as a high risk business.

Also, there is economic strain on families as some lost bread winners to road accidents caused by NURTW addictive alcohol intake as reported by National Bureau of Statistics (NBS) (2017) that 94% of accidents' victims in 2017 were adults and that Nigeria loses two lives every four hours to road accidents majority of whom are adults (NBS, 2018). Road accidents also generate a huge financial burden for hospitalization of some survivors.

Furthermore, Alcohol addiction of the NURTW can breed many other variants of addictive behaviours such as sexual addiction, gambling addiction, kleptomania addiction, prescriptive drugs addiction, and so on. Therefore, it becomes imperative to reduce the level of alcohol addiction in order to circumvent the victims from being trapped in other addictive behaviours that would definitely compound their ordeal and drastically reduce the quality of life.

Addictive use of drugs among the NURTW triggers violence and social unrest in various motor parks across the country, thereby increasing the members' vulnerability to thuggery and presenting them as viable tools for ill-meaning individuals in the society in perpetuating violence especially during sensitive periods in the history of the country such as the election period to perpetuate crimes, fight political opponents and engage in actions that will disrupt peace and harmony, hence, endangering the lives of members of the society. Also, Akinsanmi (2017) reported that on the 6th of June, 2017, the Lagos State Government suspended seven branches of the NURTW over the murder of the leader of the Motorcycle Operators Association of Lagos (MOALS) which culminated into vicious cycles of group violence claiming at least two lives with many sustaining various degrees of injuries during the councillorship primary election of the All People's Congress at Oshodi, Lagos State.

The National Bereau of Statistics (NBS) (2018) report in the Road Transport Data Journal revealed an alarming rate of road accident with the death of 1,306

Nigerians in road accidents in the 4th quarter of 2017 and 292 people in the 1stquarter of 2018. Hence, an average traveler using the road in Nigeria is psychologically traumatized due to fear of danger necessitated by frequent occurrences of accidents on the road which is fueled by the distorted mind set of most drivers caused by addictive alcohol use.

### 1.3 Purpose of the Study

The broad purpose of this study was to examine the effectiveness of Functional Analytic Psychotherapy (FAP) and Psychoeducation therapies in reducing alcohol addiction among the National Union of Road Transport Workers in Lagos State, Nigeria. Specifically, the research;

1. Investigated the main effects of treatments in reducing alcohol addiction among the National Union of Road Transport Workers in Lagos, Nigeria.
2. Examined the main effect of self-efficacy in reducing alcohol addiction among the National Union of Road Transport Workers in Lagos, Nigeria.
3. Studied the main effect of distress in reducing alcohol addiction among the National Union of Road Transport Workers in Lagos, Nigeria.
4. Investigated the interaction effects of treatments and self-efficacy in reducing alcohol addiction among the National Union of Road Transport Workers in Lagos, Nigeria.
5. Examined the interaction effects of treatments and distress in reducing alcohol addiction among the National Union of Road Transport Workers in Lagos, Nigeria.
6. Studied the two-way interaction effect of self-efficacy and distress in reducing alcohol addiction among the National Union of Road Transport Worker, Lagos, Nigeria.
7. Investigated the three-way interaction effects of treatments, self-efficacy and distress in reducing alcohol addiction among the National Union of Road Transport Workers in Lagos State, Nigeria.

## 1.4 Research Hypotheses

The following null hypotheses were tested at 0.05 level of significance.

1. There was no significant main effect of treatments on the reduction of alcohol addiction among Workers of National Union of Road Transport in Lagos State, Nigeria.
2. There was no significant main effect of self-efficacy on the reduction of alcohol addiction among Workers of National Union of Road Transport in Lagos State, Nigeria.
3. There was no significant main effect of distress on the reduction of alcohol addiction among Workers of National Union of Road transport in Lagos State, Nigeria.
4. There was no significant two way interaction effect of treatments and self-efficacy on the reduction of alcohol addiction among Workers of National Union of Road transport in Lagos State, Nigeria.
5. There was no significant interaction effect of treatments and distress on the reduction of alcohol addiction among Workers of National Union of Road Transport, in Lagos State, Nigeria.
6. There was no significant interaction effect of self-efficacy and distress on the reduction of alcohol addiction among Workers of National Union of Road Transport, in Lagos State, Nigeria and
7. There was no significant three-way interaction effect of treatments, self-efficacy and distress on the reduction of alcohol addiction among Workers National Union of road Transport in Lagos State, Nigeria.

## 1.5 Significance of the Study

The findings of this study is of great benefit to many stakeholder, the first major beneficiary of this study were members of the NURTW who participated in the study. This work educated participants of the ills of addictive use of alcohol on their health, relationships, work and finances which in turn caused them to voluntarily inculcate healthy lifestyles by desisting the destructive intake of alcohol thereby sustaining better relationship, encouraging meaningful life, healthy eating habit and achieving efficiency and effectiveness at work as well as contributing positively to the society. This study also helps equip commercial vehicle drivers on strategies and skills that ensure avoidance of alcohol addiction.

In addition, this study is immensely beneficial to the passengers who had been left with no other options than to patronize the services of these commercial drivers with a lot of fear and doubt about their safety as it restored trust and hope to the minds of these individuals about the commercial transport sector of the country.

Furthermore, this study is of immense significance to professionals, especially counselling psychologists and social workers, whose professional line of duty could be among commercial motor drivers. This study also helps in the formulation of policies and development of effective strategies that could be of excellent use in curbing the menace of alcohol addiction among commercial motor drivers. In addition, as scholars make attempts to unravel more theories and models to understand, explain and proffer reliable solutions to the problem of alcohol addiction, this study helps in giving needed additional information on the problem of addiction.

Also, the management of the NURTW stands to benefit greatly from this study as it provides insights into discovering the urgency to sanitize the parks of vendors of psychoactive substances to reduce availability and consequently easy access to addictive substances and avoid triggers in the motor parks. Moreover, NURTW management would have less distress dealing with recurrent offshoot of violence in the parks leading to government sanctions from time to time. This study leads to the rebranding of the union, therefore, improving their mental health and quality of life.

The Lagos State Government finds this study very helpful as it keeps the roads saner and safer by ensuring that drivers are mentally sound, physically fit and psychologically stable to engage successfully in the act of driving. This also reduces dependency ratio through the reduction of accidents in the state, which culminate into reduction in crime rates as most children out of shock and loss of breadwinners and in the quest for survival engage in drug addiction, prostitution, and robbery. Lagos State also benefits immensely from this study as the elections would be more violent free since most potential thugs and hoodlums usually used for violence during elections would have found a meaningful way of living their lives and contributing positively to the growth of the State. The government would spend less money equipping the hospitals with drugs to treat mental illness and other illnesses caused by addictive use of alcohol as well as less on repairing damaged roads due to road accidents.

The FRSC finds this study to be of tremendous help in their incessant effort in ensuring compliance to traffic rules, reducing casualties on the roads and in educating drivers on how to drive safe, keeping the road safe for all road users. This study is also advantageous to the FRSC as it reduces their job hazards as reports have been made of FRSC officials losing their lives while performing their duties as a result of road casualties.

Policy makers also finds this study of great importance as it unravels the ills of the menace of the addictive use of alcohol, thereby providing the facts and yardsticks required for a policy that will effectively address such a growing health concern in the society. Moreover, this study is also of benefit to non-governmental organizations and religious associations that are trying to help in eradicating the problem of alcohol addiction, especially among commercial motor drivers. Also, the study serves as a reference point for them in an attempt to put up effective strategies that could work among commercial drivers.

## 1.6 Scope of the Study

The content scope of this research was delimitated to effects of Functional Analytic Psychotherapy (FAP) and Psycho-Education Therapy. In addition, this study has two moderating variables; and these are: Self-efficacy and distress. Furthermore, geographically, only members of the NURTW in Lagos State was targeted. The pretestposttest control group, quasi experimental design was the design adopted for this study. Finally, only the moderating influences/effects of self-efficacy and distress were examined.

## 1.7 Operational Definition of Terms

The following concepts are operationalized:

**Alcohol Addiction**: In this study, alcohol addiction is regarded as the compulsive and uncontrollable use of alcohol by members of the NURTW. This was ascertained from the score obtained from screening instruments.

**Functional Analytic Psychotherapy**:This therapy focuses on using reinforcement in encouraging positive behaviours such as withdrawal from alcohol addiction and discouraging positive behaviours such as addictive use of alcohol among the members of the National Union of Road Transport Workers.

**NURTW**: This refers to the National Union of Road Transport Workers members in Lagos from whom the participants of this study were drawn.

**Psycho-Education**: Psycho-Education refers to a therapeutic intervention which combines psychological principles and education in reducing alcohol addiction among the NURTW. It was used in treating workers of NURTW who were in experimental group two.

**Self-Efficacy**:It is the degree to which members of the NURTW believe in themselves to possess the capability to quit or resist the urge to engage in compulsive alcohol intake and demonstrate the will to desist the addictive intake of alcohol.

**Distress**: Distress refers to physiological, emotional and psychological response to unpleasant and life-threatening circumstances among members of the NURTW.

# CHAPTER TWO

# LITERATURE REVIEW

**2.0** This chapter reviews important literature which discourse upon the interventions necessary for reducing alcohol addiction among the NURTW. Literature were reviewed both theoretical and empirically.

## 2.1 Theoretical Review

### 2.1.1 The Concept of Addiction

Defining the concept of addiction with precision is quite a complex task as this has been an object of debate in many studies but despite this, it is however, unavoidably necessary to obtain a consensual and testable definition of the addiction concept as it enables the possibility of making inferences regarding how it is related to other concepts and subsequently develop useful applications. Addiction creates an insatiable appetite for an activity or substance as supported by Foddy and Savulescu (2010) asserting that addiction is a strong appetite that generates the desires that are urgent and oriented towards some rewarding behaviors, periodically reoccurring, often in predictable circumstances, and inviting based on their immediate but high sense of fulfillment and pleasure. Originally, the Latin verb ‘addico’ signifies “giving over” either in a positive or negative sense. Supportively, Sussman and Yafeh (2006) submitted that in the Roman law, an addictus was an individual handed over as a captured slave to the creditor. This therefore explains addiction as a compulsive behaviour that happens when a someone takes a substance such as alcohol, cocaine, nicotine embarks on an activity such as gambling, sex, piercing, shopping, eating, and so on, that can be satisfying at the initial stage but the continuous and consistent intake of which creates a compulsion which adversely impacts life responsibilities such as work, relationships, religious commitment or health, hence, most of the times inconveniencing individuals around either consciously or unconsciously thereby constituting a problem to themselves and others through their compulsive addictive behaviours.

Notably, the difference between addiction and dependence is quite difficult to understand as these words are consciously or unconsciously used interchangeably. However, MacLaren (2017) distinguished between tolerance, dependence and addiction as he argued that both scholars and unlearned people usually use the terms wrongly resulting to the misconstrued belief that tolerance, dependence and addiction are merely addressing the same construct using different names. Hussar (2017) further submitted that tolerance is an individual's reduced reaction to a medicine or drug owing to incessant or frequent meaning that people can build tolerance to either illegal drugs and prescribed medication, therefore, tolerance is described as the effect of the repeated consumption of a substance or drug on the psychological, physical or mental disposition of a person and not necessarily a sign of addiction.

Conspicuously, there exists numerous schools of thought pertaining to the concepts 'addiction and dependence' in literature. One belief that is well accepted is that substance dependence equals addiction while in the opposite, there exists another argument that the two terms are simply wide apart and not equal to each other. MacLaren (2017) supported the fact that they are different thereby describing dependence as a condition whereby the body has adjusted to the ingestion of a substance to the extent that when an individual with alcohol dependence ceases the intake of the substance suddenly, such a person stands a high risk of experiencing withdrawal symptoms. However, the assertion explicitly imply that dependence may be a part of addiction, but non-addictive substances such as prescribed medications can also produce dependence in patients. Mayo (2014) supported by illustrating using an example of a drug called prednisone meant for treating asthma and series of allergic infections may produce withdrawal symptoms if stopped after being taken for several weeks even when the chemical composition of the drug is not known to produce addiction. However, Diagnostic and Statistical Manual (DSM) (2017) viewed it differently, basically as the same, hence defining substance dependence often called 'addiction' as the habitual intake of intoxicants such as alcohol regardless of the harmful after effects, insufficientself-will or drive to stop using a drug or alcohol, inefficiency at meeting work, social, or family demands as well as physical dependence in which the relies on the substance of addiction (alcohol or other intoxicants) requiring more of it to achieve the same effect. Therefore, considering these different views, it is obvious that addiction simply presents a

condition in whereby the addict loses control to the substance or behavior of addiction.

A widely argued issue in the field of addiction is whether being addicted is caused by a pathological condition in the physiology of a victim of addiction or whether being addicted stems up from non-compliance to social norms and moral etiquettes resulting in a state of moral weakness in combating the urge for addiction. These divergent views may not be resolved easily but the lack of resolution does not alter the fact that addiction can be treated, however, non-resolution may negatively impact the decision as to what form of treatment is most applicable in assisting victims of addiction to fully recover from their addictions. Several scholarly submissions have been made from both schools of thought. The National Institute on Drug Abuse (NIDA) (2003) cited in McLaren (2016) defined addiction as a severe retrogressive illness of the brain that is identified by an uncontrollable search for intoxicating substances including alcohol despite negative consequences.

Furthermore, addiction is delineated according to the American Society of Addiction Medicine (2011) as a serious infirmity affecting the reward structure of human brain, motivation, and memory as it alters the ability to moderate behavior, leads to creation of a malfunctioning emotional response, and reduces the user's ability to abstain from substance or behaviour of addiction. Also, MacLaret (2016) posited that although addiction used to be perceived as a sign of moral depravity, but recently repositioned by majority of the researchers and practitioners in substance abuse and addiction treatment sphere to be a condition in which the addictive use of intoxicants such as alcohol causes changes in the brain of the addict to the extent that obtaining and taking addictive substance can literally feel like a "do or die affair".

Some researchers have argued that the process of addiction does not resemble the disease model which is characterized by the existence of a target organ, a defect, and obvious manifestation of specific set of signs and symptoms (Heyman, 2009). Heyman (2009) further posited after surveying a wide range of evidences spanning through critical evaluation of history, study of human behaviour, society and culture, adequate clinical and laboratory examinations to substantiate the argument concerning the effects of choices or self-will in addiction through which he averred that presenting substance addiction as a form of severe disease (like cancer or schizophrenia) is to a large extent erroneous, misguiding and misinforming. This position is further authenticated on the premise that while most addicts quit their

addictions voluntarily or with the help of a psychotherapist without any form of medications, individuals suffering from chronic diseases do not have the capability to voluntarily cease to feel pains or discomfort. Researchers from Heyman's school of thought asserted that addiction is a self-acquired behaviour, therefore, it lacks the characteristics of diseases curable or terminal as it is not contagious or communicable, autoimmune, hereditary, degenerative or traumatic.

The symptom of addiction is the incessant desire to use intoxicants, alcohol inclusive, hence, addiction is a choice, a decision intentionally taken and not a disease by any standards with the number one treatment prescribed being the determination to embrace abstinence without any need for medical intervention such as surgery (Marc, 2015, Holden, 2012, Dodds, 2011, and Schaler, 2002). It is therefore reasonable to surmise that addiction at the initial stage is a moral weakness while it graduates into a disease of the brain at the advanced stage in which control shifts from the addicts to the object or substance of addiction and there is an evidence of impairment as the brain structure has been altered by consistent exposure to the focus of addiction.

Khoddam (2017) argued that the core of an addiction is one's inability to cope with some issues of life, and that it is a life coping strategy for some of these addicts rather than a problem, hence it is suggested that therapy should be focused on helping client answer the question of what problem the addictive substance is solving in his life, and secondly if there can be alternatives that may work. Khoddam further submitted that addictive behaviours can be connected to distress as people commonly use drugs, gamble, or shop compulsively in an attempt to prevent or recover from distress, and not compulsorily as a function of physical addiction. This elucidates the reasons some individuals switch from one addictive behaviour to the other or from a particular substance of addiction to another or better still combine various forms of addiction therefore implying that the focus (object or behaviour) of the addiction is not what matters but the need to cope with certain kinds of distressor. The real focus of psychotherapy would be how to increase coping skills such that addictive tendencies is reduced. This in the long run enables abstinence and reduces the risk of relapse. Important to note is the fact that individuals react to similar distressors differently, hence highly distressful conditions to an individual may be less distressful or not distressful to another, hence, there arises the need to allow

therapeutic sessions equip clients (addicts) with the capacity to rationally assess or perceive life situations.

The tendency to become addicted has been found to be linked to 50% genetic factors and 50% poor coping skills positioning human genes as a vital driving force for addiction as literature reveals that the genetic composition of people either predisposes to or protect them from addictive tendencies. Steenbergh, T. A., Runyan, J. D., Daugherty, D. A., and Winger, J. G. (2012). Mayfeild, Harris and Schuckit (2008) also submitted that genetic orientation of a person can present a prediction on the extent to which such a person is exposed to the risk of addiction. Steenbergh, T. A., Runyan, J. D., Daugherty, D. A., and Winger, J. G. (2012) reported that the children of addicts are 8 times more at higher risk of developing addiction than the children of non-addicts. In the same vein, the American Psychological Association reported that a good proportion of a person's risk at embracing addiction is traceable to genetic factors. Fowler CD, Kenny PJ (2012) reported supportively that the role of genes can be connected to an increase in an elated response to drug/alcohol, a reduction in the possibility of having unpleasant responses to substances with addictive properties, and an addictive personality.

The Diagnostic and Statistical Manual of Mental Disorders fifth edition (DSM-5) (2013) viewed compulsive intake of intoxicants including alcohol as a pathological condition operating within a wide spectrum characterized with an evidence of forfeiture of control to the substance one is addicted to, problems in keeping up with family and social relationship, and use despite the danger it poses. Also, DSM-5 further expatiated the features that can be considered as connected or predictive of alcohol use disorder namely; difficulty regulating the quantity of intake, continuous excessive intake of alcohol despite the consequences, a larger quantity of alcohol having lesser effect, intake of alcohol to the extent of increasing the chances of getting hurt, or manifesting withdrawal symptoms when use is interrupted or delayed. The requirement for DSM-5 alcohol use disorder diagnosis are basically synonymous with the standards for an analysis of substance dependence or abuse except for two adjustments:

- the "repeated or consistent legal problems" was expunged; and
- "a sense or feeling of compulsion or urge to use substance" was added.

American Psychiatric Association (APA) updated the DSM and Substance Use Disorder was used in replacing the broad characteristics represented under the

umbrellas of substance abuse and substance dependence. The requirements connected with the disorder experienced as a result of compulsive intake of alcohol according to APA (2013) are within four categories namely; risky use, social impairment, impaired control and tolerance together with withdrawal.

The symptoms of alcohol use disorder include the following:

i. Increased intake of alcohol and usually for an extended period of time than intended.
ii. There are series of unsuccessful attempts or efforts to cut down on excessive intake of alcohol.
iii. A sufficiently long period of time is involved in obtaining substance (alcohol), using the substance as well as recovering from its effects.
iv. An insatiable appetite for the substance and consistent uncontrollable urge to sustain availability.
v. Consistent substance use and the inefficiency at fulfilling work, school or home responsibilities.
vi. Inability to desist from substance use even with incessant and recurring interpersonal or social difficulties resulting from or worsened by the influence of substance use.
vii. Sacrificing significant work-related, recreational or social obligations in an attempt to meet up with the ever increasing demands of excessive alcohol use.
viii. Incessant excessive alcohol intake in circumstances in which it is dangerous or hazardous.
ix. Progressive harmful alcohol use despite the understanding or awareness about its capability of causing recurrent and severe physical or psychological problem.
x. Tolerance as regards impaired use of alcohol has the following characteristics:
    - A need for constant increase in the quantity of alcohol intake with the goal of achieving intoxication or desired effect.
    - An obviously reduced effect of the usual quantity intake of alcohol such that the usual quantity has a seriously diminished effect.
xi. Withdrawal in impaired alcohol use is demonstrated through the following:
    - The usual or often experienced withdrawal syndrome for alcohol.
    - Alcoholic drink or substances related to alcohol is taken as a panacea to experiencing withdrawal symptoms.

### 2.1.2 The History of Addiction and Addiction Vulnerability

The word "addiction" is traceable according to history to the 17th century when it was perceived as the act or process of being coerced into eliciting a series of deviant behaviours with those who involved being referred to as opium, morphine eaters as well as drunks which can be medically referred to as alcoholism (William, 2016). However, it was first mentioned in the medical literature in the 19th century. This therefore implies that addiction to alcohol had been existing for quite a long time but the commitment towards reducing it has been low possibly due to fewer alcohol addicts.

In the experiment conducted in the 1880s, as reported by Horward (2011), William Halsted and Sigmund Freud experimented with cocaine users. However, being oblivious of the addictive tendencies of cocaine, there was a negative turn of event as in the process Freud and William became addicted to cocaine thereby altering their contributions to psychology. Freud fell a prey to the addictive components of cocaine because he discovered the drug was effective in relieving his migraine but as the migraine was cured, the quantity of cocaine consumed increased. However, there was a widespread news about the effectiveness of the drug, hence, based on the knowledge of the pain suppressing properties of cocaine, it was frequently prescribed by physicians to patients in need of pain relief such that by late 1800s using cocaine as a drug that relieved pain spread rapidly (Howard, 2011) and while it continued to spread, physicians had to resolve the problem of looking for ways of treating patients who have now become addicted to the physician's prescribed drugs.

A major factor to be considered in conceptualizing alcohol vulnerability is individual differences as some individuals lacks the interest in alcohol despite availability and accessibility to alcoholic drinks and beverages, also, some other individuals indulge in the use of alcohol for several years without developing any form of addiction to it while certain individuals become severe and compulsive users of alcohol right from the very first sip. Ellenbroek (2005) cited in Bardo (2013) asserted that despite the fact that a lot of people were introduced to alcohol use at an early stage in life which should have increased the risk of being addicted, yet do not demonstrate any form of alcohol use disorder symptoms as would meet up with the criteria for substance use disorder, however, some other people being introduced even at a later stage in life developed a compulsive desire for alcohol use. This riddle

was unraveled by the assertion of Glantz and Pickens (1992) that based on certain factors, some individuals are more vulnerable to addiction.

However, Ronald (1999) argued that virtually every person possess the tendency to get trapped in addiction to intoxicating substances such as alcohol as revealed the a research that an average of 60 million to 70 million Americans had taken drugs at one time or the other in their lives, and surprisingly, only 4.2 million have yielded to addiction to those substances. In the same vein, 65 million of the American population drink alcohol, and only a little above 8 million have demonstrated dependence to alcohol and alcoholic beverages. There certainly exist some factors propelling these differences which NIDA (2014) revealed in its position that vulnerability to addiction differs from individual to individual and that no particular factor can be said to be singlehandedly responsible for whether someone would turn out to become an addict or not. It was further argued that further there are risks and protective factors which can be environmental (including family background, parental occupation and economic class, norms and ethics of the society, the peer group, level of education, and so on) or genetic such as biological oriented factors (genetic makeup, stage and age of development, and gender). Hence, vulnerability to addiction can be explained to be the physical, genetic, or psychological tendencies to embrace addictive behaviours. Literature has established the fact that some individuals possess higher vulnerabilities to addiction, stating three-determinant indicators for susceptibility to dipsomania/insobriety which include: chromosomal and environmental factors, as well as the consistent exposure to the substance of abuse (Kreek, Nielsen and LaForge, 2004).

Several researches in the structure and functioning pattern of the nervous system identified genetics as a significant determinant to addiction vulnerability as it accounts for 40 - 60% of a person's tendency to yield to addiction (Hiroi and Agatsuma, 2005; Goldman and Orozi, 2005). This is revealed in the dopamine receptor called $D_2$ which is responsible for responding to the chemical called dopamine carrying the capacity to produce satisfactory and enjoyable responses in the brain. Therefore, various researches have validated the fact that individuals who have a level of  deficiency as regards the dopamine receptor demonstrate not just the desire excessive and compulsive alcohol use above their peers who are genetically normal but also go further to compensate for the levels of cannabinoid receptor type $CB_1$ (Thanos, Gopez, Delis, Michaelides, Grandy, Wang and Volkow, 2011). This

posits that the two genetic factors (dopamine receptor and cannabis receptor) work hand-in-hand regulating cocaine and alcohol in the human brain. Therefore, the critical examination of both receptors justifies the assertion of various researchers on the significant influence of genes on the vulnerability of addiction. However, should that suggest that alcohol addicts can blame their addiction on their genetic orientation? This might actually be the case as the natural deficiency in these receptors make these individuals with this deficiency to naturally demonstrate the tendency to seek out pleasure through reward producing substances such as alcohol and intoxicants as they demonstrate lowered reception of the natural feel good effects of dopamine.

The role genetics play in determining the individual's traits may influence the extent of vulnerability as it possesses the possibility of putting someone at a heightened risk for experimenting with alcohol, incessant use of alcohol, addictions and high tendency to experience relapse. These genetic traits include reward-seeking, acting without forethought (impulsivity) and reaction to distress which may lead to greater susceptibility to substance obsession (Kreek, Nielsen, Butelman and Laforge, 2005). This explains the reason substance abuse is known to occur in families, as having an addict as a member of the family raises a person's tendency of being a victim of addiction by eight to ten percent more than the general population (Whitesell, 2013). The efforts of researchers in discovering the cause of addiction yielded positive effect as the brain abnormalities found in addicts and their non-addicted siblings vividly suggest that conditions present at birth are responsible for the increased addiction tendency (Whitesell, 2013).

Aside the genetic factors, there are certain environmental factors that increase the tendency to develop addiction. A major environmental factor is the availability of the substance of addiction and some other relevant ones include socio-economic status, parenting styles, poor family relationship such as low level of affection, peer pressure, cultural practices, etc. which have been revealed to have a strong influence on the factors that encourage the initiation and consistently compulsive use of excessive alcohol (Volkow and Kalivas, 2005). Biological and genetic composition once again acts out a very germane role in increasing the tendency of alcohol addiction vulnerability when combined with factors resident in the environment such as distress which creates a complicated process that can disrupt the functioning of the brain (Sinha, 2017).

Furthermore, external distressors (such as financial challenges and familial problems). Also, severe distress has proven to possess tolerance or dependence effects on the brain such that the brain loses the capacity to naturally adjust itself to compensate for the increased cortisol level as produced by distressors. An unreasonably high level of distress prevents the prefrontal cortex from functioning maximally therefore affecting the abilities to plan, adequately review behaviour before eliciting it, hence the brain being in a compromised state might take up addiction in the middle of a highly distressful situation (Sinha, 2017). Additionally, distress can have a cyclical effect on the brain as the presentation of the stimuli of distress can adversely affect the brain leading to addiction, also, repeated substance use, can also be a distressor to the brain thereby physiologically altering the brain (Hyman, Malenka and Neslter, 2006).

Also, an averagely large percentage of individuals have high tendency of developing addiction for medically prescribed drugs or medication so the concept of addiction transcends intoxicants, alcohol and other illegal drugs. Prescription drug addiction encompasses a series of non-medical use of prescription drugs, which may involve all or any of the following; exceeding the prescribed dosage or the frequency prescribed for usage as well as using medications for uses other than that for which it was prescribed or using without a legitimate prescription from a certified professional (Compton and Volkow, 2006). Also, DSM IV (2013) described prescription drug abuse as the usage of medically approved drugs without prescription, using medications in an inappropriate way or form, in a pattern different from the way it was prescribed, or for the purpose of getting excited (Baillargeon, Landreville, Verreault, Beauchemin, Gregoire and Morin, 2003).

National Institute on Drug Abuse - (NIDA) (2011) assertion also corroborated the argument of DSM IV that in accordance with the various national surveys that have been carried out, medications used in treating pain, prescription medications for reducing attention deficit, and anxiety have been abused at a rate almost as high as the rate marijuana is abused which is validated using statistics on the rate of hospital visits and deaths recorded from misuse of prescription drugs. This posits that the new trend of addiction is stemming up gradually from prescriptive drugs or medications basically because as reported by (NIDA) (2011) and McHugh, Park and Weiss (2014) that prescriptive drugs can be acquired lawfully, are easily available, and usage of prescriptive drugs are perceived as socially acceptable. Also, Volkow's

(2016) submission corroborated the findings of previous researchers by stating that the culture of decisively taking medications for whatever ailment or symptoms experienced and the belief that prescription drugs are not as harmful as illicit drugs are major causative variables birthing the increasing recurrence of prescription substance abuse. The mostly abused prescriptive drugs are those prescribed to reduce or cure pain, drugs discovered medically to be effective at treating anxiety, sleep disorders, as well as stimulants which function basically to reduce attention deficit disorder (NIDA, 2011).

The addictive and/or non-medical application of prescribed drugs is becoming an urgent issue of public concern according to NIDA (2011), and the Center for Disease Control and Prevention (CDC, 2010). In the same light, in 2009 as succinctly noted by the CDC (2010) 20.2% of young people within the teenage age had addictively abused prescription drug such as Vicodin, Oxytocin, Ritalin and Adderall with the last two recommended for treating Attention Deficit Disorder. Also, cough syrup and tranquilizers are usually abused for non-medical use and as succinctly advanced by the National Institute for Drug Abuse (2011), the most frequently abused prohibited substances among young adults and teenagers are prescription and OTC drugs. Major contributory factors to the increased prescription drug addiction drastic increase in the number of prescriptions written by medical personnel which is basically linked to increase in population, increased medical awareness and improved living standard, and an increased marketing by pharmaceutical companies (Volkow, 2014). Hence, NIDA (2017) stated the following ways through which prescription drugs can be misused:

- Taking another person's prescription medication.
- Taking a medication in a way other than the one prescribed by the doctor.
- Taking a prescription drug for fun to get high.
- Taking a prescription drug to undermine the effect of other drugs like stimulants.
- Mixing prescription drugs with other substances such as alcohol.

### 2.1.3 The Concept of Alcohol Addiction

Alcohol consumption has gone a long way such that it breaks every barrier spanning from economy, age, tribe, religion or gender. The usefulness of alcohol has changed form from time to time. It was initially used as a tool for social cohesion, and later for imperial control and it was further used as a tool for revenue generation

by different stakeholders starting from the production, to the manufacturing and sales of alcohol and alcoholic beverages (WHO, 2010; Korieh, 2003). However, in recent times, the mode, quantity and purpose for consuming have changed drastically, most especially among teenagers and youths (Chikere and Mayowa, 2011). This has culminated into a greater encumbrance of problems relating to alcohol which has been valuated to go beyond those connected to tobacco consumption and use. In Nigeria in the ancient past, the consumption of alcohol is regulated using such yardsticks about gender and age such that alcohol was totally restricted to adults who were males and totally frowned at among the teenagers, youths, females of any age and children with customs and traditions through laws were used in regulating manufacturing and drinking of locally brewed alcohol (van Wolputte and Fumanti, 2010; Heap, 1998).

Also, all over the world, the consumption of alcohol has experienced a sporadic increase in the last few decades up until now with almost all the of that increase coming from the developing countries as Nigeria leads the rank with the second position in Africa for per capita consumption (WHO, 2014). The fact that spirit, beer, wine and other variants of fermented alcoholic drinks have been in use from the dark ages in the Nigerian traditional societies has not by any way reduced access to modern or foreign brewed alcoholic beverages, thereby increasing the abundance of these drinks without any concrete method to regulate use. This validates the report of WHO (2013) that the quantity of alcohol consumption not recorded in Nigeria has been estimated as 3.5 litres undiluted alcohol per capita for a group of individuals who are above 15 years of age beginning from 1995 (WHO, 2013).

The concern about alcohol addiction stems from the fact that though alcohol has been consumed for ages, there is a sudden upsurge in the rate at which it is marketed and sold in the present Nigerian society and the fact that it is accompanied by life threatening consequences. It is suddenly discovered that societal norms and ethics are becoming milder and tolerant of females and teenagers indulgence in alcohol intake which negates the ancient values of the Nigerian society as stated by Willis (2006) that excessive intake of alcohol was frowned at in many societies despite that in traditional African societies, the consumption of alcoholic brews like burukutu, palm wine,and so on, were consumed for social cohesion and instant

gratification, however, irresponsible intake was a misnomer and alcohol was rarely permitted to be traded in the market (Odejide, 2006).

Excessive alcohol intake results in 3.3 million deaths every year across the world, hence presenting alcohol as a major contributory factor as the addictive content of alcohol may trigger irresponsible drinking which may be responsible for the casualties experienced from excessive alcohol intake to the extent that more than 200 illnesses and injury conditions among 5.1% of the population of the world are connected to alcohol (WHO, 2015). Also, Dumbili (2013) posited that drunkenness, alcohol tolerance, and other chemical reactions caused in the body because of inordinate and impulsive drinking of alcohol have been confirmed to produce such consequences as severe health problems, sudden death, injury through vehicle clashes and all sorts of accidents, acute alcohol poisoning, and fetal alcohol disorder.

Unfortunately, despite all the ills of alcohol consumption, it is readily available in motor parks throughout the nation in different sizes, shapes and forms such as paraga, shepe, indigenous herbs drenched in dry gin such as ale, opa-eyin, and so on. WHO (2014) averred that injuries attributable to alcohol addictive intake are of deep concern to stakeholders in the public health community, with alcohol-related injuries such as automobile accidents, burns as a result of fire outbreak during road accidents, poisoning as during binge drinking, falls and drownings making culminating in greater than one-third of the ailment burden especially, the developing countries of the world. In the same vein, the International Center for Alcohol Policies (ICAP) asserted that an alcohol content in the blood level between 0.20.9mg/ml is capable of causing a person to experience sudden mood changes, inappropriate responses to stimuli in the environment, poor co-ordination, slowness in response of the central nervous system and diminished response to pain.

It is therefore not surprising that in some countries such as Brazil, Bangledesh, Hungary and so on, it is unlawful to have any measurable quantity of alcohol in the blood while driving considering the graveness of the dangers it can expose road users to (Cowan, Weatherman, McCutcheon and Oliver, 1996). Although Nigeria mandates a limit of 0.05gm/100ml Blood Alcohol Concentration (BAC), unfortunately, the execution of the edict is mild as a result of the unavailability of alcohol testing equipment (Ogazi and Edison, 2012).

In critically examining the gravity of mishaps unleashed by reckless use of the road, an accusing finger may be directed towards the commercial vehicle drivers

usually members of the NURTW as it has been validated to have contributed immensely to the rate of road accidents attributable to alcohol consumption as Adeyemi (2015) further asserted that 19.30 people are killed in every 10 road accidents, therefore making very necessary an involvement in the commercial transport system in Nigeria that will reverse the trend of the addictive use of alcohol among the NURTW as this is overly controlled by communities of people and associations with an insufficient education about the ills of addictive consumption of alcohol.

### 2.1.4 History of Alcohol Use in Nigeria

Alcohol has been with man from the beginning of creation as Myadze (2014) supportively averred that individuals across the globe have possibly used alcohol even before history was ever chronicled thereby validating the ancient assertion of Horton (1974) that beverages with alcohol content are possibly as old as the act of crop cultivation by man which may relate precisely to the beginning of man. Alcohol consumption cut across various culture, history, gender and times in such a way that consequences of alcohol consumption are not specific to age, gender or ethnicity of race. Chrzan (2013) argued that according to the reports of the National Academy of Sciences, jars from the Neolithic Village of China showed signs of a previous existence of alcohol which was soaked and preserved with chemical and examination of the relic affirmed that it was a fermented drink extracted from rice, honey, hawthorn berries and grapes which was discovered about 10,000 years ago. An important driving force of alcohol use through various cultures and time is the belief that alcohol is medicinal. Moreover, Bacon (1683) suggests that wine could keep the stomach healthy, retain the natural heat, help in easy digestion of food, preserve the body against corruption, helps in blood formation, but he also recognized the danger of excessive in-take of it stating that such can “cause confusion in the mind, retard brain functions, create feebleness of the limbs and cause bleareyedness”.

In Nigeria, industrial manufacturing of Western beer was launched by Heineken sponsored brewery in Lagos, Nigeria in 1949. The oil boom experienced in the country in the 1970s presented the beer making business as a profit-oriented venture for both the government and individuals. However, in the 1980s, there was a formulation of polices which restricted the growth and expansion of breweries leading to the closure of many brewery businesses. The economic downturn for breweries however ended in the 1990s due to the formulation of a more-brewery

friendly economic policies and since then, the alcohol brewing companies have explored all avenues in the economy to expand and maximize profits (Obot, 2007).

Alcohol has been embraced in Nigeria in various forms and for several reasons since many decades ago. Though, westernization might be a contributory factor to addictive alcohol intake, Nigerians are highly known for high sociability and religiosity which culturally requires the use of alcohol, though, not to the level of addiction, long before the introduction of the western kind of alcoholic drink. According to Obot (2007), three main classifications of indigenous drinks are traditionally produced and consumed in Nigeria namely; fermented outcomes such as palm wine which is tapped from raffia plants and ginlike distillates usually called ogogoro, kinkain, kai-kai or apetesi, burukutu and pito.

- **Burukutu**: Burukutu is a well-known beverage with high alcohol content with a vinegar-like fragrance made from fermented sorghum majorly produced and relished in the Northern part of Nigeria (Haard, 1999). Often, it is taken in the South-West area of Nigeria especially in Ibadan with its alcohol component ranging from 3 - 6% (Bennett, 1998). Burukutu is the topmost widely consumed liquor in the rustic parts of northern region of the country and in some economically impoverished urban localities due to its affordability compared to beers that are commercially brewed. Burukutu can also be taken as a meal due to its thick and heavy form. The burukutu business is overly dominated by women (Obot, 2000).
- **Palm wine**: Palm wine, a refreshing and nutritious drink, is well-celebrated and preferred to any other alcoholic beverages in the traditional South-West, Nigeria. It is preferred as a super-combination to be taken with favourite local delicacies in the SouthWest, Nigeria. Palm-wine popularly called ‘emu’ is the white coloured liquid extracted from the Palm tree sourced from a delicately and strategically opened part of the stem. Fresh wine is healthily sugary and has minimal alcohol content which increases as fermentation upsurges. Palm wine that is not kept in an enclosed container such as bottle has a reduced alcohol composition (of about 3%) than bottled palm wine (around 4%) (Stanley and Odejide, 2002). More often than not, palm wine with an alcohol proportion of 3 - 6% is also generally relished in the South-Western part of Nigeria (Bennett, 1998). Palm-wine has high nutritious value as it is embellished with vitamins such as such as vitamins B and C as well as complex carbohydrates (Gire, 2001).

- **Pito**: The traditional alcoholic beverage of the South-South region of Nigeria is pito. Also, it is popularly consumed around Nigeria, hawked in calabashes and chilled for super taste and satisfying refreshment. Pito is popularly consumed throughout Nigeria basically because of its affordability, compatibility with the climate as it is usually sold in hot afternoons well chilled to give a refreshing satisfaction during hot weathers. Grains such as sorghum, maize or a mixture of both cereals is used in making pito. A dark brown drink with a taste varying from bitter to sweet, pito has amino acids, sugars, lactic acid as well as an alcohol component of 3% (Haard, 1999).
- **Ogogoro**: Ogogoro (otherwise called apetesi and/or kinkana) is a drink similar to gin and usually brewed from either raffia palm wine or oil. Distillation procedures are executed in small huts sited laterally around the littoral regions and in existing villages located within Southern Nigeria. These procedures culminate in the production of a clear drink which has an alcohol content that is usually greater than 40% (Obot, 2000).
- **Oti baba**: In an agrestic town called Igbo-Ora sited in South-West, Nigeria, "baba" is the Yoruba (a tribe in this region of the country) name for sorghum. Guinea corn is subjected to grinding and fermentation to produce what is locally known as oti'ka or *oti baba*. Agadangidi is another alcohol beverage which is also often produced in SouthWest, Nigeria. This is a fermented brew produced from water, fresh chili peppers and mashed ripe plantain (Mamman, 2002).

### 2.1.5 The Benefits of Alcohol

Alcohol is a large and prosperous business in Nigeria providing employment directly or indirectly to a large population of the Nigerian citizens thereby, increasing the standard of living of an average Nigerian. This is achieved through the large expanse of factories and breweries all over the country and coupled with the high turnover of alcoholic products, retail businesses thrive impressively encouraging retail outlets springing up in the country, providing stable incomes for people ranging from income from shop rentage, profits from sales of alcoholic products, income from transportation of alcoholic products, and so on.

In the same vein, alcohol industries also promote other sectors of the economy such as the advertising sectors through constant patronage to boost sales. Also, advertising is done through the promotion of talent discoveries among young adults by sponsoring shows such as fashion shows and beauty contests on campuses.

Sponsorship of social activities in Universities featuring key artists in the music industry therefore promoting their music careers. Furthermore, the sports sector has been sponsored during national and international events, football matches such as the Star Larger beer sponsorship support for the Super Falcons in 2018. Also, in 2018, Nigeria Football Federation entered into partnership with Nigeria Breweries (Bassam, 2018).

Responsible and moderate intake of alcohol shares a nexus with lowered risk of or reduced vulnerability to certain diseases such as type II diabetes, heart failure, ischemic stroke and coronary artery disease. This corroborates assertions made by Mostofisky, Mukamal and Rimm (2016) stating that moderate intake of alcohol which is within the range of a maximum of one drink daily is linked with a lower risk of infarction, myocardial, cognitive decline, gallstones, sudden cardiac death, stroke, hypertension and many other illnesses that can cause death. Furthermore, Mostofisky, et.al. (2016), further asserted that women indulging in low to moderate consumption of alcohol experience better reduction pertaining to the risk of mortality when compared to abstainers and women who take beyond one drink every day. Also, Chiuve and Rexrod (2008) noted that consumption of alcohol in moderation has been found to enhance a healthy lifestyle as being one of the major contributors to reducing the risk or vulnerability to pulmonary heart disease, stroke, and total mortality.

The consumption of alcohol is rooted in some cultural practices (Brisibe, Ordinoha and Dienye, 2012). Hence, alcohol drinking is a socially approved behaviour. In the same vein, Russel, Skinner and Windle (1992) explained the three distinct motives for drinking alcohol which includes enhancing positive motives, coping with negative emotions and social affiliations which are basically to reduce distress, boost mental health and maintain community solidarity.

### 2.1.6 The Consequences of Alcohol Addiction

Alcohol is both a tonic and a poison with the difference being in the dosage. Researches have established that excessive alcohol consumption can result in inflammation of the organ lying behind the stomach, chronic liver damage, disease of the lung, inflammation of the air sacs in the lungs, injuries, cancerous growth and physical and psychological deterioration (Schutz, Boeing and Pischon, 2011; Rehm, Baliunas and Borges, 2010). Also, Guo and Ren (2010) argued in support of Guo et.al. (2011), asserting that alcohol has damaging effects on most tissues and systems

in the body at doses exceeding one or two daily, expatiating the fact that exposure to alcohol over a long time span absolutely heightens the propensity of injury to the alimentary canal, digestive tract, gastro-vascular, the coordination and transmission of information to and from different parts of the body and other systems in the human body.

In the same vein, Mamzo-Avalos and Sanvedra-Molina (2010) posited that excessive alcohol intake negatively impacts the process of oxidation of a cell following the reaction of ethanol metabolism hence, having a destructive consequence on the metabolism of fats and cellular respiration in both man and animals. Also, Nitsche, Simon, and Weiss (2011) supportively stated that alcohol can promote disorder in the digestive system, damage of the gullet and gastrointestinal sections of the body leading into hemorrhage or upchucking thereby damaging the mucous membrane. Nitsche (2011) further posited that alcoholics experience more acute pancreatis than the general population and also present the possibility of progressing to severe ailment or adenocarcinoma in case of sustained exposure.

In the same light, Gao, and Battaller (2011) revealed that cirrhosis, alcohol-induced hepatitis and fatty liver disease are traceable to the existence of excessive fat in the liver culminating from reduced oxidation of fatty acids. Similarly, Chopra and Tiwari (2012) posited that alcohol-dependent individuals may experience pain from nerve damage leading to pins and needles sensation and inability to sense any feeling in some parts of the body including a progressive damage to the nervous system that affect stability often accompanied by an involuntary eye movement caused by the wasting away of the organ that receive information from sensory systems due to alcohol toxicity.

The fundamental truth about alcohol is that overtime, indiscriminate use of alcohol, both in the forms of drinking a lot either for a short term or consistently taking alcohol for a long-term period may result in numerous problems which involve not only some incurable health challenges but also social problems as reported by the findings of National Council on Alcoholism and Drug Dependence (NCADD, 2015) that alcohol addiction creates social problems including unemployment or under-employment, reduced productivity, problems in the family, violence including child maltreatment, child sexual abuse, fights and suicide, injuries involving motor fatalities on the road, falls, drowning, burns and fire accidents. Also, alcohol addiction places an economic burden of debt on the nation as according to

Sacks, Gonzales and Bouchery (2010) reported that in 2010, alcohol misuse cost the United States $249.0billion. Relatedly, National Health Services Directory (NHSD, 2012) stated the social consequences of alcohol addiction which include financial problems due to unjustifiable spending on alcohol, reduced career prospects due to a conviction in the court of law for an alcohol-related offence, inefficiency at work, poor familial relationships, and low sexual performance.

Vulnerability to alcohol addiction in the recent past has increased tremendously among Nigerian youths and teenagers as well as those in other countries of the world as succinctly noted by National Drug Law Enforcement Agency (NDLEA, 2012) record gathered from interviews of persons detained for drug-related crimes, from school reports on drug use and abuse data, accounts of patients admitted at mental health institutions for drug related problems, and also sustained by the findings of WHO (2011) that alcohol is depicted as a seal of accomplishment and a mark of courage, heroism and virility through various advertisements and marketing strategies. There is therefore a need to restrict or preferably ban alcohol marketing which is stated as part of the action plan for an effective alcohol policy by WHO (2011) precisely spelling out the fact that restrictions of alcohol marketing is one of the most promising strategies for governments in developing countries.

### 2.1.7 Alcohol Policy Formulation and Implementation in Nigeria

The alarming increase in alcohol addiction and alcohol related issues have raised the concern of the World Health Organization on the urgency to curb the excesses which thereby resulted in the drafting of a 10-point policy for controlling alcohol production, advertising and consumption in 2010. Nigeria adopted the policy as posited by Dumbili (2013) as Nigeria ranks the highest amidst the thirty nations with high per-capita consumption of beers as well as other alcoholic substances which present seriously alarming alcohol related problems. However, the policy had faced major obstructions considering the economic contributions of alcohol to Nigeria. According to Obot (2007), the rankings of the most capitalized firms in the Nigerian stock exchange have the two largest producers of beer in the nation occupying the fourth and first spots.

Furthermore, Abiona (2019) stated that Nigeria has not made any impressive progress in the implementation of the alcohol policy with the major road block being the fact that alcohol is a controversial substance as it is perceived as a social

substance approved by many cultures and also a substance with grave health implications attached to it. The government has however failed to strengthen systems and to establish structures necessary for alcohol control. Hence, Obot (2007) stated that the industries producing alcohol have taken advantage of Nigerian alcohol-permissive culture which is deeply entrenched in their norms and traditions. This implies that the alcohol companies understand the positive tone Nigerian culture has for alcohol and therefore advertise to appeal to the culture-sense of Nigerians by presenting alcohol products such as Schinapp as a libation drink and launching "orijin" an alcoholic brand in traditional rulers' palaces.

Hence, the World Health Organization according to Abiona (2019) revealed that Nigeria has no well-structured policy guiding or regulating alcohol production and consumption, advertisement, availability and promotion. The WHO global strategy for alcohol control include ten key areas which are

- Public enlightenment, dedication and responsible leadership.
- Prompt responses to health services.
- Community and government collaborative actions.
- Effective driving policies and countermeasures.
- Controlling the availability of alcohol.
- Creating policies that prohibits excessively aggressive marketing of alcoholic beverages.
- Manipulating the prices of alcoholic products.
- Ameliorating the embarrassing aftereffects of liquor intoxication and drinking.
- Minimising the influence of illegal alcohol consumption and informally produced alcohol on public health.
- Proper examination and supervision of alcohol policies.

### 2.1.8 Vulnerability of the National Union of Road Transport Workers to AlcoholAddiction

The National Union of Road Transport Workers (NURTW) numbered over one and a half million people according to Oladipo (2012), is a male dominated commercial transporters' association, established in 1934 which uses motorcycles, tricycles, buses, cabs, and tankers in conveying goods and passengers from one destination within the country to another. The union was established to defend and

further the collective interests of transporters. The NURTW while performing the functions of a public transport company, exhibits some traits of hooliganism triggered by consistent use of alcoholic drinks, founded in 1957, and has been a source of revenue generation for the government. One of the major features of the activities of the NURTW is the inclusion of thugs and social miscreants with high violent and risk behaviour tendencies called “agberos” and as posited by Oluwole, (2013), the word “agberos” is usually used for a group of people known as social deviants, street wanderers or hooligans who forcefully extort money from commercial bus drivers at motor parks and bus-stops particularly in Lagos metropolis. The vulnerability of the NURTW to alcohol addiction refers to the fact that there exists some factors which predispose NURTW members to higher tendency to develop addiction to alcoholic substances than people in several other jobs, professions or careers such as nursing, banking, teaching and so on. Hence, Nestler (2013) posited that some major factors that determine susceptibility to alcohol addiction include recurring exposure to alcohol and genetic factors.

The reality that NURTW has been engaged in activities which are beneficial to commuters has not overruled the incessant deployment of some members of the association for propagating acts that disrupt the peace of the society due to constant indulgence in the intake of alcoholic and other psychoactive substances, decreasing the capacity for clear reasoning about behavioural consequences which is keyed to the work environment for the members of the NURTW has the capacity to trigger intake of alcohol and other psychoactive substances. In the same vein, Aina (2014) asserted that in Nigeria, finding alcohol displayed for sale in every motor park is commonplace. Also, Grace (2014) posited that on the average, about 62.5% of NURTW members purchase alcoholic drinks from the motor parks. Furthermore, Makanjuola, Daramola and Obemebe (2007) argued that tanker drivers and long distance vehicle drivers use psychoactive substances including alcohol drinks at stop-overs with alcohol being the most frequently used.

### 2.1.9 Prevalence of Road Accidents in Nigeria

The danger of experiencing road traffic accident is on the increase due to loss of simple nerve circuit control, lack of restraints manifested in impulsivity, disregard for other road users, aggressiveness, risk taking behaviour, loss of control sensation, intoxication and perceptual deficiencies informed by excessive alcohol intake (Montoro, 1991). Also, Romero (1994) opined that almost sixty percent of road

traffic mishaps stemmed out of excessive alcohol intake. Aside other factors such as shabby road networks, poor maintenance of roads, coupled with the fact that most vehicles on the Nigerian roads are "end of life vehicles" and are not road worthy which have culminated into series of accidents across the various roads in Nigeria, being a country with large expanse of roads with a total road length of 194 thousand kilometers (Olubomehin, 2012) and total population of vehicles being 10 million (FRSC, 2016), translating into an average of 825 persons per km of road which statistics from the World Bank has ranked contingent on the number of vehicles to individuals that make up the population as 31 cars per every 1000 inhabitants in 2007 with the ranking being large to a large extent due to poor-socio economic status and low standard of living creating a strain on the strive for survival making most NURTW members struggle hard to meet up with the daily "delivery" money as hundreds of others will eagerly leap at the opportunity to drive the vehicle should there be any reason for a lay off by their present vehicle owner causing more recklessness on the road. Nigeria lost 6, 450 lives to road traffic accident in 2013 that included 201 girls, 299 boys, 4,552 men and 1,398 women indicating that the male folk are four times higher susceptible to being victims of road accidents than women. Also, from 2009 to 2013, road accident claimed 30,435 lives in Nigeria (almost an equivalent of the population in Gyula city, Hungary). This number validates the report that Nigeria is rated second-highest in the spate of traffic collisions out of 193 countries globally, thus, justifying the authenticity of WHO's (2015) declaration that one of four road accidents in Africa happens in Nigeria.

In 2013, 70.6% of the population of individuals killed in road mishaps were men (FRSC, 2014) further intensifying the problem of high dependency ratio and creating a cycle of series of addiction serving as an escape route for dependents especially youth under the hot scourge of economic challenges. These fatalities were friends to people, fathers, sons, brothers and uncles, depicting high level of dependency, high number of school-drop-outs due to the death of the father, high social crimes etc. It is emotionally crippling to absorb the fact that 1,903 children died while 8,667 children were incapacitated in traffic collisions from 2010 to 2014 (FRSC, 2014). A major suicidal act prevalent in Nigeria is the under-reporting of road accident which makes little or no data to be available for proper corrective measure to be taken as a matter of urgency (Labinjo, 2010).

### 2.1.10 Functional Analytic Psychotherapy

Functional Analytic Psychotherapy (FAP) is a counselling technique in the study of behaviours elicited in a clinical setting which has it focuses on the intensive professionally grounded counselling-client relationship as a means to achieve the desired change in the client. Especially, FAP proposes that the response of the therapist contingently to client target behaviours can enhance important therapeutic achievements (Tsai and Kohlenberg, 2009). FAP was developed in 1980 by Kohlenberg and Tsai after understanding that there is a collaborating relationship between positive association and the expected change in client's behaviour as well as the worth or extent of the therapeutic interaction. Therapeutic affinity is the main focus of the treatment package therefore establishing a behavioural relationship that promotes a deep, emotional and in-depth counselling experience and it is adjudged as the foundational principle of FAP (Tsai et. al., 2015). In the same vein. Tsai, Yard and Kohlenberg (2014) averred that FAP's outstanding benefits are offshoots of the use of behavioural principles that produce more accurate and innovative intervention.

Professionals in the field of therapy according to FAP can engage these basic principles in counselling relationship to promote a viable and deep professional experience that possess measurable impressive effects on client's problems, structured specifically to suit individual client's needs. FAP's main focus is on the issue a client is trying to resolve through the performance of a behaviour rather than on the type of behaviour elicited with the intention of rectifying a wide spectrum of behaviours that actually seems dissimilar on the exterior but all perform the similar purposes (Tsai et al., 2009; Kohlenberg and Tsai, 1991; Tsai, Callaghan and Kohlenberg, 2013). FAP posits that client behaviours which plays out in their daily individual relationships will also manifest during the counselling interaction reveals an adequately high quality client-focused-relationship. The core values of Functional Analytic Psychotherapy (FAP) as entrenched in its practice includes:

**i. Natural Reinforcement**

Natural reinforcement is responding in a timely manner to client's counselling challenges and advancement during counselling in order to solidify improved behaviour considering the overtly-established benefit of promptness in the efficiency of reinforcement, and a major objective of FAP is to mould and react to improved behaviours as these behaviours exist during the therapeutic session instead of focusing on client's self-report of what was done outside sessions (Kohlenberg,

2010). According to Kohlenberg (2010), natural reinforcement requires that the therapist creates a resemblance of the daily life of the community where the client resides in the counselling session by using generalization of happenings outside of the therapist-client relationship.

**ii. Generalization**

Generalization refers to the process of learning new behavior and successfully applying the learnt behavior into some other areas of life due to the existing factual relationships in the given environments (Kohlenberg, 2010). Kendra (2016) supportively asserted that the generalization of similar circumstances reveals the likeliness of a stimulus that has been conditioned to evoke a range of related responses after the having conditioned the responses. In operant conditioning, stimulus generalization explains the ability to apply the knowledge acquired in one situation to similar situations therefore, Functional Analytic Psychotherapy creates a therapeutic interaction that enables clients to apply changes experienced in the counselling session to real-life situations outside the counselling session. Also, Jeffery (2016) submitted that stimulus generalization enables the transfer of learned responses to other stimuli with the greatest amount of transfer occurring to situations or objects that are closest in terms of similarity to the conditioned stimuli. This enables the client to transfer the responses of abstinence from the drinking addiction to other similar addictions relating to substance use addiction such as sexual addiction.

**iii. Functional Analysis**

Functional Analysis intends to find an answer to the reason a behaviour is elicited or unravel the reason why a client would participate in a specific kind of disposition or choose to take to a specific pattern of behaviour by ascertaining the basic triggers of such behaviour as well as the after-effects that prompt the occurrence of the behavior. Critically analyzing the function of a behaviour leads to therapeutic interventions which are more individualized (Tsai, Kohlenberg, Kanter, Holman and Plummer, 2012). This was supported by Kanter (2010) stating that Functional Analytic Psychotherapy (FAP), requires the understanding of the behaviours that are clinically relevant (CRBs) which are referred to as such behavioural classes of response which are the sole interest of FAP whereby FAP focuses on client's problems problem behaviours as demonstrated in the counselling session (CRB1) and anticipated positive changes from those problem behaviours

(CRB2). Similarly, Manduchi and Schoendorff (2012) asserted that a behaviour is clinically relevant when it serves the same functions in and out of the counselling session.

One of the long lasting criticism of Functional Analytic Psychotherapy is that the counselling atmosphere shares no resemblance with the real life scenario, which obviously is an invalid argument that lacks any form of valid substantiation as behaviourists are applauded for the ability to manipulate various conditions in order to enable it elicit behaviours that are inconsistent or out of the norms to it. For instance, the story of little Albert being conditioned to react differently to a mouse. Hence, the therapist may choose to manipulate the counselling room to elicit responses such that would be elicited in client's natural environment. Hence, the possibility of triggering the occurrence of daily life responses during the counselling session is positive despite the differences in the physical features of the environment, the purpose of which is to determine how much progress has been achieved since the initiation of therapy. Therefore, the functionality is focused on the ability of both the counselling session and the real life condition to evoke the same or related behavior, as both based on the practical application of FAP doctrines are supposed to be functionally similar in terms of the responses they trigger (Kohlenberg, 2010). Tsai, Mckelvie, Kohlenberg and Kanter (2009) similarly stipulated a stepwise process for relating with CRBs which includes:

**i. Rule 1: Notice CRBs**

Busch, Kanter, Callaghan, Baruch, Weeks and Berlin (2009) approved the fact that the occurrence of CRBs in the therapy session is absolutely unavoidable which can be presented by clients in different forms such as a client who deficient in social skills as per ability to make friends may be unfriendly during the counselling session and alienate the therapist, also, and a client with aggressiveness tendency may be hostile to the therapist during the counselling session. In the same vein, a counsellee who stammers or seeks for affection, displays vulnerability or experiences compulsive desires for alcohol, will display such behaviours as well during the therapy session. It is the professionally required of the therapist to examine and identify these behaviours as they are exhibited. Therefore, the first step focuses on the skill of the counsellor to ensure importance is attached to the awareness of the CRBs elicited by the client during the counselling session. This is widely supported by researchers stating that it is the responsibility of the counsellor to take cognizance

of these behaviours as they unfold (Kanter 2010, Tsai et al 2010, Wilson and Schlam, 2004). Linehan (1993) also asserted that the major procedure of practising FAP principles is that the therapist should be ont the watch out for behaviours that are clinically relevant (CRBs) and also proceeded to aver that both the in-session eliciting of client's problem behavior known as CRB1 and clients improvements known as CRB2 are all clinically essential to enhance a successful therapeutic relationship.

**ii. Rule 2: Evoke CRBs**

Also, apart from noticing the CRBs, there is the necessity to evoke CRBs which is majorly enhanced by a well-structured interface between the therapist and the client (Tsai et al., 2008). Kanter (2010) also supportively posited that the therapist should engage the client in a counselling conversation that can trigger the eliciting of CRBs from the start or early in a therapeutic session with keen attention given to client's experiences and expressions, as well as combining techniques from several therapeutic methods with a clear focus to functionally evoke key behaviours in clients.

**iii. Rule 3: Respond Contingently to CRBs and Naturally Reinforce CRB2s**

The primary intention of FAP was to organically trigger CRB2s that Tsai et al. (2008) has widened to involve prompt reaction to all CRBs which are elicited by the client in a counselling session. Tsai further posited that this is an important rule that stands-out FAP form of therapeutic principles. The most exciting moments of FAP are periods when

CRB2s (client's improved behaviours) happen as a result of which the therapist becomes automatically impressed for the progress made such that the therapist gives a positively reinforcing feedback in the most sincere way such that therapist's responses are not monotonous but is culled out of a well-groomed relationship and therefore carries more weight than just any random kind of reinforcement. This proceeds from a caring and genuine relationship which the therapist has painstakingly developed from the beginning of the therapeutic interaction. However, caution should be taken when using reinforcers because if not used with genuineness, it may lose its potency as supported by Wachtel (1977) who was swift to notice that therapists in the behavioural sciences were usually too monotonous in their use of praise, hence, reducing its efficiency. Therefore, the use of reinforcement in psychotherapy has more often than not posed a major dilemma. However, FAP

provides a guideline that is structured in order to arouse the therapist's unpretentious reactions to the behaviour of the client in a unique but professional way to reinforce improvements as they occur in therapy (Kohlenberg and Tsai, 1995).

**iv. Rule 4: Observe the Potentially Reinforcing Effects of Therapist Behaviour in Relation to Client CRBs**

This is absolutely linked to the principles of behavior analysis placing emphasis on the relevance of the aftereffects of a particular behaviour on subsequent possibilities of such behaviour re-occurring. Therapists in FAP are keen at carefully observing the extent to which the behaviors elicited by them during therapy in an attempt to evaluate the reinforcing effects in terms of how far such behaviours have been able to achieve either a decrease in CRB1s or an improvement in CRB2s. Kanter (2014) asserted in support of Kohlenberg's view by positing that in order to understand and successfully apply rule 4, therapists must work with an understanding that reinforcements are functionally defined by behaviourists as any occurrence that propels an increase in the eliciting of a desired behaviour, not superficially, as any type of occurrence. Hence, for a therapist, who is using FAP, to ascertain whether Rule 3 is successfully taking place, Rule 4 empowers the therapist to study patient's behavioural fluctuations over a specific timespan in measuring how successful reinforcement had been.

**v. Rule 5: Give Interpretation of Variables that Affect Client Behaviour**

Consistent with the usual method, the client's behaviour is analyzed based on past attitude towards therapeutic instructions and strength of relationship. This stage is essential for two important reasons namely; proper analyzing of factors or events moulding client's behaviours can help in providing counselling instructions, or rules and secondly can help in giving either positive or negative reinforcements or both depending on what is most applicable (Ferster, 1979). Kohlenberg and Tsai (1991) deliberately introduced the fifth rule to provide an avenue for functional analysis of client's behaviour which is the peak of FAP's initiative in psychotherapy. The interpretation is to single out the causes and consequences of a target behaviour and to generalize the achievements made during therapy to normal daily life of the client. However, recently, more advancements were made on rule five as it has been expanded to provide for homework assignment which should be deduced from a successful interaction during therapy (Tsai et al., 2008).

Kanter, Holman and Wilson (2014) argued that it is expedient to understand that CRBs being the most unique innovation of FAP to psychotherapy are not predetermined before the beginning of FAP therapy but are arrived at during therapy and often redefined in the process depending on what tendencies are discovered during psychotherapy in the client. Therefore, while goals are defined in advance by a cognitive therapy (for example, reducing depressive feelings about self, the future as well as the world), the FAP therapist will instead be guided by the five rules of FAP to assess and interpret CRBs as presented by the client which give direction to psychotherapy in FAP and collaboratively decide the goal of therapy which is done as many times as required based on the CRBs presented by the client. Although FAP has been criticized for placing more weight or emphasis or better still attaching more importance or preference to on rules, pure logic or principles rather than on observations that have been verified or concrete experiences (Corrigan, 2001). It is of immense importance to however understand that five rules of FAP are well tested, approved, established and foolproof behavioural fundaments which are summarized thus: Stimulus control (Rules 1 and 2); Reinforcement (Rules 3 and 4); as well as Generalization (Rule 5). Secondly, numerous convincing and congregating lines of confirmation alluding to the veracity of FAP exist from behavioural to several other literatures (Baruch, 2008).

### 2.1.11 Psychoeducation Therapy

The concept of Psychoeducation originated from the field of medical sciences as it was used for the first time in a literature article in medicine written by Donley E. John tittled ‘re-education and psychotherapy’ published in 1911 in the journal of Abnormal Psychology. However, in 1941, the word “Psychoeducation” was initially mentioned by Brian Tomlinson in a book he wrote titled “The Psychoeducational Clinic”. Though, it was conceived as a term to treat patients suffering from schizophrenia by C.M. Anderson, a renowned psychologist and it was popularized based on that premise in the earlier stage of its use, being adopted for educating relatives of individuals suffering from schizophrenia about the symptoms and process of the disease (Anderson, Hogarty and Reiss, 1980), it has been adapted to resolving other prevailing issues in psychotherapy.

Psychoeducation is an evidence-based psychotherapy initially developed to help patients with mental illnesses and their family by providing information that enhances a more enlightened understanding of the illness in an attempt to empower

them to cope with such illnesses which included; mental disorder symptoms such as breakdown in thoughts, emotions and behaviours, chronic depressive mood swings, anxiety, absence of connection with reality, poor eating pattern, personality disorders and autism and later advanced to being used in treating individuals with physical illnesses such as cancer (Tay, Peter, Seow and Dennis, 2016). Psychoeducation has been discovered to improve recovery and reduce the possibility of relapse among clients in psychotherapy through the provision of education on problem-solving, coping, teaching of emotional-social skills and communication skill in an enabling environment (Pekkala, 2002). Therefore, Psychoeducation is the education provided for individuals with mental health, physical, psychological or emotional issues that are incongruent with optimal performance with the goal of helping such individuals understand the features and sources of the problem and possible solutions so as to engender coping and improve worth of life. Greater level of adherence, reduced relapse rate as well as lowered pathological condition accompany Psychoeducation (Knuf and Seibert, 2001).

Psychoeducation is conceived as a combination of a wide range of therapeutic packages with its dimensions including clarification (causal attribution), therapeutic intervention (relationship level) and improvement of coping capability (control attribution) (Bauml, Frobose and Gabrielle, 2006). Therefore, psychoeducation treatment encompasses various psychotherapies such as self-assertiveness skill training, behavioural therapy, problem solving training, as well as communication training. Hence, a psychoeducation therapist must be vast in the administering or providing of several other therapies as they all contribute immensely to the treatment package and goals of psychoeducation. However, caution should be taken especially bothering on the robustness of the programme to ensure that psychotherapy does not become a burden according to Cummings and Cummings (2008) positing that psychoeducation therapists should avoid overloading clients with too much information in a single session, but ensure to elucidate the benefits of the information to the goal the client intends to achieve, avoid the use of a single method in communicating information to clients but rather engage a didactic method which varies from videos, handouts, role-play, group discussions, to picture slides so as to make each session highly engaging, educating and interactive.

Psychoeducation is a combination of health psychology and counselling focused on behaviourism together with psychotherapy (Cumming and Cumming,

2008). Also, Lukens (2015) posit that Psychoeducation is a client focused strategy to therapy that connects educational and counselling strategies which can be employed to provide adequate care for individuals with several biological, mental and other life challenges. Therefore, as a treatment package that serves as a combination of "Psychotherapy" and "Education", both aspects of it function differently but collaboratively such that the educational component provides vital knowledge and care procedures about both biological and psychological aspects of life challenges or illnesses giving clients a clear analysis and understanding of their experiences while the psychotherapeutic component makes available life coping skill training necessary for adapting to various changes in life style as necessitated by the knowledge imparted through education, a kind of positive thinking through cognitive restructuring exercises programmed to ameliorate the gravity of the mental or physical challenge, depth, feedback, safety and time-space that enables participants to accept information that may be unfamiliar and challenging and may trigger complex emotions. This may be somehow difficult but can be achieved by professionals helping to develop the relationship and equity between both concepts by providing clients the opportunity to increase their level of understanding and to take responsibility of giving a close monitoring to symptoms and triggers, interpret response positively, understand complicated feelings and develop sense of coping and healthy living skills that boost hope and that can be practically applied to everyday situations.

Psychoeducation is a form of therapy that can be offered in groups or one-on-one and each has proven to be effective by various studies (Colom et al., 2003; Mattei et al., 2015). Psychoeducation when offered in groups provide social support for the participants.

Today's patients and caregivers want information, education and a complete understanding of their condition and its treatment (Swaminath, 2009). Psychoeducation enables client understand their challenges as well as provide knowledge of life coping skills, together with resources that may be external or internal which are provided for client's recovery, strength identification and recovery as well as maximally being in charge so as to feel more in control of their conditions and have a greater intrinsic potential to develop and improve mental and emotional well-being.

Psychoeducation is known for the ability or tendency to increase compliance with treatments. Psychoeducation came into being as a result of the gaps created by existing psychotherapeutic treatments such as Psychoanalysis which places emphasis on uncovering how a client's past still lingers to the present in everyday life positing that painting vivid picture about past experiences or clarifying deep seated issues therefore enabling an individual to breakthrough life overwhelming circumstances that got him stuck with deeper awareness and understanding, however, researchers have vehemently criticized psychoanalysis on the basis that psychoanalysts are mere witch doctors and the theory has been adjudged to be highly unscientific by claiming to read the mind (Torrey, 1986; Graubaum, 1993).

Cognitive behaviour therapy focuses on how self-talk can really change one's life, however, thought processes cannot singlehandedly change the way things work, most importantly in situations when some behaviours have become habitual and are almost a form of addiction, hence irrespective of the fact that irrational thoughts have been identified, and knowing how such can be replaced with more positive ones, clients remain helplessly stuck due to lack of skills to effect a change. This therefore necessitates the need for a psychotherapy that empowers clients with skills to maximally benefit from psychotherapy where the functions of a psychotherapist go beyond the skills of listening, ability to support and provide healthy feedbacks but to teach which does not mean "telling" but imparting knowledge about the strategies that they might not have learnt in school or life. Therefore, empowering clients with the tool for life and helping them experience change constructively by offering clients opportunities to try out new behaviours, thoughts and skills. Hence, practical exercises may be able to breakthrough even the addictive behaviours and defences (Lukens and McFarlane, 2004).

Psychoeducation provides basic form of help that is psychological in nature by combining psychotherapy and education majorly in such a way that it provides an approach that is multimodal in nature bringing in different techniques within a single therapy (Cummings and Cummings, 2008). Psychoeducation aims at broadening the understanding of the client regarding their problems, causes, prevention and cure as well as promote treatment adherence (Menezes and Souza, 2012). This therapy uses appropriate language suitable to communicate effectively with a target population which could be through different means including videos, manuals, lectures and conversation wheels (Bai, Wang, Yang and Niu, 2015).

The primary goals of Psychoeducation involves the impartation of knowledge on the different stages of health challenges including signs, symptoms, stages, pattern of progression, effects, and predictions of possibilities of re-occurrence and how to avert such, unmasking the myths about certain health conditions and creating general awareness, assisting individuals in expanding knowledge regarding "dos" and "don'ts", and the knockon effects of treatments. In the addicitive intake of alcohol, interventions in psychoeducation have high transformative potentials such that it is incorporated in the processes of treatment with well-structured treatment routine (Bhattacharjee, Rai, Singh, Kumar, Munda and Basudeb, 2011). Also, behaviour modification therapies are increasingly emphasizing the importance of Psychoeducation in achieving successful behaviour amendment or modification (Wood, Brendtro, Fecser and Nichols, 1999).

Furthermore, Anyamene, Nwokolo and Maduegbuna (2015) posited that it is a therapy that tend to understand the emotional attachment to behaviours which is demonstrated through proper attention to the identification of antecedent of behaviours, realistic evaluation of triggers, equipping for the ability to rationally assess situations to reduce negative thoughts as well as enabling people eliminate future negative tendencies by inculcating problem-solving skills. In the same vein, Clarion (2013) averred that Psychoeducation technique usually engages different counselling strategies in the various sessions with three main goals: upgrading participants' skills coping with distressors and selfmanagement potentials, equipping participants with the assistance necessary for managing their behaviours and enlightening participants regarding causes, consequences as well as strategies to addressing behaviours. Hence literature is convincingly loaded with evidences that Psychoeducation or psychoeducational strategies involves a wide possibilities of activities that blend education and psychotherapy including supportive interventions (Oncology Nursing Society, 2016).

Studies have proven psychoeducation programme to be effective in reducing Attention Deficit Hypersensitivity Disorder (ADHD) (Ferrin, Perez-Ayala, EL-Abd, LaxPericall, Jacobs, Bilbow and Taylor, 2016). It has a history of success with schizophrenic patients (Maffi, Georges, Kissling, Schreiber and Rummel-Kluge, 2015; Uchino, Maeda and Uchimura, 2012; and Xia, Merinder, and Beigamwar, 2011). It has also been very effective in helping patients with breast cancer increase psychological wellbeing (Cappasso, Martins, Pella and Giraldi, 2010). The

Psychoeducation therapy has also been effective in reducing anxiety (Agberotimi, Olaseni and Oladele, 2015). These studies are commendable but most of them are foreign and cannot be adapted to the Nigerian society while some are descriptive and did not proffer a treatment. However, this study would be an experimental study with a focus on the NURTW with an objective of reducing alcohol addiction.

### 2.1.12 Somatosensory Affectional Deprivation (SAD) Theory of Drug and Alcohol Use

Somatosensory Affectional Deprivation Theory of Drug use was propounded by Prescott in 1970. Prescott proposed that alcohol addiction has been traced scientifically through various researches and scholars to lack of physical touch and nurturance at infancy, this is buttressed by Siegel and Weil (1989) that the most comfortable method to create depressive mood and separation in a baby, an infant or child is by not touching, holding or carrying the child, anchoring their assertion on extensive scientific researches which have validated the fact that these methods of arousing one or more of the five senses including the senses of seeing, smelling, hearing, tasting and touching during the period of brain formation is very important for proper growth and development of the structure and function of the brain. Therefore, depriving an infant any of these experiences (sensory stimulations) as mentioned by Siegel and Weil (1989) is what raises the challenge of Somatosensory Affectional Deprivations (SAD) which is basically a malfunctioning or reduction in the brain capacity due to the absence of affection and nurture majorly at infancy or early childhood. This according to Siegel and Well (1989) has given a significant answer to the reason why there exits an insatiable appetite for drug and excessive alcohol consumption in humans resulting in an addictive pattern of alcohol or drug use as altered state of consciousness or lack of touch with reality is the utmost goal.

SAD describes how affectional deprivation in modern cultures has resulted to persistent feeling of sadness, social isolation, excessive fear and worry, loss of zeal for dayto-day life demand, aggressiveness and anger that trouble the present generation of humans in operating successfully in the modern cultures with all its demands and ills (Prescott, 1989). Scholars have affirmed the fact that the aspect of the brain that produces pleasure releasing hormones, when activated restrains the functions of those parts of the brain that releases depressive and violent hormones and vice-versa, therefore, when the part of the brain that releases the hormones for excitement and pleasure is destroyed or incapacitated through SAD, then the

functions of restraining those parts of the brain that create depression and violence is jeopardized (Prescott, 1971; Essman and Casper, 1978; Prescott, 2010). Hence, the somatosensory affectional deprivation theory of drug use, one of the developmental psychological theories, is propounded to provide generally accepted view for the several and varying theories of substance abuse.

The Somatosensory Affectional Deprivation (SAD) theory proposes that the growing or newly formed human brain is at a stage that is far from being mature at birth and it depends largely on the stimulation of the sense organs for its healthy maturation, advancement, capability and how it is structurally organized to function (Prescott, 1980). The views of Holder, Coleman and Wallace (2010) and Prescott (1970), (1975), (1980), align with the submission of James and Prescott (2017) stating that SAD theory is established on the view that the healthy development of the physical and psychological aspects of an infants' life is largely dependent on not less than three sensory procedures which are; Vestibular Cerebellar system which is concerned with posture, balance as well as fine voluntary coordination and movement and recently discovered to possess the ability to be helpful in cognitive processes, the Somesthetic system is concerned with the sensory information acquired from the muscles, skin and body organs and the olfactory system which refers to the sense of smell which helps in the ability to recognize careers therefore, the inhibition of sensory stimulations in any of these systems in the life of infants during the stage of brain maturation and development can hinder the affectional formation of bond between the mother and the child, resulting in two major disadvantages namely; it inhibits the development of a secondary affectional connection and also depreciates the capability as well as potential of creating affectional bond with offspring leading to a generational transmission of drastically reduced ability to form such bonds.

Likewise, Cook (1996) asserted that nations are at heightened risk of failure due to the development of poor maternal-infant-child relationship and affection which has given rise to numerous risk for aggressiveness, low tolerance level, depressiveness and violent destructive behaviours. Also, several cross-cultural studies have long reported that the poor affectional bonding relationship between a mother and the infant child is responsible for increased tendency for low level of excitement and severe mood swings, destructive, violent, and alcohol addictive behaviours (Ember and Ember, 1997; Prescott, 1975; Bacon, Child and Barry, 1963).

Somatosensory Affectional Deprivation (SAD) has been useful in giving tenable explanations about variety of behavioural misconducts such as violence (Prescott, 2017), and the tendency towards drug and alcohol use. Somatosensory Affectional Deprivation theory provides an understanding of the complexity and delicateness of human growth and development especially during the formative years exposing the effect of the environment and culture in predicting the behavioural disposition of people later in life. Therefore, the therapist treating drug dependence should put into consideration the possible factor that predisposes the client to the addictive behavior thereby carefully choosing therapeutic packages that ensure total withdrawal and that limits the possibility of relapse to the barest minimum.

Prescott (2017) averred that alcohol abuse and addiction majorly negatively tampers with the state of human's emotions and therefore needs to be approached in relation to the prevailing state of an individual's emotion. This can explain how an issue of violence and low tolerance can be a manifestation of a failure of proper nurturance at infancy and the inability to form affectional bonds. Therefore, the deprivation of affectional pleasure and bonds can raise the tendencies to engage in behaviours that are compensatory in nature and the likes of such behaviours are physical violence, alcoholism, drug abuse and stimulus seeking behaviours, being desperate attempts to compensate for the sensory stimulation that was apparently denied earlier in life.

**2.1.13 Self Determination Theory**

Deci and Ryan (1985) propounded the self-determination theory (SDT) in 1985. SDT is established upon the assumption that man by nature devotes constant progressive efforts to the accomplishment of specific goals that are considered important to his life, the important aspect of human potentials referred to by SDT as inherent growth tendencies. Self Determination Theory (SDT), categorised as an organismic psychology in line with the works of Carl Rogers and Jean Piaget, proposes that individuals are living beings characterised by activeness with in-built as well as well-entrenched potentials towards psychological growth and development. SDT holds the view about human beings being in possession of an encouraging level of deep yearning for growth which is inborn and a natural part of their existence. This is empowered by a social environment which provides adequately sufficient triggers intrinsically developed tendencies for change. Ryan

and Deci (2017) in the same vein asserted that the theory consists of three essential elements;

- Human beings possess integrally proactive potentials alongside a mastery of their innate forces like feelings and drives.
- Humans are equipped with inborn ability to embrace growth, advancement and wellstructured functioning.
- High capacity development and attributes for growth are innate to humans but would not happen unaided in most cases except when supported via appropriate grooming from the social environment.

Therefore, support from the social environment such as a well-seasoned therapist can create an enabling context that fuels the innate motivation resident in a client to detach such an individual from health endangering behavior such as alcohol addiction which depreciates performance by impairing the functioning of the mind. Quite alarming is the rate at which human behavior due to lack of competently motivating social environment has reduced the strength of medicine to curb and prevent health challenges rooted in addictive behaviours. Therefore, to enhance a well-functioning body, there is an urgent need to encourage healthy lifestyles in individuals to optimize efficiency and effectiveness at work. Self-determination theory focuses on the procedure that impacts a high level of motivation into a client, sufficient enough for creating new health enhancing attitudes and religiously observing or adhering to such overtime (Ryan and Deci, 2008). As a theory of motivation, SDT has been able to prove beyond reasonable doubts that factors relating to rewards, sanctions, imposition of rules and regulations, opportunity to make choices, and level of challenge mould clients' experiences in terms of embarking on the processes of goal achievement which eventually turns out to determine the extent to which behavioural persistence can be sustained to achieve desired outcomes (Deci and Ryan, 2000).

Self Determination Theory is a highly encompassing and extensive theory that delve into how humans can be motivated into achieving difficult but desirable tasks, the influence of personality development on goal achievement with strong emphasis placed on voluntary or selfdetermined behavior and the contribution of the society in creating healthy environments that promote goal achieving possibilities (Ryan and Weinstein, 2009). Deci and Ryan (2000) posited that research on SDT developed from studies that seek to find the variances between the extrinsic and

intrinsic motives in which intrinsic motivation connotes the urge and the act of engaging in a task for its own sake, because of the sense of satisfaction the completion of such tasks brings by itself and not engaging in a task because it aids the achievement of certain external goal. For example, there is a difference between someone who is getting married with the extrinsic goal of raising children and someone deciding to be married for the sake of the satisfaction that being married brings. The latter has higher tendency of staying in marriage longer than the other as the goal of child raising if not achieved in good time may frustrate the individual out of marriage. Self-determination comprise a set of delicate patterns of behaviour of the human self which settles on the foundation of intrinsic motivation. This is confirmed by Ryan and Deci (2017) positing that there is the existence of three different psychological needs which serve as motivation for the self to launch a behaviour specifically authenticating the essential roles of these in determining the mental wellbeing and psychological health of people with these needs adjudged as ubiquitous, psychological and innate, and these are the need for psychological relatedness, autonomy and competence.

## Self-Determination Theory Theoretical Framework

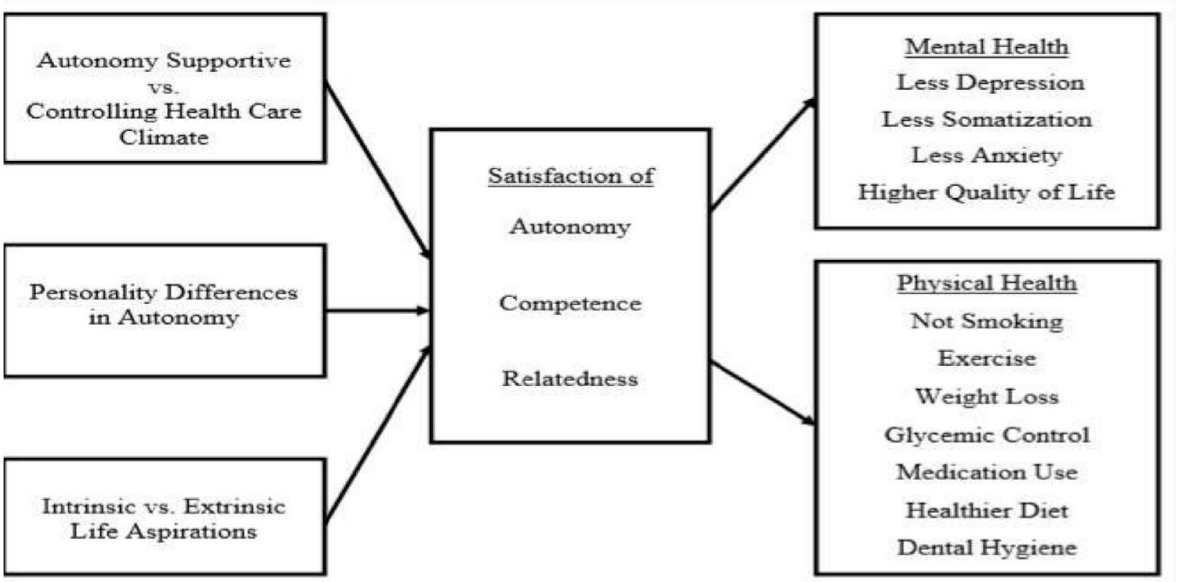


**Figure 1** Self-Determination Theory Model of Health Behaviour Change

## Self-Determination Theory's Five Mini Theories

Self-Determination Theory (SDT) was developed and validated using the theory formal framework which has a combination of five mini theories (Brown and Ryan, 2003; Chirkov and Ryan, 2001; Niemiec, Ryan and Deci, 2009).

These theories are:

i. Cognitive Evaluation Theory (CET);

ii. Organismic Integration Theory (OIT);

iii. Causality Orientation Theory (COT);

iv. Basic Psychological Needs Theory (BPNT);and

v. Goal Content Theory (GCT).

**Cognitive Evaluation Theory**

Cognitive Evaluative Theory (CET) explains the processes through which the social setting and interpersonal relationship would either improve or discourage intrinsic motivation which is sourced from the sense of satisfaction emanating from undertaking a task for its own sake (Ryan et al., 2010). CET emphasizes the importance of freedom of choice and the assurance of competence to intrinsic motivation. It also argues that targeted activities at reducing the capacity of an individual to have the option of choice as to whether to embark on a task or not, diminish intrinsic motivation (Chirkov et al., 2003). Deci, Koestner and Ryan (1999) posited that according to CET, the reason for low effectiveness of financial reward as a form of motivation for a required level of persistence in the quest to achieve set goals is because it is extrinsic and the satisfaction derived from it is subjective in nature therefore, resulting in a form of distraction to the achievement of set goals. CET elucidates the relationship of autonomy and competence to successfully undertaking and completing an action and borders on how variables like rewards (financial or material), pressure, feedback and deadlines affect belief in one's sense of autonomy and competence and thereby reducing intrinsic motivation.

**Organismic Integration Theory**

Organismic Integration Theory is founded on a proposition that the higher the level of someone's sense of autonomous to the onset of an action, the higher the person's motivation, leading to an increased level of persistence, performance and

wellbeing in an activity or specified task. This is in agreement with the views of Ryan and Deci (2008) that people have more likelihood to accept and adhere to a practice, belief or value if there is an avenue to make choices in regard to it, that is, there exists a form of flexibility to the task in question, self-assurance as to their inherent capability in achieving success in the task as well as an existence of a form of connectedness with those who promote the idea, activity or process. This therefore implies that cessation from drug addiction can be fostered when the client is allowed the freedom to decide whether to desist or not, decide the period to attain complete cessation as well as work more closely with individuals or live in an environment that can support their determination to withdraw from the addiction. It also implies that self-efficacy is key which is defined by Albert Bandura (1997) as the judgement that individuals hold about their tendencies to learn or execute causes of action at designated levels which in summary is simply the self-perception that individuals hold about their capabilities.

**Causality Orientation Theory (COT)**

Causality Orientation Theory stipulates the importance of a person being autonomyoriented whereby enabling such an individual to be engrossed in activities or tasks that appeal to their interests therefore voluntarily eliciting actions that are in congruence with his values. The theory stipulates that Self Determination is more often than not depreciated when an individual is control-oriented thereby externally regulating behavior by yielding to social demands and reward systems (Vansteenkiste, Lens, and Deci, 2004).

**Basic Psychological Needs Theory (BPNT)**

The BPNT is shouldered on the philosophy that any behavior that meets psychological needs of individuals is naturally satisfying and it presents feeling of wellness. Therefore, the desire to withdraw from drug addiction should be psychologically satisfying to enhance motivation to desist from such substance use dependence. BPNT asserts that each need has its own kind of effects on mental, physical and psychological wellness, and also that the effect of any form of behavior or attitude on all-round wellbeing is to a very large extent a function of its connectedness with need satisfaction (Ryan and Deci, 2007).

**Goal Content Theory (GCT)**

Research has revealed that material-oriented rewards and other extrinsically oriented goals such as popularity and affluence usually lack the tendency to achieve satisfaction of need and therefore do not boost wellbeing even in instances whereby one achieves them successfully (Niemiec et al., 2009, Kasser and Ryan, 1996). There is higher potency for goals channeled towards intrinsic aims to be better stuck to rather than the ones informed by extrinsic rewards (Vanteenskiste et al., 2006). Therefore, based on this theory, alcohol dependence cessation as a goal of counselling interactions should place emphasis on its intrinsic satisfying tendencies. This will strengthen the level of determination of the clients and increase his resilience to relapse. The therapist should focus intensely on the intrinsic motivation such as increased self-worth, self-efficacy, health, etc. as these would sustain the interest of the client in the journey to gain independence from alcohol addiction.

Health researchers, such as Rothman (2000), have expressed the health behavior pattern of change as that which involves the double tasks of starting the process of change which involves sustainability for success and then retaining the desired change. Although there exists several methods that can be used in starting the change process which ranges from an external measure of control such as using incentives or rewards positively to followup on adherence, there exists a major problem which has to do with the procedures for maintaining a particular level of success or preventing relapse. However, SDT in contrast specifically targets the method by which someone develops the interest for starting a new health enhancing behaviour and sustaining such for quite a long time period.

SDT proposes that developing a propensity for freedom of choice or independence and efficaciousness are essential to the enhancing successful internalization and integration by which an individual can personally control and sustain behaviours relevant to healthy living and well-being. Therefore, psychotherapeutic sessions that promote freedom of choice, support and belief in client's capability have higher likelihood to promote adherence and expected change in behaviour. Also, it is of immense importance to the process of internalization in SDT's view that there is a sense of connectedness wherefore SDT believes people higher tendencies to develop values and behaviours driven by those with whom they have a sense of connectedness and in whom they trust. Therefore, SDT focuses on Autonomy, Competence and Relatedness.

**Autonomy**: Autonomy according to the proponents of SDT assumes that majority of the health-related behaviours, such as embarking on series of physical exercises, increased compliance to prescribed medication or quitting alcohol addiction are not often intrinsically motivated or enjoyable activities inherently. Therefore suggesting that if such behaviours would be successfully implemented with adherence being ensured in places external to the treatment settings or controlled environments, clients would have to take up the responsibility of placing value on the behaviours of interest and voluntarily approve its relevance. SDT has been labelled "controlled motivation theory" and external regulation is one major type of controlled drive which is a condition whereby a person's interest is geared only towards obtaining an external reward, punishment avoidance or compliance due to social pressure.

Also, controlled motivation can take the form of introjection which is a situation in which a client resolves to comply with a particular demand so as to obtain praise or commendation or to avert feelings of guilt or disapproval. However, relating to the proposition of SDT, both forms of controlled regulation, are absolutely disconnected from long-term adherence, hence SDT preferred an autonomous motivation which is the kind of regulation whereby someone personally approves of or deliberately agrees with the value or importance connected to a behaviour which therapists achieve by providing client with useful information and convincing reasons for change without exerting controls that are external, mounting pressures or instilling fear. Furthermore, SDT perceive as most autonomous the process of integrated regulation in which an individual does not just value a behaviour but has also adapted such as being a core personal principle out of which behavioural choices and patterns emanate (Ryan, Patrick, Deci, and Williams, 2008). SDT therapists encourage integration by providing supports to clients as they explore impediments to change, and discover relevant paths to living healthier lives. As SDT suggests, identified and integrated motivations are associated with engendered maintenance of change in behaviour and are autonomous.

**Competence**: Competence is a component of SDT because it works together with a sense of autonomous internalization requiring a person to be confident of his competence to make change happen. The SDT model of change establishes the fact that developing competence is enhanced by the freedom connected to the choice of embarking on a task, implying that the moment a client is voluntarily determined to desist from a behaviour or inculcate a new behaviour having significant level of

willingness to act, such clients have the greatest probability to creatively apply fresh competencies and methods and learn (Markland, Ryan, Tobin and Rollnick, 2005). However, SDT's argument opposes the theory of self-efficacy (Bandura, 1989), by proposing that competence must be accompanied with autonomy or volition in order to enhance adherence, as only competence may not suffice.

**Relatedness**: Several behavioural modification models have submitted that the bond between the therapist and the client is a veritable avenue to facilitate alteration in psychotherapy. A healthy relationship according to SDT theory is premised on; a sense of deeply rooted sense of being respected, a feel and re-assurance of empathic understanding and being cared for. These are key elements in building up trust-enriched relationships producing connectedness that allow the occurrence of internalization, subsequently increasing the probability of achieving the desired behavioural change. SDT has proven effective in developing and maintaining health enhancing change in behavioural (Patrick, Williams, Fortier, 2007; Williams et al., 1998; and Ryan and Deci, 2007). This study was hinged upon Self Determination Theory as motivation, autonomy as well as relatedness which serve as the main emphasis of this theory are necessary components of a successful and sustainable withdrawal from addiction and most importantly the fact that with these core values of SDT (that is, motivation, relatedness and autonomy), the possibility of the occurrence of relapse is sufficiently low.

Though many researches have been conducted through Self Determination Theory like the clinical instructor behaviour and SDT-based analysis on student clinical engagement (Knight, 2016), empirical nexuses between self-determination and achievement goal theories in sport (Ntoumanis, 2001), increasing student success through instruction for self-determination (Ryan and Deci, 2017) but these studies have not been geared towards investigating the effectiveness of SDT in reducing alcohol addiction.

### 2.1.14 The Concept of Self Efficacy

Self-efficacy is a psychological term used in expressing the degree to which an individual believes in her or his capability to execute a given duty and achieve expected result. This is affirmed by the assertion of Bandura (1977) that self-efficacy explains the confidence a person can repose in his ability to execute and achieve a desirable result. This therefore suggests that there is a connection between the inherent existence of a potential and the self-awareness of such existence, in terms of

its depth, intensity and workability which is evaluated based on the extent to which it can be put to use as a tool to achieve a desired result which is measurable against a norm and can be adjudged to be satisfactory.

Also, Bandura (1989) posited that self-efficacy decides a person's level of determination to achieve a specified goal as well as vulnerability to distressors and adverse conditions connected to goal achievement. Thus, it can be deduced that Self-efficacy may be a determinant of the level of resilience an individual can exhibit in the quest towards accomplishing a goal.

Self-efficacy may be contingent on situation such that a person may demonstrate self-efficacious belief in undertaking some activities while in other activities, the reverse may be the case, also, self-efficacy may be culture specific in which individuals of certain cultural orientation may demonstrate higher level of self-efficacious beliefs than others in certain sphere of life due to conditioning, however, there is a general sense of self-efficacy as surmised by Adeyemo and Adeleye (2008) that general Self-efficacy is a wide and consistent sense of competence to handle effectively various distressful conditions and achieve desired result. However, in order to achieve the fulfilment of desired goals in specific situations, individuals require an intense sense of task-specific self-efficacy alongside the exertion of unrelenting effort to prevail over unavoidable impediments in life (Bandura, 1997).

Also, Artino (2012) averred that self-efficacy is a personal belief in her or his expertise in organizing as well as executing lines of action necessary for the achievement of designated forms of performances which can be expressed in terms of the self-confidence reposed in one's self to successfully initiate and complete a task. This portrays self-efficacy as a conclusion arrived at after a thorough self-evaluation of a person's strengths and weaknesses in relation to certain tasks or situations.

Therefore, based on the assumption underlying the concept of self-efficacy, it is not sufficient enough for an individual to possess the required skill to achieve a designated task but must as well possess the conviction of their capability to succeed in the required task (Bandura 2006, 1997 and 1986). This conviction is derived from various life experiences which according to Bandura 1997 include; (a) Enactive Mastery experiences revealed through actual performances (b) Observation of others (c) Types of Persuasion which may be verbal which may be projected through verbal

or non-verbal means (d) Physiological and affective states from which individuals judge their capableness, potentials and level of resilience in challenging tasks. However, among all these, Bandura posited that the most valid and reliable information about an individual comes from enactive mastery experiences as consistent experience of success in certain tasks can raise self-efficacy while consistent failure reduces it.

Self-efficacy is vital in the achievement of life goals as it determines the degree of resilience that individuals display in the face of challenges that arise in the process of goal achievement. In the same vein, Bandura (2006) posited that selfefficacious people expend more effort and an enduring level of persistence towards the achievement of goals than those with low level of efficacy, hence, there is higher tendency of more successes for self-efficacious individuals as low self-efficacy in highly self-limiting and a high predictor of failure. Therefore, individuals in the process of quitting alcohol addiction may require a satisfactory level of self-efficacy to quit their addictive behaviour. Also, self-efficacious individuals might not involve in addictive behaviour as addiction may be as a result of poor coping skill.

Therefore, an individual with high self-efficacy possesses self-regulatory ability that sustains persevering effort and demonstrates positive perception in handling pressures and failures thereby holding the views that encourage resilience and promotion of goal focused efforts. Hence, members of the NURTW with high self-efficacy would perceive daily challenges as normal and would display attitude geared towards resolving daily issues positively while those with low level of self-efficacy would perceive daily life challenges as unsurmountable and take to excessive alcohol intake and other addictive behaviours to compensate for their inability. Therefore, efficacious beliefs influence positively, courses of actions, effort, perseverance in difficult situations, withstanding obstacles and failures, resilience in adverse life conditions, nature of thought patterns, level of distress perception and past accomplishments. In the same vein, low efficacious beliefs can create distressful adaptation to life by reducing the motivation to exercise control over aversive threats and tasking environments.

According to Bandura (2006), a consistent history of success at reducing negative health habits and maintaining it is dependent on self-regulatory ability which shares a connection with perceived self-efficacy as a predictor of how properly people adhere to health enhancing behaviours, as well as response to relapse

possibility being the same for heroin addiction, alcoholism and smoking accompanied by similar issues which may include the inability to control negative emotional state like distress, loneliness and depression, social pressures and personal conflict.

### 2.1.15 The Concept of Distress

Distress is described an emotional state in which a person becomes overwhelmed, worried or out of control. Distress affects humans across all ages, gender and economic status and would culminate into mental, physical and psychological health issues. Distress is basically non-conducive and turbulent emotional upsurge that is laced with biochemical, physiological and behavioural unpredictable changes. Distress becomes unbearable when it negatively impacts on the capability of an individual to lead life in a normal way over a lengthy timespan. Severe distress is the usual reaction to emotional and mental pressure which to quite enduring, lasting for a relatively extended span of time during that the victim seems to be losing hope of possibility of staying in control perceives or nurturing a fear of the probability of a mental stability (Neil, 2013). Also, Timmins (2011) aver that high level of distress subjects the body on a regular basis or on a single occasion with a long lasting adverse effects which obstructs health and inherent potentials for longevity. Supportively, Neil (2013) further posited that high level of negative distress can result into a set of life experiences that are enduring and continuous or progressive in nature, happen in recurrent manner or in a low intensity for a long time.

It is pertinent to reiterate the fact that distress has a sequence of hazardous consequences ranging from poor quality of health, confusion and more often than not addictions as a major way of coping or escape. In the same vein, Robertson (2018) posited that negative distress poses a major problem to the body such that when an individual repeatedly encounters strenuous challenges, the body is triggered to constantly produce higher levels of hormones for which there is a deficiency in its capacity to achieve recovery from due to the continuous nature of the distressor. Also, McEwen (2004) surmised that excessively severe distress, which are regular and recurrent over a long space of time, can have debilitating psychological and physical effects. Expatiating the Mcewen's view, American Psychological Association (2018) posited distress to be capable of resulting to major illnesses such as heart diseases, severe mood swing and obesity. Consequently, Miller (2018)

submitted that an individual perceives as a distressor, situations that seem intolerable involving a series of tasking demands and pressures for quite an unending period of time with no foreseeable improvement resulting in individuals adjusting their lifestyles to accommodate such distressful experiences as a norm and a part of daily living which is highly connected to the members of the NURTW who have adopted an addictive behavioural lifestyle in resolving daily distressors that have consistently served as a major impediment in achieving success in their field of expertise which is the transport sector.

Reaction to acute distress is viewed by Selye (1950) to be displayed in three major phases which include; the stage of alarm, the stage of resistance/adaptation as well as the stage of exhaustion. The alarm stage as projected by Selye explains the first set of symptoms distress inflicts on the boy which encompass some series of "fight or flight" responses that trigger the body to increase heart rates, the adrenal gland to release a distress hormone called cortisol to boost adrenaline thereby increasing energy. Obviously, the body homeostasis is distorted to give protection against attack but which is usually short-lived. The second stage according to Selye (1950) revolves around the attempt by individuals to engage in acts that will assist them in resisting the negatively perceived consequence of the threatening distressor and it has signs and symptoms such as fatigue, irritability, concentration lapses, lethargy, and so on.

Each resistance tried however has varying levels of success largely dependent on the relativity and relevance of the resistance in resolving the distress which is largely limited in capacity as the prolonging of the distressor may exterminate the viability of the resistance therefore, leading to the final stage. The third and final stage of reaction to distress is the

"exhaustion stage" and it is characterized by visible signs of adaptation failure emanating from the inability of an organism to subdue, resist or adapt to distress which has translated to distress. This stage has the possibility of leading to various biopsychosocial symptoms including death in the long-run.

## 2.2 Empirical Literature Review

### 2.2.1 Functional Analytic Therapy and Alcohol Addiction

Kohlenberg, Kanter, Bolling, Parker and Tsai (2002) also undertook a study using a non-randomized, controlled trial of only Cognitive Behaviour Therapy in comparison with another therapy comprising a commixture of Functional Analytic Psychotherapy and Cognitive Behaviour Therapy (that is, FAP + CBT) otherwise known as FAP-Enhanced Cognitive Therapy (FECT) on 16 and 24 clients respectively suffering from depression. Results showed statistically substantial and huge differences between FECT and CBT on relationship satisfaction (d = 0.91), and moderate dissimilarities on social avoidance (d = 0.38). It is pertinent to acknowledge the fact that at post-treatment and after a 3-month period of follow-up, standard indicators of depressive tendencies, remission, response as well as reversion all favoured FECT (having a mean "d" across measures of 0.40 and 0.35 at the post-treatment and follow-up phases respectively).

Gaynor and Lawrence (2002) conducted a study using Functional Analytic Psychotherapy (FAP) on a group of ten (10) juveniles/teenagers who were regrouped into 2 based on the depression severity which indicated compulsive drinking, smoking and attempted suicide tendencies. The researchers employed a protocol that entailed having 16 sessions over an 8-month period succeeded by six (6) months follow-up with interventions and sessions lasting for 2 hours conducted by the therapists. The result showed positive changes in depression-related problems including compulsive drinking and smoking. This therefore serves as an indication that Functional Analytic Psychotherapy can be used in managing addictive drinking and smoking even when the addictive behaviour stemmed from depression. Obtained results showed Robust IRDs (improvement rate difference scores) extending from 0.63 to 1, recording weekly meliorations in depression from a baseline phase of three (3) sessions throughout the combined FAP protocol (LIVE) treatment phase.

Kurtz, Chin, Huette, Tarbox, O'Connor, Paclawskyj and Rush (2003) engage a sample of thirty (30) children (with ages ranging from 10 months to 4 years) over a period of 11 months in an outpatient clinic to assess self-injurious behaviour in its early stages. Functional Analytic Psychotherapy with developmentally appropriate modifications were used in conducting the research with Functional Analytic Psychotherapy being instrumental in discovering sources of reinforcement for Self-

Injurious Behaviour (SIB) with head banging being the most prevalent ones. Function-Based treatments that proved effective were developed for 24 cases.

Ferro García, Valero, Aguayo and Vives Montero (2000 and 2006) and Wagner (2005) carried out studies using open trial of a FAP enhancement approach that commixed the empirically-enhanced Cognitive Behavior Therapy group course Coping with Depression alongside a FAP protocol known as "Living through In-Vivo Experience" (LIVE) on 10 adolescents suffering from depression. Results obtained showed clinically consistent changes in depression as indicated by the BDI-II (first or second edition Beck Depression Inventory) for 7 of the 10 clients. It was however not lucid enough to ascertain if the recorded successes should be attributed to the CWD, the FAP protocol called LIVE, or integrated elements of the protocol.

Kanter, Landes, Busch, Rusch, Brown, Baruch and Holman (2006) carried out a single-subject AB design involving two (2) clients in which they used CBT (Cognitive Behavior Therapy) during the Phase A and FAP (Functional Analytic Psychotherapy) during the Phase B session in treating an array of socially-oriented behaviours (cognitive distortions). While one of the two clients evidenced successful outcomes after the CBT and FAP sessions (Robust IRDs of 0.74 as well as 0.48 across 2 target behaviours), the other client was not successful (with Robust IRDs of 0.25 alongside relatively low treatment attendance) succeeding the phase shift from Cognitive Behavior Therapy to FAP.

Gifford, Kohlenberg and Palm (2011) in a randomized controlled experiment involving three hundred participants investigated the effectiveness of a commonly used drug for smoking cessation otherwise known as bupropion. Acceptance and Commitment Therapy for substance use cessation as well as Functional Analytic Psychotherapy were also employed. The result revealed that the therapeutic instruments were significantly more effective in reducing addiction than bupropion.

Holman, Kohlenberg, Tsai, Haworth, Jacobson and Liu (2012) in a study of five clients examined the integrative therapeutic effectiveness of FAP when used concurrently with other treatments in treating depression-induced addictive smoking using Functional Analytic Psychotherapy and Evidence-Based Practices (EBPs) supportively. Functional Analytic Psychotherapy (FAP) has proven to serve as the basis for the utilisation of the Evidence Based Practices (EBPs) establishing how FAP principles brought about the justification for the use of the treatment protocol which, in turn, was contingent on standard behaviour as well as behavioural

activation therapy for cessation from smoking. Of the clients, three (3) were absolutely abstemious by post-treatment. A participant was abstemious for a period of six (6) weeks, beginning from the fourteenth week of treatment, but consumed cigar on an estimate of < 1 stick of cigarette daily from the last 4 weeks of treatment through to post-treatment, an ample decrease from the rate of smoking at pretreatment. The treatment proved effective as results at the end of the study showed that 60% of clients were successful at smoking cessation (that is, self-restraint from cigar consumption) by post-treatment. A participant was partly abstemious and another had minimised smoking rate at post treatment alongside achieving abstinence for a period of two weeks at the middle of treatment. Results obtained could be juxtaposed with those usually attained during smoking cessation trials as it is commonplace to record 40% to 70% asceticism at post-treatment.

McClafferty (2012) performed similar study using an open trial of FAPenhancement approach that commixed a FAP protocol called “Living through In-Vivo Experience” (LIVE) together with the CBT supported by empirical evidences (Cognitive Behavior Therapy) group course Coping with Depression on an adolescent who was down with depression. By the end of the study, the client demonstrated a significant (95%) level of recovery as another certified measure of depression symptoms known as Patient Health Questionnaire-9 reveals.

Landes, Kanter, Weeks and Busch (2013) conducted another study similar to Kanter, Landes, Busch, Rusch, Brown, Baruch and Holman (2006) using a combination of supportive listening as well as FAP’s Rule 1 (but excluding Rules 2 to 5) in Phase A in place of CBT and the entire FAP procedures in Phase B on four clients who were suffering from varying maladaptive behaviours. It was recorded that none of these clients showed any improvement in behaviour during the Phase A session but all, except one that could not complete the treatment just immediately after the full-stretch FAP Rules were introduced, showed substantial improvements following the phase shift to FAP as indicated by robust IRDs extending from 0.68 to 1.00. This result clearly shows that the success in FAP application is not contingent on only the employing of just Rule 1 or an alliance between Rule 1 and therapeutic procedures outside FAP.

In furtherance of these studies, Lizarazo, Muñoz-Martínez, Santos and Kanter (2015) did a single-subject AB design research using FAP’s Rules 1 and 2 in Phase A and the entire FAP procedure in Phase B session to target the behavioural

disorders of three clients. Results showed worsening or stable behaviour in the A phases of treatment, after which there were evident and stable positive outcomes during the FAP phases for both patients (with IRD records of 0.353 and 0.58) in all of the clients. The trio yet exhibited continuance of improvements at a follow assessment spanning 6 months (Robust IRDs = 1.00).

Dias and Silveira (2016) conducted a study with a commixture of couple's therapy and FAP techniques on a couple as a way of addressing psychosomatic issues bordering on deficient social skills. They documented a below average (40%) improvement in social skills for the female client but no tangible change for the male client. These reported instances signaled the potency of FAP in the management of depression specifically, a psychosomatic condition that may eventually generate major negative tendencies such as addiction. However, using FAP in collaboration with other treatment techniques in the reports above makes it pretty difficult to ascribe observed desirable changes solely to the Functional Analytic Psychotherapy.

Villas-Bôas, Meyer and Kanter (2016) conducted a study following an ABCBC withdrawal design while using behaviourally informed therapy without systematic FAP (similar to Lizarazo, Muñoz-Martínez, Santos and Kanter's) in Phase A, with the introduction of Rules 1, 2, 3 and 4 in Phase B as well as Rule 5 is added in Phase C on two clients suffering from abysmal addictive tendencies. Results obtained from this study showed that the two clients exhibited positive changes during the study following Phase A but the particular addition and removal of Rule 5 in Phase C has an infinitesimal effect on the overall outcomes of the study in both clients. These studies particularly revealed that desirable changes in behaviour become most palpable with the introduction of Rule 3 of the FAP phases.

Maitland and Gaynor (2016) directed a study employing a total of five FAP as well as five supportive-listening (SL) sessions in an interchanging sequence to treat 13 collegestudent clients suffering from transdiagnostic psychopathology including substantial levels of pretreatment fear of intimacy alongside problems with social intimacy. All the participants exhibited appreciable diminutions in the two aforementioned problems faced with social intimacy ($d = 1.35$) as well as intimacy fear ($d = 1.57$) as the treatment progressed further alluding partly to the efficacy of FAP in treating psychopathological tendencies.

Maitland, Petts, Knott, Briggs, Moore and Gaynor (2016b) further conducted another study as a follow-up to Maitland and Gaynor's (2016) report using the

randomized FAP trial in comparison to a condition of watchful waiting (WW) on 22 college students suffering from distress. The selection of clients was contingent on the extents of pretreatment fear of intimacy exhibited as well as the demonstration of one or more DSMIV disorder(s), including avoidant personality, generalized and social anxieties, major depression and/or dependent personality disorders. While the full FAP protocol entailed six weekly sessions targeting the clients' social distress, the watchful waiting condition involved 6 brief (15-minutes) check-ins every week which provided non-specific assistance to the clients. The result of this study revealed an overwhelming, statistically substantial reduction in intimacy fear for FAP clients relative to the watchful waiting patients (d = 0.92), as well as a similar decline in the severity of psychiatric tendency for FAP in comparison to what was obtained with the watchful waiting participants (d =1.02).

Functional Analytic Psychotherapy has been proven to offer a consistent, greatly specified still low-inference language for the production of personalized conceptualization on the basis of generally applicative principles. Furthermore, having established the efficaciousness of instant/immediate reinforcement for behaviour transformation, Functional Analytic Psychotherapy was able to enhance a focus on reinforcement and shaping behaviour as it is occurring in the here and now. However, these researches have created some gaps in the use of Functional Analytic Psychotherapy in treating alcohol addictions which are reflected. In terms of location, most are not African-based researches. Others used adolescents, some out-patients, therefore this research intends to investigate into the effectiveness of Functional Analytic Psychotherapy adapting it to the Nigerian environment and among a population of young adults in the transport system.

### 2.2.2 Psychoeducation Therapy and Alcohol Addiction

LeFort, Gray-Donald, Rowat and Jeans (1998) applied a twelve-hour psychoeducation therapy to patients confronted with chronic pain related to depressive indicators like hopelessness, despair and distress as well as addiction. 110 patients diagnosed with prolonged aching (average period of pain, six years) were randomly assigned to a three-month wait-list control or the psychoeducation therapy groups. Results obtained immediately post-treatment revealed that the group participants showed significantly improved physical functioning, self-efficacy, vitality, general life satisfaction, a leaning towards better social functioning and

mental health as well as subsided symptoms of dependency and pain relative to individuals in the 3-month wait-list control.

Dowrick, Dunn, Ayuso-Mateos, Dalgard, Page and Lehtinen (2000) made a comparison of a psychoeducational group (with 12 sessions lasting 2 hours each over a period of 8 weeks), six individual problem-solving sessions conducted in the home as well as controls to address the needs of individuals suffering from depression or bipolar disorder. The results of this study indicated that patients recorded better subjective functioning as well as diminished symptoms with the subjects showing more preference for the problemsolving intervention over the psychoeducation therapy.

Bultz, Speca, Brasher, Geggie and Page (2000) conducted a study using the psychoeducational therapy which focused exclusively on hubbies (partners) of womenfolk with early-stage mammary cancer (a major distressor that could lead to depression and/or addiction). Results obtained from this study indicated that clients in the psychoeducational group exhibited a drop in mood disturbance 3months post-treatment than the controls, more so, the women whose men (partners) were partakers of the treatment recorded more emotional support and less personal mood disturbance. In furtherance of these reports, women whose partners were subjected to the psychoeducation therapy also attested to having notably smoother nuptial relationships over time, which was indicative of the fact that a preventive function was served by the psychoeducational groups.

Rocco, Ciano and Balestrieri (2001) conducted a study coordinated to encourage healthful attitudes and behaviours pertaining to diet and as a preventive mechanism to inhibit increment in eating disorders by randomly assigning adolescent lassies from a wealthy high school established in Italy to receiving either 9 monthly sessions in exhaustive psychoeducation therapy groups or zero intervention. Outcomes revealed that partakers exhibited diminutions in bulimic dispositions, in tendencies toward austerity as well as in emotions indicating ineptitude, and reduced fears and anxiety concerning maturity when compared with the controls.

Fristad, Goldberg-Arnold and Gavazzi (2002) coordinated several family psychoeducational groups alongside breakout sessions for children from ages eight to eleven suffering from mood disorders (inclusive of major depressive malady/dysthymia and bipolar disorder relative to the wait-list controls). They (the groups) centered on the child and parent results, along with caregiver knowledge,

greater caregiver concordance as refers diagnosis as well as curative measures, reduced manifested emotion in parents and ecological strain for the child, decreased syndrome severity as well as period for the child. Specifically, the curriculum bordered on the development of communication and advocacy techniques both internally (that is, within the family) and externally (across systems), information dissemination, and approaches to social problem unravelling as well as the management of symptom. Results obtained from this study were favourable, with the participating families in the psychoeducational groups exhibiting substantially better appreciation of mood symptoms, improved utilisation of support services, as well as greater accounts of parental support by offspring, both instantly after the entire sessions and four months post-treatment. It is however succinct to add that parents reported more frequent favourable family relations, but not reduced undesirable family relationship.

Kaminer, Burleson and Goldberger (2002) undertook a research in order to juxtapose the efficaciousness of cognitive behavioral therapy (CBT) relative to that of psychoeducational therapy (PET) in eighty-eight adolescent drug addicts who were randomized to 1 of 2 eight-week, outpatient group psychotherapy conditions. Drug urinalysis and the Teen-Addiction Severity Index (T-ASI) were used as parameters to ascertain outcomes. 86% treatment completion rate, 95% follow-up location rate, 80% posttreatment rate at 3-month evaluation and 65% rate after 9-month follow-up were recorded. Although, a decline in substance addiction was recorded irrespective of curative conditions, CBT clients showed substantially decreased recurrence of positive urinalysis relative to those subjected to psychoeducation therapy (PET) treatment particularly for male subjects as well as older youths after three months of the follow-up evaluation that lasted nine months. Great improvement were revealed by most T-ASI subscales from baseline to 3- as well as 9-month follow-up assessment throughout both conditions.

Olmsted, Daneman, Rydall, Lawson and Rodin (2002) gave eighty-five teenage daughters clinically certified as suffering from comorbid disturbed eating patterns and type I diabetes and their parents to a treatment-as-usual control group or a chain of 6 psychoeducational group sessions. The parents alongside their affected daughters took part in different yet equivalent sessions. Findings of this exercise revealed that the lassies in the active treatment persistently exhibited substantial decline in eating disorder at 6-month follow up relative to the controls.

Yiprah, Goldberger and Ronit (2002) piloted a quest to juxtapose the effectiveness of the Cognitive-Behavioural Coping Skill (CBT) versus Psycho-Education Therapy (PET) on 88 substance abusing adolescents randomly selected to an 8-week treatment. The result revealed that the frequencies of positive analysis exhibited by the CBT subjects are lower than those shown by the PET subjects but a drop in substance abuse was significantly noticed in both groups irrespective of the mode of treatment employed.

Kubany, Hill, and Owens (2003), in Hawaii, conducted a small randomized experiment by assigning thirty-seven ethnically dissimilar women with a medical condition of posttraumatic distress disorder (PTSD) and an antecedence of partner abuse to either a personalised psychoeducation therapy programme or a wait-list control group out of which 32 of the randomly selected 37 patients completed the session. The psychoeducation therapy incorporated 8 to 11 individual 1½hour sessions which focused on avoiding revictimization, controlling contact with the one who abuses, strategies for self-advocacy, probes of the history of trauma, managing distress, negative self-talk monitoring and assertiveness. Outcomes of this study showed that at post-treatment and three-month followup, 94% of the women who partook of the active intervention no longer met conditions for PTSD. In furtherance of the foregoing, they presented considerably improved self-esteem as well as reduced shame, depression and guilt relative to women given to the wait-list control group exhibited zero differences in values obtained for any measure by the 2$^{nd}$ pretest.

Colom and colleagues (2003) also conducted a comparison of the impact of nonstructured group meetings and 21 psychoeducational group sessions on outpatients who were down with bipolar disorder type I and II in Spain. Outcomes of this trial revealed that those who participated in the active treatment experienced increased time before reappearance of syndromes, underwent shorter as well as fewer hospitalizations, had less tendency to medically deteriorate overall with lesser recurrences per individual as compared to those subjected to non-structured group meetings.

Honey, Bennett and Morgan (2003) in a study using the psychoeducation therapy on forty-five women from Wales who scored more than twelve on the Edinburgh Postnatal Depression Scale and were subjected to a brief psychoeducational group intervention for postnatal depression through an eight-

session psychoeducational group or time-to-time treatment. The treatment followed a preformed course (in spite of the fact that the research was not manual-based) inclusive of coping strategies relating to childcare alongside getting social supports, relaxing as well as cognitive behavioural techniques (CBT). At posttest and 6months post-treatment, women engaged in the psychoeducational groups exhibited majorly reduced values obtained on the measure of depression, regulating the extent of antidepressant use. Albeit this recorded improvement, it is worthy to note that no alterations in the areas of enhanced coping, matrimonial relationship or social support was reported.

Rea, Tompson, Miklowitz, Goldstein, Hwang and Mintz (2003) in a study involving 53 participants also juxtaposed results obtained for patients that partook in twenty-one individual group psychoeducation sessions alongside those subjected to standard individual intervention. Results obtained from this study which lasted two years showed that the tendency of partakers in the group psychoeducation sessions to experience relapse or get admitted in the hospital is less relative to those that underwent standard individual treatment.

Miklowitz, George, Richards, Simoneau and Suddath (2003) conducted yet another comparison study between the application of psychoeducational therapy and crisis management by randomising 101 patients down with social ailments such as bipolar disorder and addictive tendencies. Although these two treatment procedures were manualbased, with virtually the same design, approach, method and outcome, it is succinct to state that the patients subjected to psychoeducational therapy exhibited longer symptom-free periods, better medication compliance, fewer relapses overall as well as fewer symptoms.

Cheung, Callaghan and Chang (2003) in Hog Kong conducted cross-national studies by randomly assigning 96 women who were between ages 30 to 55 making preparations toward elective hysterectomy to a control group or individual psychoeducational sessions. It was shown that women receiving the active treatment (psychoeducation therapy) recorded substantially higher treatment satisfaction and lower anxiety and pain than the other women within the control group in the days instantly succeeding postoperative.

Gibbs, Potter, Goldstein and Brendtro (2006) in a randomized pilot study designed a psychoeducational programme which was manual-based for teenagers who were imprisoned in a medium security youth correctional centre. The

psychoeducation therapy groups convoked every day with focus on peer support, skills and values enhancement as well as mediation. These incarcerated adolescents subjected to psychoeducational therapy were trained on how to recognize deleterious social behaviour such as addictive tendencies both in their individual lives and amongst their peers in order to substitute the aforementioned deviant behaviours with new profitable and positive responses and activities. The result of this study showed that the adolescents who participated in the psychoeducation therapy sessions recorded significantly decreased antisocial behaviours as well as considerably enhanced adjustment and social skills aside being further described as vividly easier to manage in comparison to non-participants.

Sandra, Model and Elkin (2006) conducted a study to evaluate two primary healthcare interventions which were Physician Intervention and Clinic-Based Psychoeducational treatment on four groups for alcohol abuse among Mexican-American patients with major focus on drinking patterns, psycho-social problems and blood test results revealing blood alcohol concentration among one hundred and seventy-five MexicanAmerican male and female for a period of 8 months. Participants were randomly assigned into 1 of 4 categories; Psycho-Education, Physician Intervention, both or no treatment. The result showed that treatment groups including psychoeducational treatment group demonstrated significant reduction in their blood alcohol concentration levels, signifying that psychoeducational treatment was effective in reducing alcohol consumption.

Chien (2008) in a study to investigate the Efficaciousness of Mutual Support Group Programme and Psychoeducation for Family Care Givers of Chinese suffering from Schizophrenia using a randomized controlled experiment with a population of sixty-eight Chinese females with mental health challenge in Hong Kong within a nine-month period reported that Psychoeducation and Mutual Support recorded greater improvement on family and patient functioning. The result of the research substantiated that Psychoeducation and Mutual Support Group Interventions are suitable therapies in mental health issues including addiction recovery and relapse prevention.

Peterson, Mitchell, Engboom, Nugent, Mussell and Miller (2008) used a psychoeducational intervention in comparison with three other treatment conditions (namely, a wait-list control, structured self-help and partial self-help) for 61 women suffering from an addiction otherwise known as binge eating disorder. Results

obtained from these studies showed that individuals that partook in the entire active treatments exhibited a decline in binge consumption instantly at post-treatment.

Ciliska (2008) also randomly assigned 78 women with obesity to an education-alone group employing a classroom format (with each group consisting of sixteen to twenty individuals), or to a control group which was subjected to no treatment and then, to a small group psychoeducational therapy groups each having 6 to 8 members with emphasis placed on assertiveness and problem solving training, with focus on aetiology, pros and cons; as well as the nexus between body image and self-esteem. Outcomes of the study revealed that the women who were subjected to psychoeducation therapy revealed substantially improved body satisfaction, self-esteem as well as more restrained feeding patterns relative to partakers in any of the 2 remaining groups. There was no difference between the results obtained for individuals in the education-alone treatment and the ones from members of the control group.

Russell, al John, and Lakshmanan (2009) did a study by randomly assigning 57 parents of children residing in southern India and suffering from intellectual dysfunction to an untreated control group or active psychoeducational group intervention. Outcomes of this study revealed that individuals who participated in the ten-session groups exhibited considerably better parental disposition towards child rearing and managing the impairment instantly at posttest relative to those parents assigned to the untreated control group.

Thylstrup, Schroder and Morten (2015) conducted a randomized experimental study to establish the potency of psycho-education substance use cessation among one hundred and seventy-six patients in a community substance use disorder treatment centres where participants were randomly assigned to treatments with follow-up interviews which were carried out 3 and 9 months after treatment. The result of the study revealed that psychoeducation is effective in treating patients with substance use disorder.

Jusoh and Abd. Halim (2015) employing the trial pretest-posttest control group design along with follow-up test, the duo tested the efficacy of psychoeducation group therapy (PGT) amidst people addicted to heroin who went through recurring relapse episodes (consisting of 12 patients) relative to the control group equally comprising of twelve (12) patients. Subjects in the experiment group were made to undergo 15 sessions of psychoeducation group therapy alongside

treatment as usual (TAU) programme while just the control group were only exposed to the treatment as usual procedures. The findings of the study show psychoeducation group treatment enhances motivation of addicts towards quitting the act as respondents subjected to psychoeducation therapy exhibited significant improvement in decisional balance level ($F = 5.90$, $p < 0.05$) as well as self-efficacy level ($F = 31.71$, $p < 0.05$) when compared with the other 12 patients who were subjected to treatment-as-usual (TAU).

Conducted follow-up test further revealed that these impacts stayed consistent even after 3 months. Psycho-educational treatment was also used at Pacific Solstice for drug and alcohol abuse programme organised to engender awareness pertaining substance obsession and recovery. Several clients abusing and overly dependent on substances who underwent post-acute withdrawal syndromes had challenges with the motivation to amend their behaviours and were basically starting to eschew the undesirable acts. However, the psychoeducational treatment proved apt in motivating addicts to change based on the wellinformed decisions they made with the intels this form of treatment affords.

### 2.2.3 Self-Efficacy and Alcohol Addiction

Taylor (2000) engaged in a research to examine what impact self-efficacy has on liquor consumption amongst one hundred and fourteen American Indians as well as Native Alaskan grownups using ANOVA (analysis of variance) to juxtapose the dissimilarities between the groups given to alcohol use (that is, nonuse, low use and medium-high use) as high substance use self-efficacy (SSE) and low general self-efficacy (GSE) were presumed to be linked with higher use of alcohol. Findings of this research showed that inordinate intake of alcohol may be reactive to emotional states of powerlessness in one's life which could persist as a result of having superficial feelings of dominance over use. This trial therefore shows self-efficacy as sharing a nexus with issues bordering on empowerment and, by inference, would certainly have important implications for substance abuse particularly when considering minority individuals.

Hagman (2004) assessed self-efficacy in individuals who were substance addicts and had underwent out-patient treatment at 4 follow-up phases (120 days, 90 days, 60 days and 30 days) post-discharge and reported substantial inverse correlations between drug use and self-efficacy by the thirty days, sixty days and ninety days follow-up intermissions. He also reported that by the thirtieth day

follow-up, there was a substantial dissimilarity in the average sum perceived self-efficacy value obtained between individuals who did not remain abstinent and others that remained abstinent.

Young, Connor, Ricciardelli and Saunders (2006) undertook a research to examine the impact of drinking refusal self-efficacy beliefs and alcohol expectancy on addictive tendencies among 174 undergraduate tertiary students in Australia suffering from addiction to drinking. After administering the drinking expectancy questionnaire (DEQ), drinking refusal self-efficacy questionnaire as well as alcohol expectancy questionnaire (AEQ) to them, the result of the research reveals that positive expectancy and drinking refusal selfefficacy have substantial effect on drinking with drinking refusal self-efficacy as well as dependence beliefs amongst the university students accounting for significant deviation over negative and positive expectancies in predicating all of the three drinking parameters.

Forcehimes and Tonigan (2008) coordinated an experiment to investigate the influence of self-efficacy on abstinence from alcohol/other drug abuse through a metaanalytical combination of eleven studies in a bid towards diagnosing pertinent questions regarding the magnitude as well as the nature of modification in self-efficacy as a predicating factor of drinking diminutions amongst twelve-step exposed individuals suffering from alcohol addiction. However, the findings of this research were found to be in contrast relative to those from previous studies as changes in self-efficacy were found to be inconsistent in Alcoholics Anonymous (AA) even as the level of benefit linked to enhanced self-efficacy on result obtained was not mutual across researches.

Maldonado, Pedrão, Castillo, García and Rodríguez (2008) conducted a descriptive and correlational study on 359 students who were addicted to drinking and smoking in the rural and urban milieus of Nuevo León México in order to examine the nexus between selfefficacy and the consumption of liquor and smoking among addicted adolescents in secondary schools. The subjects were studied for a period of six (6) months (that is, January to June, 2006). Results of the findings made it clear that a substantially negative nexus was recorded between the amount of drinks taken on daily basis and self-efficacy ($rs = -.23$, $p < .001$), as well as for the number of sticks of cigarette taken each day ($rs = -.20$, $p < .001$).

Dolan, Martins and Rohsenow (2010) piloted a study to investigate Self-Efficacy for Relationship to Outcomes, Pretreatment Correlates and Cocaine

Abstinence in a population of one hundred and sixty-three patients who have been diagnosed of possessing inordinate obsession for cocaine intake in a residential interention programme employing 2 self-efficacy measures applied in the 1st week of interention. Results showed that the beliefs in the foremost week of the intervention regarding success in stopping its intake and implicit assurance of abstaining from cocaine even in high trigger situations with the most effective correlate of self-efficacy are better enhanced longing to discontinue the undesirable fixation and inhibit the quest for usage even in overly pressing circustances. Result of the research suggests that treatment must focus on self-efficacy in cocaine- as well as alcohol-dependent people.

Ibrahim, Abu Samah and Kumar (2011) carried out a quantitative cross-sectional survey research to examine the impact of self-efficacy on relapsed alcohol tendency by subjecting 400 drug addicts chosen via the systematic random and stratified random sampling techniques from 8 Centres for Narcotic Rehabilitation (NRC) in Peninsular to the General Efficacy Scale (GES) test in order to measure their levels of self-efficacy with a test outcome showing strong reliability rate at 856. The analysis of obtained data was executed using Pearson Product Moments Correlation (PPMC) alongside descriptive tests. The result of this study indicated that 86.3% of the four hundred participants displayed moderate to low self-efficacy level. Obtained results through the PPMC analysis showed that there was a strong significantly negative nexus between relapse addiction and selfefficacy ($p < 0.05$; $r = -0.790$). The resultant findings clearly indicated that poor self-efficacy predicator could give undesirable impact to addicts such that they perpetually remain abstemious from drugs, specifically when these individuals are confronted with difficult times as well as their milieu after their release from centers for rehabilitation.

Connor, George, Gullo, Kelly and Young (2011) in a study designed to assess the comparative role of 2 key Social Learning Theory concepts (alcohol expectancies as well as drinking refusal self-efficacy) in predicting the drinking behaviour of 192 individuals in early adolescent stage of development and examining the plausible mediational roles of alcohol expectancies (AEs) as well as drinking refusal self-efficacy (DRSE). Instruments measuring alcohol expectancies as well as drinking refusal self-efficacy were administered on the individuals using a Drinking Expectancy Questionnaire-Adolescent version (DEQA) and Drinking

Refusal Self-Efficacy Questionnaire-Revised Adolescent version (DRSEQ-RA) respectively as well as indices of problem drinking and alcohol consumption. Known predictors of alcohol misuse (such as tobacco use, peer drinking, gender, age as well as negative and positive behavioural characteristics) observable in the participants who were followed on over a period of 12 months (with retention value of 8.5%) were also incorporated into the statistical models. The results of the study as indicated by the prospective structural models that were controlling for Time 1 alcohol intake behaviour, tobacco use, peer alcohol use, gender, age as well as behaviour glitches acknowledged that DRSE (but not AEs) was not unconnected to problem drinking twelve-month post-initial check. This outcome further reaffirms the significant reductive effect of self-efficacy on alcohol drinking/addiction.

Kim (2012) conducted a research aimed at examining the impacts of coping and abstinence self-efficacy on inordinate use of drugs amongst forty destitute youth (with ages ranging from seventeen to twenty-four) selected from the sole drop-in facility within the Midwestern city. Organised data pertaining the abstentious coping, self-efficacy as well as the rate of recurrence of drug and alcohol intake of partakers were garnered and these data were analysed through a series of hierarchical regression. While coping was reported to have no association with substance use, Kim's finding's reiterated the fact that higher abstentious self-efficacy was related to lower alcohol and drug use.

Chavarria, Edward, Stevens and Ferrari (2012) carried out a randomized, longitudinal study on one hundred and fifty grownups (SD = 8.1; M age = 37.1; 38% male; 62% female) engaged in recovery procedure from substance abuse using self-efficacy and self-regulation as determinants of substance use self-restraint while comparing a communal housing model versus usual aftercare. The upshots of this research indicated that both the change in self-efficacy ($p = .032$) as well as the change in self-regulation ($p = .014$) were considerably predicative of the chances of substance abstentious with the change in each of these parameters being overly independent of the other.

A cross sectional study by Abdollahi, Taghizadeh and Bahramzad (2014) on *The Relationship between Addiction Relapse and Self-Efficacy Rates in Injection Drug Users Referred to Maintenance Therapy Center* using 200 addicts with the average age of 38 years, found a nexus between low self-efficacy and relapse as well as between the age of first drug use-cum-dosage and self-efficacy.

Torrecillas, Cobo, Delgado and Ucles (2015) conducted a study on a sample of 181 participants (comprising of 97 men and 84 women) selected from Granada Regional Drug Addiction Center, that were categorised into 4 clusters (Alcohol, Cognitive-behavioral, Methadone and Control) to ascertain and examine self-efficacy's predicative capability in the extent of inordinate substance use (with reference to chronicity of use and quantity) as well as in the treatment groups. Having measured their self-efficacy with the Addictive Behaviour Research Interview (EICA) and the Self-efficacy Scale (SE), the upshots of the research showed that Alcohol, Cognitive-behavioral and Methadone groups were inversely connected to self-efficacy while the Control group shared a direct nexus with self-efficacy. As refers how severe the drug use is, findings of the study further revealed that chronicity and self-efficacy shared direct nexus while dosage was inversely proportional to selfefficacy.

Nikmanesh, Baluchi and Motlagh (2016) in a causal-comparison study aimed at investigating the contribution of social support and self-efficacy beliefs in predicting addiction relapse, selected eighty-three partakers with zero relapse and eighty-three others suffering from relapse via snowball sampling technique in a 4-month duration of volitional involvement at the facilities for addiction treatment in Iranshahr as well as Saravan, SouthEastern Iran. While the measurement of the variables (that is, social support and selfefficacy beliefs) was taken using Multidimensional Scale of Perceived Social Support (MSPSS) and general self-efficacy scale respectively, statistics obtained were analysed via MANOVA. Upshots of the research findings revealed that the paramount predicators of addiction relapse were social support as well as self-efficacy beliefs as substantial dissimilarities between participants with relapse and those with zero relapse as refers social support and self-efficacy beliefs were recorded. Hence, social support as well as selfefficacy beliefs make overly significant contributions in the forestallment of addiction reversion in clients.

Ghadiri Sourman Abadi, Abdolmohamadi, Babapur Kheiradin and Ahmadi (2016) conducted a descriptive and correlational study on four hundred and eighty-three male students of Salmas City's high school, Iran in a bid towards ascertaining the nexus between alexithymia with susceptibility to substance addiction and self-efficacy among students who were selected through a multi-stage cluster method.

Simultaneous regression analysis and Pearson Product Moment Correlation (PPMC) were used to analyse the data obtained from the subjects through the administration of the general self-efficacy scale and Toronto alexithymia scale. The results of the finding showed that self-efficacy has greater predictability effect on vulnerability to substance addiction than alexithymia that positively predicates susceptibility to inordinate use of drugs. By implication, this result suggests that inability to comprehend and reflect emotions as well as low self-efficacy contribute significantly towards young people's tendency at becoming addicted to drugs.

Cibulskytė and Zajančkauskaitė-Staskevičienė (2017) conducted a study including 101 alcohol-addicted persons (aged 40 to 59 years), obtaining clinical attention at Kaunas County Centre for Addictive Disorders (KCCAD) in a bid towards ascertaining the alterations in perceived social support and self-efficacy of women and men who were addicted to alcohol during the Minnesota 12-step intervention programme. After administering the Balanced Inventory of Desirable Responding Short Form, Multidimensional Scale of Perceived Social Support, the revised Drinking Refusal Self Efficacy Questionnaire and the Coping self-efficacy scale, the analysis of the obtained data revealed that a significant nexus existed amongst drinking refusal self-efficacy, perceived social support and the overall self-efficacy in women and men who were addicted to alcohol at the beginning and the end of interention as they (perceived social support, drinking refusal self-efficacy and overall self-efficacy of alcohol-addicted women and men) were noticed to be higher at the completion than when the treatment just commenced.

Naren Selvaratnam, Dantanarayana and Pothmulla (2018) conducted an empirical evidence-providing multi-phased study to provide a therapeutic mechanism for drug dependence in Sri Lanka by examining the contributory effect of self-efficacy in nicotine and alcohol dependence. There was the statistical validation and cultural adaptation of Generalized Self-Efficacy Scale (GSES) to a sample which was selected randomly. Oneway ANOVA and regression analysis were each employed to explore the proposed hypothesis while the average self-efficacy values were engaged in examining alcohol only users, non-drug users as well as both nicotine and alcohol users respectively. While oneway ANOVA established that drug users have a substantially lesser value of efficacy relative to non-users, the other trial of the first phase exhibited a moderate negative nexus between self-efficacy and drug usage.

Müller, Znoj and Moggi (2019), in a bid to examine the effects of action-oriented motivation and abstinence-related self-efficacy to correct addictive behaviours on alcohol addiction, conducted a longitudinal multicenter study on 263 patients consisting of 89 women and 174 men who were down with austere AUD (alcohol use disorder). Self-efficacy at the time of discharging the patients suggested percent days of abstinence and abstinence. Drinks per drinking day (DDD), percent days of abstinence (PDA) and abstinence were measured at a year and five-year follow-ups after residential treatment. Results obtained from this study suggested that, at discharge, self-efficacy was not unrelated to motivation and self-efficacy at a year follow-up, that subsequently was associated with improved longterm drinking outcomes, especially with reference to percent days of abstinence (PDA) and abstinence at five-year follow-up except for drinks per drinking day (DDD) which was devoid of any such effect. These further establishes the fact that motivation alongside selfefficacy are effective at advancing long-term percent days of abstinence (PDA) as well as abstinence after residential interventions and might therefore have considerable influence on recuperation from alcohol use disorder (AUD).

Karatay and Baş (2019) coordinated a trial to scrutinise the nexus between substance abuse and self-efficacy while examining the predicating factors of both variables among six hundred and thirteen students of high school sited within Eastern part of Turkey using the Substance Use and its Causes and Self-Efficacy in the Prevention of Substance Abuse Scale (SEAPSAS) questionnaire. The analysis of data garnered was done by employing correlation and regression, Kruskal Wallis, ANOVA, Chi-Square and percentiles. Garnered results showed that lower self-efficacy scores were found in students who considered themselves as failures at school, whose family member was a drug addict, in students who smoked, engaged in inordinate consumption of liquor, in those with awful friendship and family relations as well as in those who experienced traumatic events in a lifetime.

### 2.2.4 Distress and Alcohol Addiction

Chen (2003) in a study on anger, life distressors as well as internalization and substance abuse amongst American adolescents of Indian extraction subsisting in the midwest using a sample of 212 American Indian within $5^{th}$-$8^{th}$ grade adolescent stage using structural equation models found that negative life events were found to positively influence early on-set of substance addiction. Sinha (2001) examined drug

craving as well as reactivity among individuals who were overly addicted to taking cocaine and were also exposed to former non-distressful and distressful drug-inducing circumstances, employing personalized imagery. Findings revealed that distress imagery produced significant increases in cocaine and drug cravings.

Dawson, Grant and Ruan (2005) constructed multivariate linear regression models predicating some indices of drinking pattern as well as volume by interviewing 26,946 United States past-year drinkers (aged 18years and above) at the NESARC (National Epidemiologic Survey on Alcohol and Related Conditions) so as to examine the nexus between type and number of previous years' traumatic experiences as well as inordinate alcohol intake. The result of this study revealed that a steady positive nexus between the numbers of previous years' traumas underwent and all chronic alcoholism measures with evident increase in frequency of heavy drinking by 13% and 24% among individuals exposed to further distressor recounted by the women and men involved respectively.

Tate, Brown, Galsner, Unrod and McQuaid (2006) in a study to evaluate interactive and addictive models on the impacts of severe traumatic life occurrences, dire life distressors as well as ready availability of substance on inordinate use of substance succeeding drug and alcohol treatment using 102 old hands (experts) who satisfied the DSM-IV criteria for cannabis, alcohol or stimulant addiction, found out that severe protracted distressors informed a greater possibility of initiating inordinate dependence on substances even after treatment.

Goeder (2002), Koob and Kreek (2007) conducted Studies using rodents and revealed that the exposure to distress triggers relapse in abstaining alcoholics and also reinstate alcohol seeking behaviour in post-treatment animals. Hence emphasizing a link between distress and drug reinforcement.

Najavits, Marybeth and Walsh (2012) in a study to investigate the relationship among dissociation, Substance Abuse and Post Traumatic Distress Disorder (PTSD) within a population of 77 women with Substance Use Disorder (SUD) and PTSD found that subjects had experienced chronic distressors in the form of trauma-related symptoms and childhood histories of emotional abuse and neglect.

Liu, Keyes and Li (2014) conducted the "Monitoring the Future" surveys on 12,341 adolescents battling with excessive alcohol use and drunkenness in order to scrutinize workrelated distress amidst juveniles and its nexus with liquor addiction amongst the selected grade 12 students. The result (as confidence interval 1.02-1.23

and odds ratio = 1.12, 95% reflect) of the findings clearly showed that any work distress was positively related to alcohol consumption over an observation period of twelve (12) months.

Leta, Andualem and Alemayehu (2015) conducted a cross-sectional survey on 329 medical students schooling at Jimma University, Ethiopia in a bid to establish the nexus between substance obsession and distress amongst three hundred and twenty-nine (329) medical undergraduates with a mean age of 23.02 years. Data obtained from the selected students through the administration of Drug Abuse Surveillance Test (DAST), General Health Questionnaire (GHQ-12) as well as Medical Students Distress Questionnaire (MSSQ20) were analysed through SPSS version 20.0; t-test and regression analysis. The upshots of this study further shows that distress which was found to be work (academic) related in 281 (86.6%) of the participants was significantly related to alcohol intake (CI = 1.03, 3.60; AOR = 1.93, 95%), smoking (CI = 1.05, 19.77; AOR = 4.55, 95%), as well as khat chewing (CI = 1.17, 7.85; AOR = 3.03, 95%).

Hautala (2016) in a longitudinal study to investigate the link between a variety of distress and substance use disorder among 676 indigenous youths and their caretakers in North America using logistic regression analysis found that chronic distressors such as victimization, community violence and delinquent peer association increase the risk of immoderate use of substances.

Gielen, Krumeich, Tekenlenburg, Nederkoorn and Havermans (2016) conducted a qualitative trial regarding How Patients Perceive the Relationship between Trauma, Substance Abuse, Craving and Relapse using a 45 minutes per person semi-structured indepth interview with 432 SUD sufferers on their notions regarding the nexus subsisting between PTSD and Substance Use Disorder by means of content and inductive analysis. Garnered results from the study revealed that craving, relapse as well as PTSD share a clear link.

Useche, Serge, Alonso and Esteban (2017) conducted a survey on two thousand, four hundred and forty-five (2445) Colombian expert drivers with the aim of studying the nexus between 2 addictive behaviours (namely; smoking and regular consumption of liquor) amongst professional drivers as well as job distress and self-reported road safety outcomes. The sample for the study had an average age, driving experience, daily working hours, frequency of road accidents and registered fines for traffic offences (in the past two years) of 38.01 years, 15.81 years, 7.35 hours, 0.41

and 0.50 respectively. A two-step cluster analysis of results obtained from the data garnered through the administered Job Strain (JCQ) questionnaire indicated that 28% of the participants exhibited Job Strain while 20.3% and 27.9% of these professional drivers indulge in active consumption of tobacco and alcohol respectively. This study clearly reemphasises the fact that distress/distressors are predicating factors of alcohol addiction among professional drivers.

Medisauskaite and Kamau (2018) conducted a randomised controlled trial on 417 doctors in United Kingdom in order to examine whether occupational distress increases the rates of binge-eating and substance use among selected doctors who were summoned through the medical Royal Colleges. The results of this study show that occupational distress as well as other job hassles (distressors) raises the chances of medics that binge-eat and use substances as 5% and 44% of medics satisfy the measures for alcohol dependency and binge-drinking respectively.

Shortt (2018) conducted a quantitative cross-sectional survey design research on ninety (90) adults (Male - 38; Female - 52) resident in Dublin in order to observe the nexus between distress levels (depression and anxiety inclusive) and rates of alcohol consumption among selected respondents. The results of this academic exercise showed that subjects who indicated they take part in alcohol or binge drinking experienced higher levels of distress, anxiety and depression.

### 2.2.5 Conceptual Model for the Study

The conceptual model of this study has three variables, namely; intervening variables, independent variables as well as the dependent variables.

The independent variables otherwise called predictor variables were the treatments which were be used by the researcher in a bid to observe their effects on the dependent variables. The independent variables in this research are Functional Analytic Psychotherapy and Psychoeducation Therapy. The intervening variables are some of the factors that possess the tendency of having effect on the predictor (independent) variables and outcome (dependent) variables. The intervening variable has the capacity to affect treatment outcomes if not properly controlled as it has been done in this research work. The intervening variables in this study were classified into two factors; namely, organismic and environmental factors.

Organismic factors are the first order intervening variables resident in the participants. The organismic factor in this study is the participants' Self Efficacy'.

Also, studies show that some intervening variables which are not part of the study may have the likelihood of affecting treatment outcomes and some of them include cognitive level, level of assertiveness skill, risk perception, emotional maturity, and so on. The second order intervening variables which are the environmental factors include and for this study is‘distress’ and other relevant factors are education status, gender, availability of lcohol peer influence, and so on.

The dependent variable is the measurable behavioural outcome expected to occur based on the effective manipulation of the independent variables. Alcohol addiction is the dependent variable in this research. The total interaction of the variables in this study is represented with the behavioural equations S – O – R (Kanfer and Philips, 1970). The interaction of the three variables is presented on figure 2.2.5.

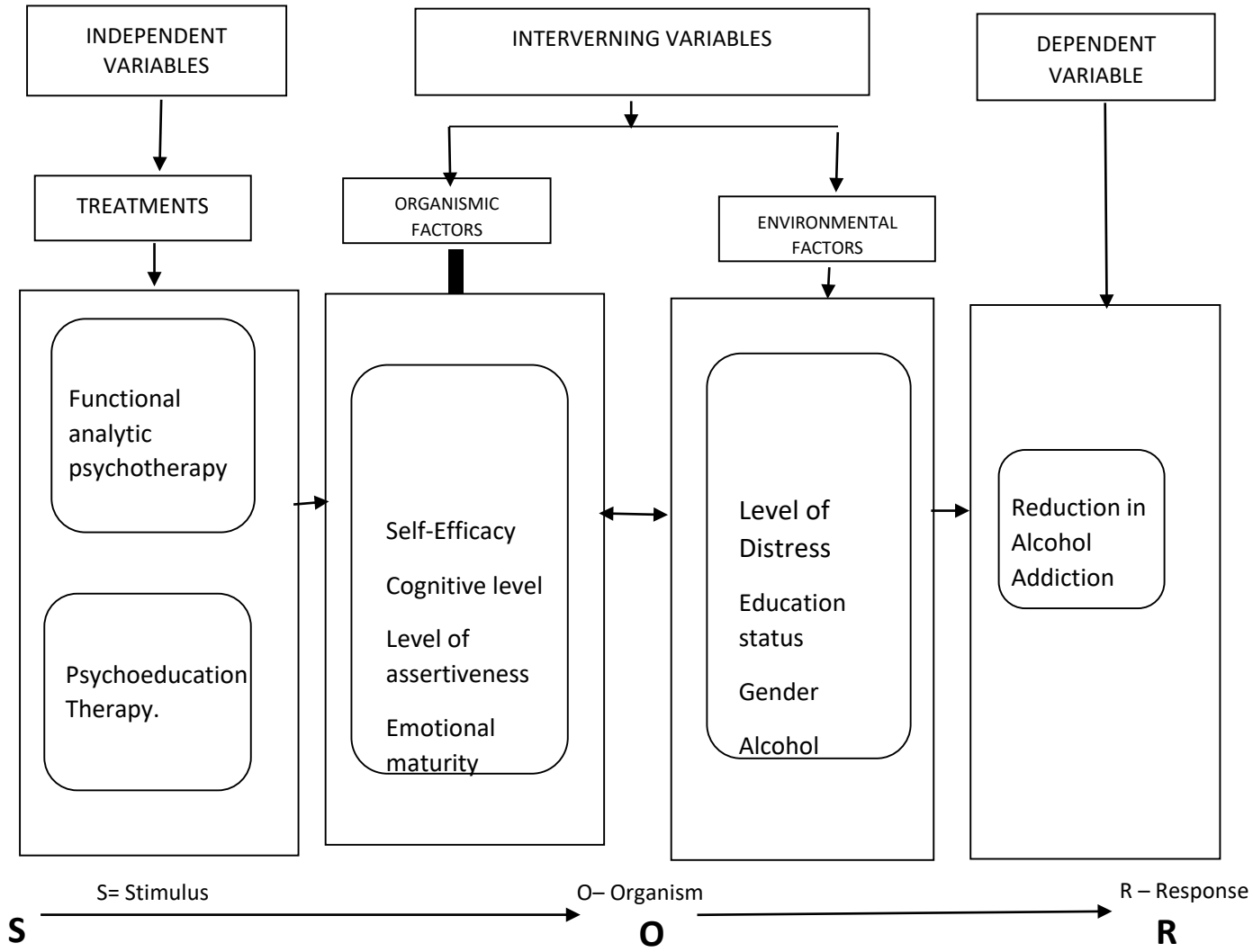


**Figure 2**: Conceptual Model of the Study

**Conceptual Model**

**Key**:

S = Stimulus (Independent Variables)

O =Organism (Intervening Variable, factors inherent in the organism)

R=Response (the resultant effect of independent variables)

# CHAPTER THREE

# METHODOLOGY

**3.0** This chapter explains the methodology and techniques that this study adopted in examining the effectiveness of the two treatment packages; Functional Analytic Psychotherapy (FAP) and Psychoeducation (PE) on alcohol addiction among the National Union of Road Transport Workers which include research design, population sample and sampling techniques, instrumentation, inclusion criteria, procedure for data collection, summary of activities in the experimental groups, control of extraneous variables and method of data analysis, and so on.

## 3.1 Design

This study is a pretest-posttest, control group, quasi-experimental design with 3x3x3 factorial matrix. The rows consist of the experimental groups (FAP and PE) and the control group, while the columns consist of the moderating variables; Self Efficacy and Distress. Self-Efficacy is at 3 levels (High, moderate and low) and also Distress at 3 levels as well.

The factorial matrix for reducing alcohol addiction is presented on table 3.1.

| Intervention | Self Efficacy (B) | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| | High (B1) | | | Moderate (B2) | | | Low (B3) | | | |
| | Distress (C) | | | | | | | | | |
| | High ( C 1) | | | Moderate ( C2) | | | Low (C3) | | | |
| FAP (A1) | 5 | 4 | 2 | 4 | 3 | 4 | 5 | 5 | 3 | 35 |
| PE (A2) | 2 | 3 | 5 | 3 | 5 | 3 | 2 | 5 | 4 | 32 |
| CONTROL GROUP (A3) | 4 | 3 | 2 | 2 | 4 | 5 | 2 | 3 | 5 | 30 |
| TOTAL | 11 | 10 | 9 | 9 | 12 | 12 | 9 | 13 | 12 | 97 |

**Table 3.1: A 3x3x3 factorial matrixes for managing alcohol addiction**

Key:

$A_1$ = Functional Analytic Psychotherapy

$A_2$ = Psycho-education Therapy

$A_3$ = Control Group

$B_1$ = High level of Self-Efficacy

B2 = Moderate Self-Efficacy

$B_3$ = Low level of Self-Efficacy

$C_1$ = High level Distress

$C_2$ = Moderate level of Distress

$C_3$ = Low level of Distress

### 3.2 Population

The target population in the study comprised the members of the National Union of Road Transport Workers (NURTW) from three Local Government Areas in Lagos State, Nigeria. These included Agege, Ojodu Berger and Alimosho Local Government Areas. Each Local Government has on the average, 10 units under each branch and the number of branches is determined by the largeness of the Local Government Area with each unit having on the average a 100 registered vehicle. Participants in the research were males being that the transport system is a male dominated occupation. The population was chosen because the use of alcohol was prevalent among this selected group compared to many other legal businesses in the country.

### 3.3 Sample and Sampling Techniques

A representative sample comprised 108 male participants with the age range of 2050 years who were members of the NURTW, Lagos State chapter. The study adopted multistage sampling techniques to select participants for the study. In the first stage, a simple random sampling technique was used to select three Local Government Areas (LGA) out of 20 LGAs that made up Lagos State. In the second stage, Purposive Sampling techniques was used in selecting 3 motor parks based on popularity, rate of patronage and proximity. The Local Governments selected were; Agege, Alimosho and Ojodu.

The third stage involved the use of purposive sampling technique to select 108 members of theNational Union of Road Transport Workers who met the inclusion criteria; one of which is scoring 50+ in the Alcohol Use Disorder Identification Test (AUDIT) were recruited for the study.

In the fourth stage, the Simple Random Sampling was further used to randomly assign 108 participants to the various groups; Functional Analytic Psychotherapy, Psychoeducation and Control groups. At the end of the study, the researcher was able to retain ninety-seven (97) participants comprising; Functional Analytic Psychotherapy (35participants); Psychoeducation Therapy (32 participants) and the control group (30 participants) respectively.

### 3.4 Instrumentation

The following instruments were used for the collection of data:

i. Alcohol Use Disorders Identification Test (Babor et. al., WHO, 1989).
ii. Socrates Alcohol Drinking Scale (Miller and Tonigan, 1996).
iii. Alcohol Abstinence Self-Efficacy Scale (Martin, 1995).
iv. Perceived Distress Scale (Cohen et al., 1983).

#### 3.4.1 Section A: Bio-Data Information of the Participants

This section contains the demographic information of participants such as age, motor park, level of education, and name of motor park.

#### 3.4.2 Section B: Alcohol Use Disorder Identification Test

Alcohol Use Disorder Identification Test was developed by World Health Organization in 1989 was adopted to assess alcohol consumption, drinking behaviours, and alcohol related problems. Respondents completed a 10-item screening tool with reliability co-efficient of 0.71. Scoring the AUDIT is based on a 0-4 point scale with six out of the ten questions focusing on the frequency of alcohol abuse behaviour and responses are interpreted based on 0 point – never, 1 point- less than monthly, 2 points- monthly, 3 points- weekly, 4 points- daily or almost daily. Questions 1-3 measure the frequency in alcohol consumption, e.g. *how often do you have six or more drinks on one occasion?,*4-6 measure alcohol dependence, e.g. *how often in the last year have you had a drink first thing in the morning to get you going?,* and question 7-10 measure alcohol related problems, e.g. *how often have had a road accident due to your drinking?,* A score of 8 or more in men is a strong likelihood of hazardous or harmful alcohol consumption while a score of 20 or more is suggestive of alcohol dependence and a score of 15 in men indicates likely dependence. This scale was subjected to pilot testing using split half reliability and resulting in reliability co-efficient of 0.72 (r=0.72) which is considered suitable for this study (Attached as appendix 1).

#### 3.4.3 Section C: Socrates Alcohol Drinking Scale (Socrates 8A)

Socrates Alcohol Drinking Scale (8A) constructed by Miller and Tonigan (1996) is a 19 item scale which was adopted to assess readiness for change in alcohol abusers/ addicts by measuring three stages of change construct which are: taking steps, e.g. *I am working hard to change my drinking,* problem recognition e.g. *I know that I have a drinking problem,* ambivalence e.g. *sometimes I wonder if my drinking is hurting people.* The items are on a five point scale ranging from 1- strongly agree,

2 – disagree, 3-undecided, 4-agree and 5strongly disagree. The researcher for the purpose of this research reduced the numbers of items to 12 items which are most relevant to the purpose of the research. This scale was subjected to a pilot test using the split half reliability method. The result of the reliability test was 0.72 (r=0.72) (Attached as appendix 2).

### 3.4.4 Section D: Alcohol Abstinence Self-Efficacy Scale (AASE)

Alcohol Abstinence Self-Efficacy Scale (AASE) developed by DiClemente (1994) is a 20 item self-report survey adopted to assess a person's perceived confidence about the ability to abstain from drinking in specific situations by measuring various aspects such as negative affect, e.g. *when I sense everything is going wrong for me, when I am depressed,* social/positive affect, e.g. *when I am excited or celebrating with others, when I am being offered a drink in a social situation,* physical concerns e.g. *when I have headache, when I am physically tired,* Craving and Urges, e.g. *when I experience an urge to take a drink that catches me unprepared, when I have the urge to try just one drink.* The items are on a five point scale ranging from 1-not at all, 2-not very, 3-moderately, 4-very and 5-extremely. The scale was subjected to a pilot test using split half reliability method. The result of the reliability test was 0.76 (r=76) (Attached as appendix 3).

### 3.4.5 Section E: Perceived Distress Scale (PSS)

The Perceived Distress Scale (PSS) developed by Cohen et al. (1983) is a 10-item test designed to determine the extent to which situations in respondent's life are perceived as distressful and basically to measure the extent to which respondents perceive their lives to be unpredictable, uncontrollable and overloaded with the issues of life. Items are on a scale of 0-4: 0-never, 1-almost never, 2-sometimes, 3-fairly often, and 4-very often. Items on the scale include: *In the last month how often have you been upset because of something that happened unexpectedly? , in the last month, how often have you been able to control irritation around your life? , In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?* PSS is scored by reversing items 4, 5,

7 and 8 such that 0=4, 1=3, 2=2, 3=1, and 4=0. Individual's scores on the PSS can range from 0-40 with higher scores indicating high perceived distress and scores between 0-13 considered to indicate low distress, 14-26 moderate distress and 27-40 high perceived distress. The scale was subjected to pilot testing with a reliability score of 0.76 (r=0.76) (Attached as appendix 4).

### 3.5 Inclusion Criteria of Participants

The following criteria were used in selecting the participants for the study:

- The participants were members of the NURTW, Lagos State Chapter.
- Males between 20-50 years of age.
- Participants were card carrying member of the NURTW.
- NURTW members who obtained 50 in the alcohol addiction questionnaire administered.
- NURTW members who volunteered by signing the consent form provided by the researcher.
- Participants who were willing to participate in the ten sessions.
- Participants willing to be photographed.

### 3.6 Procedure

The procedure for the study was in three stages as follows :

#### 3.6.1 Pre-treatment

The researcher collected a letter of introduction from the Head of the Department Guidance and Counselling at the University of Ibadan, Ibadan. The letter of introduction was presented at the NURTW secretariat in Lagos State and was stamped for in approval for use at the motor parks designated for use. Also, the heads of the various motor parks and the participants were adequately informed about importance of the study and the sampled garages were visited beforehand to enable the researcher get acquainted with the environment and the participants. The research instruments were tested with the help of one research assistance to validate the reliability of the instruments in other Local governments outside those designated for the research. Furthermore, two research assistance were selected to participate in the research, having been trained on the objectives of the study and how to engage the participants. Then, one of the treatments was administered (Alcohol Use Identification Test) after which participants who met the criteria were randomly assigned to the three experimental groups; Group 0ne (Functional Analytic Psychotherapy), Group two (Psychoeducation) and Group three (Control group).

#### 3.6.2 Treatment Stage

The treatment stage involved engaging the participants in a well-structured teaching, mentoring and impactful interaction for a period of 10-weeks with 45 minutes duration per session. Functional Analytic Psychotherapy was used for the

participants in group one and Psychoeducation for group two. Also, there was a control group which was not treated but focused on an intensive training on the importance of use of waste baskets. Several methods were used to encourage active participation and to sustain participants' interest on the training. These include; role-play, video clips, group discussion and presentation, debates, and so on. Participants had assignments to help enhance the desired change.

### 3.6.3 Post-Treatment Stage

In the post-treatment stage, the researcher engaged in the following activities: Collection of post intervention data, thorough check of the data collected to avoid ambiguousity, and appreciation of the participants with refreshment as a token of the researcher's gratitude for the commitment and resilience of the displayed to have stayed through to the end of the program.

## 3.7 Control of Extraneous Variables

Extraneous variables in this study were controlled through sample and sampling method, ANCOVA, randomization, effective use of 3×3×3 factorial matrix design and inclusion and exclusion criteria.

## 3.8 Ethical Clearance

As a professional researcher, the researcher adhered to the ethical standards of confidentiality of responses as reported by the participants, hence, such details as name, address, phone number and other confidential details were excluded from the questionnaire. The participation was voluntary and participants were not under any form of threat, coercion or duress compelling them for consent. Also, Participants were informed of their right to opt out, should they wish to in the process of the training. Consent forms were given to participants to participate in the study.

## 3.9 Summary of Sessions: Lagos National Union of Road Transport Workers Treatment with Functional Analytic Psychotherapy

- **Treatment goal**: To reduce alcohol addiction among members of the NURTW through evoking CRBs, discouraging CRB1 and reinforcing CRB2 contingently.
- **Training materials**: Flip charts, markers, flip chart stand, file folders, notebooks, and ball pens, cocaine, heroin, amphetamine, marijuana, cannabis and cigarette.

**Functional Analytic Psychotherapy Treatment Sessions**

- **Session One**: General introduction, Orientation and Administration of Pre-test.
- **Session Two**:Teaching onIdentification of CRB1s and CRB2s**.**
- **Session Three**: Discussion on the myths encouraging CRB1s (Alcohol addiction) and truth about CRB1s.
- **Session Four**: Revealing the truths about alcohol addiction.
- **Session Five**: Brainstorm Session-Reinforcing CRB2s.
- **Session Six**: Discussion on the consequences of accidents on drivers, the family and the society thereby discouraging CRB1s**.**
- **Session Seven**: Enlightenment on the Damaging effects of addictive use of alcohol on the heart.
- **Session Eight**:Teaching of incompatible behaviours that can replace addictive behaviours to avoid relapse.
- **Session Nine**: Discussion Session-Report giving on quit trials by participants.
- **Session Ten**: Appreciation and Administration of post-test.

### 3.9.1 Summary of Sessions for Experimental Group 2 (Psychoeducation)

**Treatment goal**: The Goal of therapy is to reduce alcohol addiction among participants by enlightening and widening their knowledge on the damaging effect of alcohol addiction on health, correcting irrational thoughts about the beliefs and superstitions surrounding their addictive behaviours.

**Treatment materials**: Flip charts, marker, flip chart stand, file folders, notebooks, ball pens, Information Education and Communication materials (IEC), alcoholic drinks and alcoholic based herbal concoctions.

- **Session One**:General Introduction and Administration of Pre-test.
- **Session Two**: Training on emotional intelligence skill in reducing alcohol addiction.
- **Session Three**:Teaching healthy response to alcohol withdrawal syndrome.
- **Session Four**: Discussion on the consequences of addictive use of alcohol and alcoholic concoctions.
- **Session Five**: Teaching on myths and truth about alcohol addiction.
- **Session Six**: Discussion on the effects of alcohol addiction on the kidney.

- **Session Seven**:Discussion on the effects of alcohol addiction on the heart.
- **Session Eight**: Teaching on the relationship between addictive use of alcohol and increased risk of cancer.
- **Session Nine**: Teaching on the importance of health sustaining lifestyle.
- **Session Ten**: Appreciation, termination therapy and administration of post-test. **Control Group**

Session 1: General Orientation and Rapport and administration of pre-test.

Session 2: Importance of the Use of Waste Baskets in the Vehicles.

Session 3: Administration of Post-test.

### 3.10 Method of Data Analysis

Data that was generated from the study were analyzed using Analysis of covariance (ANCOVA) statistics at 0.05 level of significance. Analysis of co-variance was used in this study to test the main and interaction effects of the independent variables on the dependent variables. ANCOVA is also preferred because of its usefulness at controlling for other variables that may co-vary with the dependent variable in this research work which are known as the extraneous variables. Post-hoc analysis made used of a pair-wise comparison using Bonferonni.

# CHAPTER FOUR

# RESULTS AND DISCUSSION

**4.0** This chapter presents the results and summary of findings. The study investigated the effect of Functional Analytic Psychotherapy and Psychoeducation on the reduction of alcohol addiction among the Workers of National Union of Road Transport in Lagos State, Nigeria. Seven hypotheses were formulated and tested to infer inferences at 0.05 level of significance. Data were analysed using simple percentage and Analysis of Covariance (ANCOVA) Statistical method.

## 4.1 Testing of Research Hypotheses

This section provides the study with regards to the seven null hypotheses that were tested at 0.05 level of significance.

### 4.1.1 Hypothesis One

There is no significant main effect of treatments on alcohol addiction among National Union of Road Transport Workers.

To test this hypothesis, Analysis of Covariance (ANCOVA) was adopted to analyse the post-test scores of the participants on their alcohol addiction using the pre-test scores as covariate to ascertain if the post experimental differences were statistically significant. The summary of the analysis is presented in Table 4.1.

**Table 4.1**: **Summary of 3x3x3 Analysis of Variance (ANCOVA) showing the main effect of treatment groups on alcohol addiction post-test score of National Union of Road Transport**

| Source | Type III Sum of Squares | Df | Mean Square | F | Sig. | Partial Eta Squared |
|---|---|---|---|---|---|---|
| Corrected Model | 4003.991[a] | 19 | 210.736 | 3.834 | .000 | .603 |
| Intercept | 3369.114 | 1 | 3369.114 | 61.288 | .000 | .561 |
| Pre-Alcohol addiction | 61.923 | 1 | 61.923 | 1.126 | .294 | .023 |
| Treatment | 385.236 | 2 | 192.618 | 3.504 | .038 | .127 |
| Self-efficacy | 745.346 | 2 | 372.673 | 6.779 | .003 | .220 |
| Distress | 261.863 | 2 | 130.931 | 2.382 | .103 | .090 |
| Treatment * SelfEfficacy1 | 186.274 | 2 | 93.137 | 1.694 | .195 | .066 |
| Treatment * Distress | 900.992 | 4 | 225.248 | 4.098 | .006 | .255 |
| Self-efficacy * distress | 480.427 | 4 | 120.107 | 2.185 | .085 | .154 |
| Treatment * Selfefficacy * distress | 151.664 | 2 | 75.832 | 1.379 | .262 | .054 |
| Error | 2638.641 | 78 | 54.972 | | | |
| Total | 81025.000 | 97 | | | | |
| Corrected Total | 6642.632 | 96 | | | | |

(R Squared = .603 (Adjusted R Squared = .446)
*Significant at 0.05

Table 4.1 reveals that there was a significant main effect of treatment on alcohol addiction of National Union of Road Transport Workers; $F_{(2,78)} = 3.504$, $p < 0.05$, $\eta^2 = 0.127$. Hence null hypothesis was rejected. This implies that treatment had significant effect on alcohol addiction. Size of effect reveals that treatment accounted for 12.7% ($\eta^2 = 0.127$) change in participants' alcohol addiction. For further justification on the margin of difference between the treatment groups and the control groups, the pair-wise comparison using bonferonni was computed and the result is shown in Table 4.2.

**Table 4.2**: **Bonferonni Pair-wise Comparison showing the significant differences among various treatment groups and control group**

| (I) treatment | (J) treatment | Mean Difference(I-J) | Std. Error | Sig. |
|---|---|---|---|---|
| Psycho-education group ($\bar{x}$= 31.99) | control group | -8.986*,b,c | 3.013 | .013 |
| | functional analytic psychotherapy group | 2.416 b,c | 2.788 | 1.000 |
| Control group ($\bar{x}$= 40.97) | psycho-education group | 8.986*,b,c | 3.013 | .013 |
| | functional analytic psychotherapy group | 11.402*,b,c | 2.942 | .001 |
| Functional analytic psychotherapy group ($\bar{x}$ = 29.57) | psycho-education group | -2.416b,c | 2.788 | 1.000 |
| | control group | -11.402*,b,c | 2.942 | .001 |

Table 4.2 reveals that after controlling for the effect of pre-alcohol addiction, participants in experimental group I (Functional analytic psychotherapy) (mean = 29.57) displayed lower alcohol addiction, followed by those in experimental group II (psychoeducation) (mean = 31.99) and control group (mean = 40.97). By implication, Functional analytic psychotherapy is more potent in reducing alcohol addiction among participants than the psycho-education therapy. The coefficient of determination (Adjusted R-squared = .446) in the overall model indicates that the differences that exist in the group account for 44.7% in the variation of National Union of Road Transport Workers alcohol addiction.

The first hypothesis that proposed that treatment will not have any significant effect on the reduction of alcohol addiction among the National Union of Road Transport Workers in Lagos State, Nigeria was rejected as revealed in table 4.1 which shows that there is a remarkable effect of treatments on the reduction of alcohol addiction among the National Union of Road Transport Workers in Lagos State, Nigeria. That is, both Functional Analytic Psychotherapy and Psychoeducation were effective in reducing alcohol addiction among participants of the study. The participants exposed to Functional Analytic Psychotherapy treatment displayed lower level of alcohol addiction thereby showing that they benefitted more from treatment than those exposed to Psycheducation Therapy. FAP, a modern contextual behavioural therapy which is informed by empirically established principles, is evocative, caring, relational and intense. It is usually employed to engender the influence of other therapeutic techniques by enhancing the value of the therapeutic alliance, interpersonal focus as well as the emotional intensity. In furtherance of the foregoing, it is succinct to note its usage as a detached approach which focuses on ideographically defined factors, usually in the context of client's goals associated with enhancing social connection, which is a cross-diagnostic functional dimension.

Several studies conducted by Kohlenberg et al. (2014), Kanter, Schildcrout and Kohlenberg (2005), Holman et al. (2012), Gifford et al. (2011), Gaynor and Lawrence (2002), Bowen, Haworth, Grow, Tsai and Kohlenberg (2012), and Kohlenberg, Kanter, Bolling, Parker and Tsai (2002) support FAP's higher corrective influence by indicating the great spiraling effectiveness of applying FAP in along with other methods and therapies. However, the high alcohol addiction observed among the participants in the control group aligned with the assertion that they were not subjected to any psychological management. The outcome of this

result denotes that if alcohol addicts are exposed to psychological interventions, such as Functional Analytic Psychotherapy and Psychoeducation therapy, there is the possibility of enhancing their potential to change from the alcohol addictive behaviour.

The finding substantiates the study of Maitland (2014) in which a randomized clinical experimentation showed substantial decreases in diagnostic symptoms throughout anxiety disorders and depression as well as substantial upsurges in social connectedness experienced by participants exposed to FAP compared to those exposed to another therapy which was Watchful Waiting. Also, there are studies that have proven FAP highly potent and incrementally effective when coupled with other therapies and methods as the use of contingency in reinforcement, evoking of CRBs, and improving of CRB1s to become CRB2s together with the generalization of outcomes of counselling session to real world situations have presented a robust package all in a therapy (FAP) which researchers such as Kohlenberg (2014), Kohlenberg, Kanter, Bolling, Parker, and Tsai (2002), Gifford (2011), Kanter, Schildcrout and Kohlenberg (2005), Eagner and Lawrence (2002), Tsai and Kohlenberg (2012), have studied critically and endorsed to be suitable in enhancing behaviour modifications across board including being especially invaluable in reduction of addictive behaviours such as alcohol addiction.

The potency of FAP is enhanced through FAP's concentration on the role of a behaviour other than on the form of behaviour which is achieved through clinical behaviour analysis by which client's behaviours of alcohol addiction are conceptualized in relation to the function such behaviours perform or the possible problems the pathological behaviour of alcohol addiction helps the client to resolve thereby merging a broad category of behaviours which may be seemingly different observing the nature but collectively performing the same function. Example of such broad category of behaviour among the NURTW includes violence, smoking, high risk behaviour, and so on, all being connected to addictive alcohol intake. This assertion supports the findings of Cook, Fucito and Baker (2012) that reliance on tobacco and alcohol is correlated as individuals who are alcoholdependent have three times higher propensities towards smoking, however, smoking as well as drinking are different behaviours but perform the same function. In the same vein, Olaniyi (2018) revealed through the study that there is significant relationship between antisocial behaviour and illicit substances abused among the NURTW, obviously,

these are two different behaviours but perform similar functions. Hence, Functional Analytic Psychotherapy is an exceptional psychotherapeutic approach which enables therapies understand behaviours in totality thereby enabling a desired change in behaviour and achievement of therapeutic goals.

Functional Analytic Psychotherapy (FAP) was more effective as it focused more intensely on relationship which is the therapeutic core of FAP as averred by Wetterneck and Hart (2012), that close relationships are important to attaining the status of mental health as FAP focuses more on what takes place within session between the therapist and the client through which interpersonal relationship is formed and sustained and according to the assertion of Holt-Lundstad (2010), that loneliness and poor social connection have been discovered to increase the vulnerability of individuals to engage in excessive smoking and drinking. Kanter, Tsai, Holman and Koerner (2012) found significant progress in observer-rated and self-reported therapist skill at FAP and therapist while conducting a small, randomized cross-over trial of FAP online training and this tells of closer, more impacted connections with their clients. Therefore, FAP provides the platform for client to express intense emotions which are usually repressed within individuals as revealed through the submission of Psychology Today (2019), that addiction has the capacity to induce the feelings of hopelessness, failure, guilt and shame which obviously implies a chain cycle of addiction for clients and this is well absorbed in the FAP principles as CRB1s that therapists through well-defined therapeutic relationship are able to evoke and resolve.

Functional Analytic Psychotherapy is equipped with a dimension of psychotherapeutic practice which portrays the real-world scenario or characteristics in the counselling session such that the counselling session can evoke the same behaviours as would be in the real-life situation. This is enhanced through warm relationship between the therapist and the client which enables client FAP therapist in collaboration with the client to collectively form therapeutic. This action is intrinsically motivating for the client because counselling goals are collaboratively formed.

Furthermore, the effectiveness of FAP in this study confirms the inevitability of the role of reinforcement in behaviour modification as this is a major principle of FAP and as alluded by Tsai and Kohlenberg (2009), therapists further reinforce the CRB2s' occurrence which are the in-session improvements in a FAP counselling

session which has the capability of increasing the occurrence of the desired behaviour which is the cessation of CRB1s (problem behaviours) the tendency to condition the client to continuously elicit responses that improve the desired behaviour (CRB2s) being that human behaviours are operant in nature. Considering alcoholism as a mental illness in which NURTW members engage in compulsive, unregulated alcohol abuse in spite of the negative economic, social and health consequences which such abuse has on them, their immediate and extended families as well as their communities was considered unsuitable when applying operant conditioning approach to addressing alcohol addiction.

Although alcohol addiction is apparently aversive and potentially results in undesirable spate of morbidity and mortality in the society, such behaviour is not pathological, as most medical guidelines submits. This invariably implies that, just like all other addictive behaviours, alcoholism follows the common bases of normal operant behaviours and by implication, is informed by the functional relationships amidst contingencies existing in the environment. Alcoholism is an impulsive behaviour as it is characterised by a significant occurrence of response, but controlled. In deviation from the foregoing, the immediate reinforcer (which is the impact of the drug), alongside other latent conditioned reinforcers significantly controls it. Operant conditioning perspective on alcohol addiction considers alcohol as a common, learned tendency which is programmed along a continuum covering from moderate alcohol drinking, with no or few related problems, to excessive alcohol intake, alongside the attendant undesirable damaging effects. In consonance to the operant conditioning perspective, moderate alcohol intake, addiction and abuse are learned responses which are reactive to their own implications and may therefore be comprehended as operant behaviours.

Contingencies of reinforcement control the acquisition and maintenance of alcoholism by members of NURTW. Such contingencies entail unconditioned instant positive reinforcement which the pharmacological effect of alcohol avails these addicted drivers; negative reinforcement associated with withdrawal from alcohol; conditioned positive reinforcement related to the social environment of alcoholism; as well as negative reinforcement which relates to the environmental frigid or aversive features. In sum, one or more of these contingencies are present in alcohol acquisition and maintenance inform addiction and attendant relapse among addicted NURTW members. Treatments which create alternative non-drug-related reinforcers

contingent on targeted behaviour (that is, alcohol abstinence) can therefore be employed in extinguishing social, conditioned, alcoholrelated reinforcers among NURTW members to effectively diminish their rates of alcohol consumption, achieve continuous abstinence and prevent relapse. This is expressed by Overskeid (2019) that operant conditioning shapes human behaviour continuously through contingent reinforcement. This, in FAP is achieved through focusing more on intrinsic dimension to motivation rather than the extrinsic. The effectiveness of this principle of FAP is revealed in the study conducted by Lizarazo (2015), in which the finding revealed that out of the five rules of FAP, rule 3 which is the contingent reinforcement of CRB2s is the active mechanism of behaviour due to the fact that rule 1, rule 2 and rule 5 produced not as much concretely observable changes in behaviour as rule 3 which is contingent reinforcement of CRB2s.

Functional Analytic Psychotherapy and Psychoeducation are both highly therapeutic approaches for reducing psychopathological behaviours as evidenced in various studies across decades such as Smokers experiencing clinical depression reporting smoking cessation in most clients after 24 sessions of FAP in conjunction with other treatments, (Holman, 2012), reducing fear of intimacy and client's social problems in which FAP was used and the result recorded a huge statistically significant reduction in phobia for intimacy (Maitland, 2016), FAP was used for the improvement of social intimacy (Busch, 2010), group psycho-educational treatment on individuals suffering from major depression with result showing high reduction in depression (Casana, Luis, Valero, Real and Casas, 2012), reduction of the symptoms of depression and psychological distress using Psychoeducation (Donker, Griffitha and Christensen, 2019).

There exists a distinct difference in terms of their therapeutic procedures as FAP operates a five-rule principle which involves; notice CRBs, Evoke CRBs, Respond contingently to CRBs and naturally reinforce CRBs, Notice the effects of CRBs on clients, and provision of functional explanations and generalizations (Tsai and Kohlenberg, 2009) while Psycho-education is a professionally enhanced treatment that combines psychotherapeutic and educational intervention (Lukens and McFarlane 2004). Hence applying FAP's five rules may have the probability of posing FAP as more effective compared to Psychoeducation which though provide information about the addiction, may not provide as much empowerment to resist addiction or relapse as FAP which can be attributed to the ability of the therapist to

naturally and contingently reinforce CRB2s actualizing the gains of the therapeutic session (Morrison, 2013).

Psychoeducation in this study has also proven to be efficacious. As an area of therapy which creates awareness, provides information as well as support for patients who are confronted with alcohol abuse syndromes, co-occurring imbalance in psychological wellness and dual diagnosis on how they could be free from addiction, it was employed in collaboration with other approach of group-dependent treatment otherwise known as FAP to ensure the unlearning of the mastered act of alcohol dependence among NURTW members in Lagos State. The psychoeducation therapy engaged the rational or left hemisphere of their brains to articulate the provided information as well as to adjust the often-compelling emotional state that informs addiction. It engenders patients to, yet again, take charge of their lives, thus making sense of the platitude which quips that "knowledge is power".

The intent of this effort was to give individuals battling with alcohol addictions the insight needed to more profoundly comprehend their malady and the enablement needed to cope with it. It provided the researcher with a more robust appreciation of the characteristic features of addiction and the disease model. Through psychoeducation, alcohol addicts were exposed to the form of engaging workshops and lectures which are appropriate and applicable to their recuperation such that they become experts at their disease. When the treatment was completed, the knowledge garnered through psychoeducation became a priceless means at coping and progressing in the recuperation process. They were equipped with all the knowledge required to maintain their resolve such that when relapse even occurs, trained clients understand what needs to be done next in order to resume to the path of sobriety.

Psychoeducation therefore remains a useful therapy for correcting psychopathological tendencies in addicts. It provided, in simple terms, means of comprehending the complex science of addiction. Psychoeducation sessions provided opportunities for the NURTW members to ask questions (even on subjects that are seemingly difficult and embarrassing) thereby alleviating their worries and anxieties by reassuring them that addiction is a chronic, treatable ailment rather than an indication of poor character or a moral issue. The NURTW clients were also encouraged to invite their significant others to these psychoeducation sessions so they could assist better appreciate the condition and provide backing for their loved

ones through the recuperation process without overexerting or losing themselves in the process. With discussions about the function of medications and other helpful therapies to drug and alcohol treatment, psychoeducation worked as a curtain-raiser, furnishing the NURTW members with a myriad of options at their disposals and enabling them to complement the process with other suitable therapies of their choice.

### 4.1.2 Hypothesis Two

There is no significant main effect of self-efficacy on alcohol addiction among the National Union of Road Transport Workers.

Table 4.1 further shows that there was a significant main effect of self-efficacy on National Union of Road Transport Workers' alcohol addiction; $F(1,78) = 6.779$, $p<0.05$, $\eta^2 = 0.220$. Hence the null hypothesis was rejected. This implies that there was a significant difference in the alcohol addiction of participants based on their level of self-efficacy. The table further reveals that National Union of Road Transport Workers' level of self-efficacy accounts for 22% change in their alcohol addiction. To further clarify where the difference lies, a pair-wise comparison was computed using bonferonni, and the result is shown in Table 4.3.

**Table 4.3**: **Bonferonni Pair-wise Comparison showing the significant difference among levels of self-efficacy**

| (I) Level of Self Efficacy | (J) Level of Self Efficacy | Mean Difference (I-J) | Std. Error | Sig. |
|---|---|---|---|---|
| High self-efficacy ($\bar{x}$ = 39.81) | Moderate self-efficacy | 5.878 | 2.522 | .072 |
| | High self-efficacy | 14.093 | 2.836 | .000 |
| Moderate self-efficacy ($\bar{x}$ = 33.94) | Low self-efficacy | -5.878 | 2.522 | .072 |
| | High self-efficacy | 8.215 | 3.176 | .038 |
| Low self-efficacy ($\bar{x}$ = 25.72) | Low self-efficacy | -14.093 | 2.836 | .000 |
| | Moderate self-efficacy | -8.215 | 3.176 | .038 |

Table 4.3 reveals that after controlling for the effect of pretest alcohol addiction, participants with low self-efficacy (mean = 25.72) had the lowest alcohol addiction tendency than those with moderate self-efficacy (mean = 33.94) and high self-efficacy (mean = 39.81). By implication higher self-efficacy reduce the likelihood of transport drivers' alcohol addiction.

The second hypothesis which stated that self-efficacy will not have any significant effect on the reduction of alcohol addiction among the National Union of Road Transport Workers in Lagos State, Nigeria was rejected as the study reveals that there was a significant difference in the alcohol addiction of participants contingent on their degrees of self-efficacy. This result corroborates the findings of Geiger (2012) in which it was revealed that a predictor of positive outcomes in substance abuse abstemiousness is self-efficacy. Also, Marthis et.al. (2009) averred that self-efficacy possess essential features which can enable patients overcome recovery-related difficulties in substance abuse and addiction. In the same light, Blume, Schmaling and Marlatt (2003) observed in a study that individuals with high self-efficacy demonstrated high resilient in drug/alcohol abstinence even in high risk cases in the course of conducting follow-ups and reduced days of consumption and decreased drug or alcohol severity. Self-efficacy has also been considered by be effective at maintaining a long-term abstinence even after treatment without any history of relapse as discovered by Ramo, Anderson, Tate, and Brown (2005) in a study that greater self-efficacy predicted abstinence from alcohol consumption after a period as long as 3 years while those with low level of self-efficacy had high tendency to revert back to drinking.

In furtherance of the foregoing, Greenfield, Hufford, Vagge, Muenz, Costello and Weiss (2000) stated a substantial nexus between many frequency-related outcome variables (such as the time to first drink; tendency of drinking; and time to relapse during the immediate year following treatment) and self-efficacy expectancies in the course of administering inpatient alcohol dependence treatment. In the same vein for outpatient treatment, Allsop, Saunders and Phillips (2000) noted that a predictor of time to relapse was alcoholics' post-treatment self-efficacy, while Vielva and Iraurgi (2001) noted that patients with great confidence in their capabilities to rebuff drinking urges were more probable to maintain abstinence for a period of 6 months (Romo et al., 2009).

In furtherance of these submissions, Brown, Seraganian, Tremblay and Annis (2002) also established that persons whose amplified confidence in high-risk circumstances continued up unto the follow-up stage experienced both reduced alcohol/drug severity and fewer days of use. Likewise, Ilgen, McKellar and Tiet (2005) noted that amidst alcoholdependent patients subjected to residential treatment, a significant degree of abstinence selfefficacy during treatment discharge was the most potent determinant of 1-year abstinence, hence, indicating the clinical essence of producing an appreciable level of abstinence selfefficacy. Stronger self-efficacy (alongside reduced dependence on avoidance coping) suggested diminution from alcohol consumption after a period spanning 3 years, while persons with relatively lesser self-efficacy were more prone to experience reversion relatively easily (Moos and Moos, 2006). Ramo, Anderson, Tate and Brown (2005) recorded a repulsing impact of coping self-efficacy on slipping back amidst teenagers experiencing psychiatric and substance use disorders.

All these studies accede to the potency of self-efficacy at inhibiting addiction and sustaining abstinence. Assessment of self-efficacy on a day-to-day basis amidst the NURTW workers trying to desist from alcohol addiction showed that self-efficacy increased just as abstinence was sustained. The researcher also noticed that reductions in daily selfefficacy informed relapse back to alcoholism. This research also established that selfefficacy could range from person to person, and that daily fluxes in self-efficacy culminate in everyday engagement. The result of this research established nexus between self-efficacy and subsequent drinking as refers both frequency/occurrence of alcohol consumption and the quantity taken per time.

Self-efficacy has been delineated by Bandura (1982) as a personal conviction of the extent to which one is sure of achieving success in specific prospective tasks or challenges. Also, the view of Stajkovic and Luthans (1998) reemphasised the assertion of Bandura by positing that beyond believing in one's capability to complete a task successfully, selfefficacy also strengthens coping behaviour and how long effort can be sustained in the presence of obstacles. Addiction to psychoactive substances restructure the brain reward system and may through repeated use become a disease of the brain (ASAM, 2011), hence there needs to be a convincing level of assurance to ensure withdrawal from addictive intake of alcohol and achieve relapse avoidance despite the experience of withdrawal syndrome and other triggers in the environment. Self-efficacy of participants of this study was demonstrated through

firstly the desire to engage in the study, secondly the tenacity to endure the series of training sessions, thirdly, the constant search for encouragement when stuck in the process of withdrawal, and lastly the resilience to withstand the challenges experienced in the process of withdrawal.

Self-efficacy is an essential life coping skill which has been discovered to affect human functioning in areas like choices regarding behaviour, motivation, work performance, thought patterns, and health behaviours which involve choices affecting health, such as smoking cessation, physical exercise, and dieting (Conner and Normah, 2005). Self-efficacy therefore empowers towards the development of healthy lifestyles such as cessation from addictive intake of alcohol through which participants in the study were able to desist from continuous and harmful use of alcohol. Therefore, clients with high selfefficacy had a higher probability of resisting the urge to relapse overtime as such resilience is deeply rooted in the factors affecting self-efficacy which according to Bandura (1982), include social persuasion, psychological factors, perception of ability and the environment.

However, some researches show that the role of self-efficacy may not be straightforward at all times, and that it may interpose with other effects like the quality of the therapeutic association/relationship to inform outcome such that if client having low self-efficacy formed a strong relationship with the therapist, the alcohol use outcomes would be relatable to patients who had greater self-efficacy (IIgen, Tiet, Finney and Moos, 2006). Amidst untreated splurge drinkers, Blume, Schmaling and Marlatt (2003) noticed that greater self-efficacy was associated with decreases in the incidence of splurge drinking occurrences over a time-span of 3 months, but not to differences in overall alcohol consumption. In furtherance of these findings, Walton, Blow, Bingham and Chermack (2003) also documented a negative nexus between self-efficacy and relapse to binge consumption.

### 4.1.3 Hypothesis Three

There is no significant main effect of distress on alcohol addiction among the National Union of Road Transport Workers.

Table 4.1 further shows that there was no significant main effect of distress on transport drivers alcohol addiction; $F_{(2,78)} = 2.382$, $p>0.05$, $\eta^2 = 0.090$. Hence the null hypothesis was not rejected. This implies that the National Union of Road Transport

Workers' distress did not influence their alcohol addiction. Therefore, National Union of Road Transport Workers' alcohol addiction is not as a result of the distress level they are exposed to.

The third hypothesis which stated that distress will have no significant main effect on the reduction of alcohol addiction among the National Union of Road transport Workers in Lagos State, Nigeria was accepted. Table 4.1 reveals that there is no significant impact/effect of distress on the National Union of Road Transport Workers' alcohol addiction. Therefore, the null hypothesis was accepted. This result, though deviates from various findings in past researches on the moderating effect of distress, it is also consistent with the studies of Lili, Hua, Ai and Fan (2013) where it was reported that positive coping strategies mitigate or lessen the negative impacts of work distress on job performance.

In the same vein, Teo, Pick and Newton (2013) reported that recent studies showed that coping strategies play a pertinent role in work distress and wellness alongside job satisfaction. Hence, the workers of the NURTW may have demonstrated coping skills that helped ameliorate the effect of the distress experienced through eliciting various coping strategies, few of which were identified in previous studies by Folkman and Lazarus (1980), (1986), in which emotion focused and problem focused coping strategies were identified. Also substantiated in recent studies by Khalid, Murtaza and Zafar (2012), as findings showed that emotional intelligence, organizational commitment and supportive leadership are important coping strategies in ameliorating the effects of distress.

Furthermore, the hypothesis positioned distress in form of any impediment that consistently obstruct the ability to live a normal life for an extended period which therefore make worse the effect of normal day to day life challenges which for members of the NURTW involves meeting deadline for daily delivery, traffic issues on Lagos roads, hike in fuel prices, bad roads, vehicle break-downs, bribes for corrupt traffic officials on the road, keeping up with rules in motor parks and countless others

of such. Hence, the NURTW members would need a reasonable level of coping strategies which Sharma and Kumar (2016) have expressed as the conscientious efforts both psychological and behavioural employed to tolerate, master, lessen or mitigate distressful happenings to combat the effects of distress which possibly might be reduced through coping strategies like emotional intelligence which has been pictured as the capability to desist from negative emotions like anxiety, anger and distress, and concentrate on positive feelings of optimism, patience, relevance, empathy and confidence (Harminder, 2013). Emotional intelligence therefore combines problem focused and emotion focused coping strategies to strengthen the capacity of members of the NURTW to cope with distress.

Some NURTW workers self-medicate distress-induced physiological impacts (such as suppressed serotonic, catecholamine secretion and elevated cortisol) by drinking alcohol to engender homeostasis (internal/emotional balance). It is usually employed as an antidepressant or anti-anxiety agent to mitigate the effect of job distress which, in turn, reduces the level of self-control among NURTW members and inhibits drinkers' tendency to absolutely abstain from or lessen alcohol consumption rates and may even cause these alcoholics to revert or relapse and start drinking all over again after treatment. Hence, it is simply rational to assume that distressful working conditions would naturally result in heavy and binge drinking among NURTW workers. On the contrary, the finding of this research contradicts that notion as corroborated by the submission of some of the alcoholics who readily admit that their cravings for alcohol get readily inhibited by the distress they contend with in the course of their mundane activities. This submission also corresponds with Van Loon et al.'s (2000) who found no statistically significant associations between alcohol consumption and job strain.

### 4.1.4 Hypothesis Four

There is no significant two-way interaction effect of treatment and Self-efficacy on alcohol addiction among the National Union of Road Transport Workers.

Table 4.1 further shows that there was no significant interaction effect of treatment and self-efficacy on National Union of Road Transport Workers' alcohol addiction; $F_{(2,78)} = 1.694$, $p>0.05$, $\eta^2 = 0.066$. Hence the null hypothesis was not rejected. This implies that self-efficacy did not significantly moderate the effect of treatment on alcohol addiction.

There will be no significant interaction effect of treatments and self-efficacy on the reduction of alcohol addiction among the National Union of Road transport Workers in Lagos State, Nigeria was the fourth hypothesis. This hypothesis was accepted as table 4.1 revealed that treatment and self-efficacy had no significant interaction effect on the reduction of alcohol addiction among the National Union of Road Transport Workers. This finding supports the results of a study conducted to clarify the controversy as regards the nexus between performance and self-efficacy and it was established that it (self-efficacy) can be negatively correlated to performance when reward is low but positively correlated with performance when reward is high. The level of self-efficacy may be reduced during treatment as a result of low level of motivation as withdrawal may possibly be reduced due to certain impediments experienced during the actual process of withdrawal from alcohol addiction. Obviously, during treatment, the initially perceived level of self-efficacy is put to test with real life circumstances such that may lower motivation, hence, reducing Self efficacy as reported in a study by Bandura (1999) conducted to test the contribution of perceived self-efficacy to depression in a longitudinal study involving a large sample of children and found that social as well as academic self-efficacy further engendered a rise in subsequent and concurrent depression both directly and via other influences such as academic achievement and behaviour.

Furthermore, Bandura (2007), in an examination of the causal structure of selfprotective behaviour, noted that avoidant behaviour and anxiety arousal were primarily coeffects of subjectively perceived coping efficacy which was regarded as inefficacy in the reality. The implication of this study is that individuals' perceived level of self-efficacy may not measure appropriately the specific level of self-efficacy required to achieve a desired result in a given task therefore raising feelings of anxiety in relation to the achievement of the predetermined goals. Hence, anxiety results in eliciting of avoidant behaviours as stated by Bandura (2007), so as to escape from difficult thoughts and feelings. This might as well justify the result of the outcomes of this research whereby self-efficacy and treatment had no significant main effect in reducing alcohol addiction among the NURTW.

Also, Salanava, Lorente and Martinez (2012) submitted that self-efficacy at high levels may be positive or negative as it was observed that self-efficacy was positive in relation to innovation and creativity while it was found to be negative in terms of high risk behaviours, less safety precautions as per performance, low

preference for safety, etc. Similarly, participants with high self-efficacy have the tendency of neglecting caution as to proper adherence to therapeutic instructions such as avoidance of triggers like alcoholic friends, social gatherings that may trigger the desire to engage in addictive drinking, avoidance of environments with high trigger capacity etc. based on the exaggerated opinion of the belief of an existent perceived high self-efficacy. This may therefore provide a suitable foundation for the findings of this study as regards the non-existent of a main significant effect of self-efficacy and treatment on the participants.

### 4.1.5 Hypothesis Five

There is no significant two-way interaction effect of treatment and distress on alcohol addiction among the National Union of Road Transport Workers.

Table 4.1 further shows that there was a significant interaction effect of treatment and distress on National Union of Road Transport Workers' alcohol addiction; $F_{(4,78)} = 4.098$, $p<0.05$, $\eta^2 = 0.255$. Hence the null hypothesis was rejected. This implies that distress significantly moderated the effect of treatment on alcohol addiction. The table further reveals that the effect of distress on treatment accounted for 25.5% change in participants' alcohol addiction; that is the interaction of treatment and distress had large effect in the variation of participants' alcohol addiction score. To further clarify where the difference lies, a pair-wise comparison using bonferonni was computed. The result is shown in table 4.4.

**Table 4.4**: **Bonferonni Pair-wise Comparison showing interaction effect of treatment and distress on alcohol addiction**

| Treatment | Distress Level | Mean | Std. Error |
|---|---|---|---|
| Psycho-education group | high distress | 31.877 | 2.708 |
| | moderate distress | 40.807 | 4.065 |
| | low distress | 23.335 | 4.145 |
| Control group | high distress | 42.537 | 3.211 |
| | moderate distress | 43.378 | 4.186 |
| | low distress | 37.007 | 4.147 |
| Functional analytic psychotherapy group | high distress | 25.944 | 4.064 |
| | moderate distress | 28.994 | 3.004 |
| | low distress | 33.777 | 2.819 |

Table 4.4 reveals that after controlling for the effect of pre-test alcohol addiction, experimental group I (Functional analytic psychotherapy) was more moderated by distress than experimental group II (psycho-education) and control group. Participants in experimental group I displayed varying level of alcohol addiction based on distress. Functional analytic psychotherapy intervention was more effective in reducing alcohol addiction among participants with high chronic distress (mean = 25.944) than those with moderate (mean = 28.99) and low chronic distress (mean = 33.77). While psycho-education intervention was moderately effective in reducing the alcohol addiction of participants with low level of distress (mean = 23.34), moderate level of distress (mean = 31.88), high level of distress (mean = 40.81).

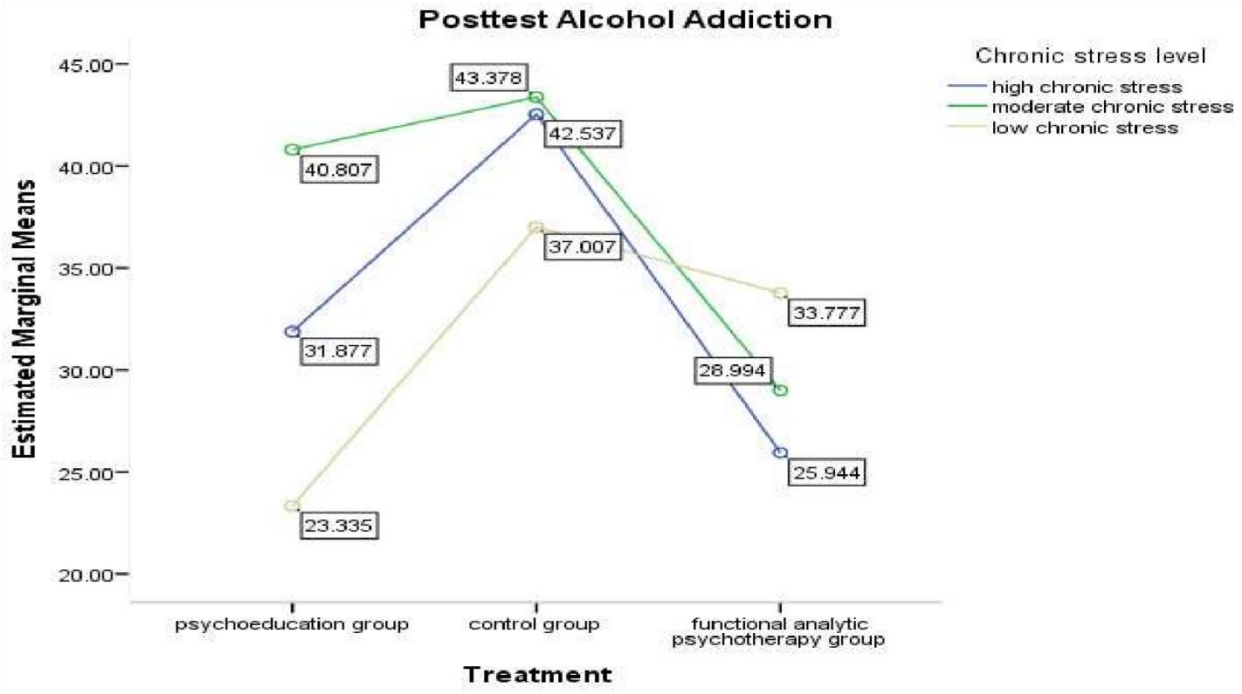


**Figure 3**: Posttest Alcohol Addiction Treatment

There will be no significant interaction effect of treatments and distress on the reduction of alcohol addiction among the National Union of Road Transport Workers, Nigeria. This hypothesis was rejected as the outcomes of the research indicated that treatment and distress have a significant interaction effect on National Union of Road Transport Workers' alcohol addiction meaning that in this study, distress in participants directed the effect of the treatments in reducing alcohol addiction. However, Breslin's (1995) findings reported a biobehavioural model of alcohol consumption which showed that chronic and acute distressors are linked with a decreased response to alcohol and also that the workings or mechanisms which may form the basis of this sobering effect include distressrelated cognitive deficiencies and situation specific tolerance related to high distress scale.

Conversely, a study conducted by researchers such as Keyes, Hatzenbueler and Hasin (2012) have shown that in human beings, dizzying alcohol consumption is associated with the distressful experience, meanwhile, the widely held tension-reduction hypothesis postulates that alcohol is taken so as to lessen the effects of distress, as a kind of selfmedication. Though NURTW members hold expectations as refers a number of positive results related to alcohol consumption, expectancies pertaining to alcohol's ability to engender tension reduction and relaxation seem most pivotal to the nexus between alcohol use and negative affect.

Also, some other researches revealed the moderating strength of distress on treatment of addictive alcohol consumption, as a research by the National Institute on Alcohol Abuse and Alcoholism suggests, substance use may be partly informed by distress, but distress can also cause individuals to appreciate the need to subject themselves to addiction treatment. This submission was supported by Koob and Le meal (2008) using the addiction cycle in which addiction is regarded as cyclinical being that persons who suffer from this syndrome transit from phases of abstinence to a relapse to drug use, thereby, obfuscating therapeutic interventions as chronic drug users experience three main phases, with the first stage known to entail fixation or preoccupation with the use of psychoactive substances including alcohol with consistent craving and obsessing succeeded by another phase of intoxication and splurging leading to the stage known as the withdrawal and negative affect phase.

Distress is delineated as a behavioural and neurophysiological reaction that enables organism to react to environmental encounters observed as intimidating (Koolhaas et al., 2011), this submission painted a vivid picture of the life pattern of

the participants of this study as distress had on several occasions during the treatment militated against participants' speedy response to treatment and in some specific situations had triggered their desire to engage more seriously in treatment. In the same vein, epidemiology researches have established distress as one of the major risk predicators for provoking drug addiction and as a powerful predictor of enormous craving and relapse (Sinha, 2008; Mantsch, 2016) which suggests the tenacity of distress as a predominant moderating variable in the process of alcohol abuse and help seeking tendencies.

### 4.1.6 Hypothesis Six

There is no significant interaction effect of self-efficacy and distress on alcohol addiction among the National Union of Road Transport Workers.

Table 4.1 further shows that there was no significant interaction effect of selfefficacy and distress on transport drivers alcohol addiction; $F_{(4,78)} = 2.185$, $p>0.05$, $\eta^2 = 0.154$. Hence the null hypothesis was not rejected. This implies that self-efficacy did not significantly moderate the effect of distress on alcohol addiction.

The sixth hypothesis states that self-efficacy and distress will have no significant interaction effect on the reduction of alcohol addiction among the National Union of Road Transport Workers in Lagos State, Nigeria and as revealed by Table 4.1, self-efficacy and distress had no significant interaction effect on National Union of Road Transport Workers' alcohol addiction which implies that in the study, self-efficacy did not significantly moderate the impact of distress on the participants. Therefore, the null hypothesis was accepted. In a research conducted by Bulik and Pierog (2007), the nous of efficacy amidst fire fighters negatively correlated with emotional fatigue whereas no significant nexus exists between other components of occupational burn out and the sense of self-efficacy.

The conventional conception that an appreciable level of confidence in one's abilities always inhibits the negative effect of difficulties is no longer comprehensive and contemporary. This informs the supposition that the positive model of self-efficacy is invalid from a general point of view. Divergent assumptions on self-regulation processes in distress management situations and motivational contexts generated empirical outcomes contesting such general protective effects. Many researches provide evidences negating such unvaryingly positive effects but rather establish a non-linear and not absolutely positive nexus between increased level of self-efficacy and distress reduction and behavior, examples of which are Vancouver's (2005, 2012) submissions. This stance connotes that higher perceived self-efficacy does not necessarily birth reduced neuroendocrine reactivity and improved performance coming from psychological regulation or adjustment. Since the impacts of self-efficacy are in turn contingent on some covariates, higher self-efficacy can also birth upsurges in autonomic arousal (Sanz and Villamarin, 2001; Sanz et al., 2006; Sanz and Villamarín Cíd, 1997).

As succinctly documented by Lazarus and Folkman (1984), coping strategies and appraisal act as mediating factors that influence an individual's emotional wellness. They further submit that an individual initially appraises and/or evaluates the distressor for features that challenge one's self-esteem and wellbeing (primary appraisal). The individual then appraises his/her ability to avert danger, or to manipulate the situation for selfaggrandizement (secondary appraisal), which is alike with a person's self-efficacy. Therefore, in transactional theory, particularly when it comes to appraising distress, selfefficacy performs a considerable role therefore suggesting that low or high level of distress might not be determined precisely by the level of self-efficacy an individual possesses but on the assessment of extant distressful situation based on how much harm or danger an individual is exposed to vis-à-vis the distressful circumstance.

**4.1.7 Hypothesis Seven**

There is no significant three-way interaction effect of treatment, self-efficacy and distress on alcohol addiction among National Union of Road Transport Workers.

Table 4.1 further shows that there was no significant three-way interaction effect of treatment, Self-efficacy and distress on transport drivers alcohol addiction; $F_{(2,78)} = 1.379$, $p>0.05$, $\eta^2 = 0.054$. Hence the null hypothesis was not rejected. This implies that selfefficacy and distress could not significantly moderate the effect of treatment on alcohol addiction among the participants.

The hypothesis which proposes that there will be no significant three-way interaction effect of treatments, self-efficacy and distress on the reduction of alcohol addiction among the National Union of road Transport Workers in Lagos State, Nigeria was accepted. This hypothesis was accepted contingent on the outcomes of the study as revealed by table 4.1 implying that self-efficacy and distress could not significantly moderate the effect of treatment on alcohol addiction among the participants. Evidences abound to the potency of self-efficacy in achievement of set goals including abstinence from addiction, however, there exits some constraints to the actualization of self-efficacy especially in aspects bordering on addiction withdrawal which may be associated with some personality variables like lifestyle factors, one's temperament and personality, cognitive factors, as well asoverall distress level (Larimer and Palmer, 1999). This relates to the submission of Bandura (1989) that individuals possessing both strong coping efficacy and the necessary skills are probable to marshal the effort necessary to efficaciously repel

circumstances of high risk for drug use or binge consumption and in the happenstance of relapsing. Persons who possess an appreciable degree of self-efficacious tend to consider such reversion as an ephemeral impediment and to reestablish authority, while people with relatively lower level of selfefficacy display greater susceptibility towards proceeding to a full-blown reversion to drinking.

Many researches show that the impact of self-efficacy may not be a straitjacket as it may interrelate with other effects. For instance, Ilgea, Tiet, Finney and Moos (2006) established that the worth of the therapeutic affiliation interfaced with baseline self-efficacy and clients that established a robust affiliation with their therapist, have a related alcohol intake results as those that were commensurable to patients who had appreciable degree of self-efficacy. Also, Bates, Pawlak, Tonigan and Buckman (2006) though, described a strong nexus between self-efficacy with both alcohol drinking frequency and quantity, the nexus was however moderated by cognitive deficiency or cerebral impairment which inhibited the effect of self-efficacy.

Considering the moderating roles of self-efficacy and distress on treatment, not all research has recorded self-efficacy to be a determinant of positive results. Wong, Anthony, SigmonMongeon, Badger and Higgins (2004) quipped that albeit the fact that coping self-efficacy got heightened with the cocaine treatment procedures, preceding asceticism, and not self- efficacy was the greater determinant of later abstinenceas reported that people who have been able to successfully resist overwhelming trigger circumstances are presumed to develop a greater aptitude of the capability to sustain same in similar situations. In the same vein, the nexus between relapse and self-efficacy is plausibly bidirectional, and this implies that clients who record greater success report relatively higher self-efficacy and patients who have failed report low self-efficacy with distress overlapping between self-efficacy and other aspects of intrapersonal determinants such as affective conditions, by offering greater adaptational strain on the patient that seeks treatment(Marlatt and Witkiewitz, 2005).

The consumption of psychoactive substances is common among members of NURTW. Virtually all forms of substance abuse are prevalent among this group of workforce nationwide. Alcoholism, in specific, among the NURTW members has huge negative health and economic implications as it reduces the quality of life through disability and can also birth untimely death. Commercial driving entailing

covering of long distances is commonplace in Nigeria and in many other climes, most particularly in the developing nations where other forms of transportation like the rail system is grossly deficient in capacity to satiate the overwhelming need of the populace. In order to daily meet up with the often-overwhelming demand of their daily tasks, majority of these drivers engage in alcoholism as a means of coping.

Particularly succinct is limitless use of alcohol, workday alcohol use, and alcohol consumption indulged in shortly after retiring from each day's work. This is done because liquor lowers the levels of neurotransmission of the cerebrospinal axis (central nervous system) producing anxiolytic and/or sedative feelings, and can equally engender stimulant effects also. Hence, some of these NURTW workers engage in alcoholism for sexual augmentation, social and physical aggrandisement, improved social assertiveness, power and aggression, as well as tension mitigation and leisureliness. It is no gainsaying that undergoing work-related distressors may most likely informs the diminution of mental, emotional and/or physical energy culminating in work fatigue that can be delineated as the detested situation of profound tiredness and mutilated functional tendency. It is rational that NURTW members who are motivated to mitigate the effects of fatigue and regain their lost energy.

One readily accessible technique for mitigating work fatigue and recovering drained energy among NURTW members is to engage in self-medication through the use of alcohol because of the stimulant effects it affords. They therefore consume alcohol to self-medicate elevated negative emotions birthed by exposure to distressors. They strongly believe that alcohol possess the tendency of reducing the deleterious effect of job distressors on them. Excessive consumption of this substance alongside its variants make these motorists to experience behavioural and mental syndromes which are not unconnected to substance abuse causing them to contravene traffic statutes on driving and drug usage which are attendant of a drug-induced cerebral ailment that births impulsivity towards alcoholism. A driver has the life of all passengers on board under his watch and any drift or miscalculation resulting from substance abuse could claim the lives of not only the driver and his coworker/conductor but those of other travellers. Hence, the need for the engagement of therapies like Functional Analytic Psychotherapy as well as Psychoeducation to correct this anomaly in drivers as a proactive means of averting the morbidity and mortality consequences of alcohol addiction.

# CHAPTER FIVE

# SUMMARY, CONCLUSION AND RECOMMENDATIONS

**5.0** This chapter presents the summary, conclusion, recommendations and contribution to knowledge as well as limitations to the study and suggestions for further studies.

## 5.1 Summary of Findings

The study focused on investigating the effectiveness of Functional Analytic Psychotherapy and Psychoeducation on Alcohol Addiction among National Union of Road Transport Workers in Lagos State, Nigeria. Alcohol addiction is a major challenge reducing the effectiveness and quality of life of members of the National Union of Road Transport Workers. This is validated through the incessant reports of avoidable road accidents as revealed by the Federal Road Safety Corps which released a report that there were 5,320 road traffic crashes and 2,471 deaths across the country within the first half of the year 2021(Vanguard News, August 2, 2021). Also, the non-challance to road traffic rules heightens usually at festive seasons during which there is generally an increased consumption of alcohol by commercial transport drivers leading to highly disturbing figures of road fatality as revealed in the FRSC report that a total of 6,055 road traffic offenders were arrested for committing 7,609 offences during the 2021 Eidel Kabir Festival (Vanguard News Report July, 28, 2021). Alcohol addiction increases risk taking behaviour among the NURTW while at their jobs and reduces adherence to caution. Also, the cognitive ability to handle emergency on the road is highly depreciated due to the effects of intoxicants consumed while at work.

The research study was presented in five chapters which grouped into introduction, Background to the Study, Statement of Problem, Objectives of the Study, Research Hypothesis, Significance of the Study, and operational definitiuon of the terms used in the study. Seven null hypothesis were raised at 0.05 level of significance.

The study is anchored to the Self Determination Theory which holds firmly the tenets of intrinsic motivation as against exgtrinsic motivation in the achievement of set goals. The Self-Determination Theory views human behaviour and ability to accomplish set tasks to be largely positively related to antonomy, competence and relatedness. SDT believes that compulsion, threats, punishments, rewards, praise, etc. do not provide a longlasting desired change. However, SDT suggests freedom to choice of action and internalization of the principles that strengthens such actions to avoid burn-out and relapse.

The study adopted a prettest-posttest, control group, quasi-experimental design with 3×3×3 factorial matrix. Descriptive Statistics and Analysis of Covariance (ANCOVA) were the major statical tool used to analyse the demographic characteristics of the respondents, while ANCOVA was used to test the seven null hypothesis on the main effects and interaction of treatment and moderating variables at 0.05 significance level. Also, Bonferrroni Pairwise Comparison Analysis was used to determine the directions of initial differences among experimental and control group participants in the study.

The following are the summary from the seven hypotheses stated and tested at 0.05 level of significance.

1. There was significant main effect of treatment on alcohol addiction among the National Union of Road Transport Workers ($F_{(2,48)} = 3.504$, $p < 0.05$, $\eta^2 = 0.127$).
2. There was main effect of self-efficacy on alcohol addiction among the National Union of Road Transport Workers ($F_{(1,78)} = 6.779$, $p<0.05$, $\eta^2 = 0.220$)
3. There was no significant main effect of distresson alcohol addiction among the National Union of Road Transport Workers ($F_{(2,78)} = 2.382$, $p>0.05$, $\eta^2 = 0.090$).

4. There was no significant interaction effect of treatments and self-efficacy on alcohol addiction among the National Union of Road Transport Workers ($F_{(2,78)} = 1.694$, $p>0.05$, $\eta^2 = 0.066$)
5. There was a significant interaction effect of treatments and distress on alcohol addiction among the National Union of Road Transport Workers ($F_{(4,78)} = 4.098$, $p<0.05$, $\eta^2 = 0.255$)

6. There was no significant interaction effect of distress and self-efficacy on alcohol addiction among the National Union of Road Transport Workers ($F_{(4,78)} = 2.185$, $p>0.05$, $\eta^2 = 0.154$)
7. There was no significant three-way interaction effect of treatments, distress and selfefficacy on alcohol addiction among the National Union of Road Transport Workers.( $F_{(2,78)} = 1.379$, $p>0.05$, $\eta^2 = 0.054$)

## 5.2 Conclusion

The study investigated the effectiveness of Functional Analytic Psychotherapy and Psycho-education in reducing alcohol addiction among the National Union of Road Transport Workers in Lagos State, Nigeria and considering the effects of self-efficacy and distress as moderating variables.

The findings of the result showed that three hypotheses were significant while four were non-significant. The study also revealed that Functional Analytic Psychotherapy and Psychoeducation were effective in reducing alcohol addiction among the National Union of Road Transport Workers, Lagos, Nigeria.

Conclusively, Functional Analytic Psychotherapy was found to be more effective than Psychoeducation in reducing alcohol addiction among the National Union of Road Transport Workers. Self-efficacy and distress were observed to significantly moderate the impact of treatment on alcohol addiction among the National Union of Road Transport Workers, Nigeria.

## 5.3 Recommendations of the Study

The following recommendations are made based on the findings of this study.

1. Psychotherapists and school counsellors should utilize Functional Analytic Psychotherapy and Psychoeducation therapy in reducing addiction among NURTW trapped in any addictive behaviour.
2. Counselling Psychologists should create awareness of the ills of alcohol addiction through constant sensitization in NURTW motor packs.
3. The government agencies in-charge of the regulation of addictive substances should stiffen the measures for penalizing NURTW found guilty of drug related offences.
4. The Nigerian government should regulate the manufacturing of intoxicant drinks in the country to avoid the proliferations of such drinks in every nook and cranny.

5. The National Union of Road Transport Workers management should prohibit the sales of alcoholic herbal concoctions and alcoholic drinks as well as cigarettes in the motor parks.
6. The NURTW should also ban any form of advertisement that may trigger the desire to engage in alcohol addiction within the motor parks.
7. The Federal Road Safety Corps should upgrade the sophistication of their equipment so as to develop the capacity to detect drivers driving under the influence of liquor and impose stiff punishment for such acts.
8. The services of psychotherapist should be employed for members of the NURTW in order to resolve irrational thoughts and negative emotions which are usually the main cause or trigger for excessive alcohol use.
9. The state and federal government should engage in road construction, repairs and maintenance in order to reduce the distress encountered while using the road and reduce traffic congestion as this culminates into massive chronic distress for members of the NURTW and other road users.

## 5.4 Contributions to Knowledge

The research has added to the subsisting body of knowledge in the areas stated below:

1. The study validated that addiction to alcohol among the NURTW can be reduced through psychotherapeutic interventions.
2. It also validated the significance of Functional Analytic Psychotherapy and Psychoeducation in reducing alcohol addiction, explicitly indicating more potency in terms of the effectiveness of Functional Analytic Psychotherapy over Psychoeducation in the reduction of alcohol addiction among the NURTW in Lagos State, Nigeria.
3. Also, the study uncovers the moderating effects of self-efficacy in the treatment of alcohol addiction of the NURTW.
4. The study demystified the concept of distress in terms of its moderating role in the treatment of alcohol addiction among the NURTW.
5. The study has also served as a bridge for the gaps created in the previous research relating to the use of psychotherapy in ameliorating the effects of or the reduction of alcohol addiction among the NURTW members.

6. This study unveils the multiplicity effects of alcohol addiction among the NURTW regarding the mental health of other road users.
7. The study has provided empirical insights as to the relationship that exists between self-efficacy at various levels and the tendency to engage in alcohol addiction as well as the ability to sustain withdrawal without relapsing.
8. The study also empowers psychotherapists by unveiling the strengths of certain psychotherapeutic interventions as well as theories that are highly germane to the resolution of addiction and addictive tendencies.
9. The study developed a robust treatment package that can be adopted in providing psychotherapeutic interventions for members of the NURTW who are found to be victims of alcohol addiction.
10. The study provided further empirical validation on the assertion that experimental groups exposed to intervention demonstrate reduced occurrence of incongruent behaviour than the control group.

## 5.5 Implications of the Study

The outcomes of this research have a huge implication for the counselling psychologists, NURTW Management, Non-Governmental Organizations, Lagos State Government, and policy makers. The study proved that Functional Analytic Psychotherapy and Psychoeducation were effective in reducing alcohol addiction among the NURTW in Lagos, Nigeria. The outcome of the study revealed that it would definitely be highly beneficial to commercial bus drivers enlightening them about the dangers of alcohol addiction.

Functional Analytic Psychotherapy and Psychoeducation reduced alcohol addiction among the NURTW, therefore, counselling psychologists should use these therapies in reducing alcohol addiction among the NURTW. Counselling Psychologists are implored to sharpen counselling practices through re-orientation and inculcation of core counselling professional ethics such that through the awareness and expertise in the use of empirically certified addiction reduction therapeutic packages, awareness of the ills of alcohol addiction can lead to abstinence and abstinence leading to total withdrawal with minimal cases of relapse. This is a vital role which is highly sensitive and requires passion and resilience on the part of the counselling psychologists as during the course of the study, withdrawal from alcohol addiction was likened by clients to weaning a child from breastfeeding, this is definitely a task that requires the ability to lift theoretical findings and psychotherapeutic

treatment packages from the level of mere knowledge of such to developing and adapting self-made version of these therapies, deeply entrenched in the principles guiding these therapies but localized adequately to suite the prevailing cultural and personal peculiarities of the clients to achieve a well-deserved result.

Self-efficacy was effective in moderating the outcomes of treatment counselling psychologists should consider this when developing treatment packages for alcohol addiction among the NURTW. Soft skills such as self-efficacy was found to have a sustainining effect in withstanding the episodes of withdrawal syndromes, therefore, Counselling Psychologists would have to deepen and widen psychotherapeutic interventions tailored towards reduction in addiction to prevention of addictive tendencies by engaging in trainings of skills like self-efficacy, resilience, emotional intelligence, distress reduction or management techniques, and so on. Training in these fields would increase success in alcohol withdrawal and most importantly prevent future tendencies to become addictive to alcohol use as these are basically life-coping skills which equip individual with the ability to positively resolve issues that are not congruent with their wellbeing rather than suppressing such challenges through addictive consumption of liquor and other psychoactive substances.

Distress contributed to the outcome of treatment, therefore, to mitigate alcohol addiction among the NURTW members on distress coping skills.

Availability of alcohol in NURTW motor parks was discovered to have a strong influence on the NURTW predisposition to alcohol addiction. Hence, the management of each park should eradicate and penalize sales of alcoholic drinks and beverages in the motor parks.

Early on set of alcohol intake was discovered to be inversely related to alcohol abstinence or relapse prevention among the members of the NURTW. Therefore, Counselling Psychologists should engage in proactive counselling for NURTW youths on the consequences of addictive intake of alcohol. The NURTW Management have the responsibility of protecting members from inculcating the addictive consumption of alcohol as most motor parks are usually congested with various presentation of alcoholic drinks in different brands and sizes which appeal to the consciousness of motor drivers who are usually in the parks to await their turn. The NURTW management would have to ensure drivers do not have unrestricted access to these substances are intoxicants and can impair proper functioning.

Also, the NURTW management should develop a standard assessment technique to evaluate effectiveness of members at work and forward incompetent members to relevant authorities for tests such as alcohol content level test such that unregulated consumption of alcohol can be curtailed. Also, NURTW management should prohibit the entertaining guests in NURTW occasions with alcoholic drinks. This would help the NURTW management inculcate professionalism into the business of commercial transportation in Lagos State.

Also, the NURTW management has a huge responsibility of curtailing the excesses of the "agbero" boys on the streets and roads of Lagos State as this heighten the level of misconduct among drivers who prefer to be high in order to subdue the incessant thuggery of the "agberos" whose assignment is collection of money at intervals from vehicle drivers. The NURTW management could create a general account from which all the miscellaneous expenses are catered for and suspend or totally eradicate the agbero boys from the scene of public transportation in Lagos State as this is a chronic distressor to drivers and also a trigger for alcohol addiction. The management of the NURTW needs to look keenly into the culture of turbulence, fighting and killings during the union Chairmanship transition periods. The perpetrators of these despicable are addictive users of alcohol and psychoactive substances among the members of the NURTW. Hence, the NURTW would have to abolish this barbaric act in order to ensure that members are decent and positive minded progressive individuals.

The burden of alcohol addiction cannot be single-handedly catered for by the government. NGOs should engage in enlightening the populace about the adverse effects of alcohol addiction especially focusing on the youths among the members of the NURTW in Lagos State. The youths are highly vulnerable to alcohol addiction and other anti-social behaviours therefore targeting the youths will be an appropriate move in the appropriate direction to curb and reduce alcohol addiction among the NURTW.

It is also important to note that there is an influx of youth into the commercial transport sector of Nigeria on daily basis and once introduced, the culture of alcohol addiction is learned as part of the ethics of the job. Therefore, a prior understanding of a youth on the danger of alcoholism or an intending member of the NURTW may prevent the possibility and help in building resistance to alcohol addiction.The onus for the reduction on addictive intake of alcohol among the NURTW lies to a large extent on the Lagos State Government vis-à-vis policy makers in the state through the imposition of sanctions on any members of the NURTW caught in the act of drinking and driving. Also, policies that

discourage the sales of alcoholic substances in and around NURTW motor parks should enforced to deprive motorists easy access to these drinks and reduce trigger which may lead to relapse.

The Lagos State Government should also make adequate provisions for equipment effective at detecting alcohol content through breath to the FRSC and other traffic officials. Also, an important call to action for the Lagos State Government is the imposition of strict penalty on any branch chairman or NURTW official who engage the services of NURTW members for thuggery and other socially deviant behaviours as these are strong areas for triggers.

## 5.6 Limitations to the Study

The study focused on male members of the NURTW exempting the women who have started taking up a career as commercial vehicle drivers especially in the tricycle sector (Tricycle Owners and Operators Association of Nigeria (TOOAN).

This study initially started with one hundred and eight participants but there was an attrition rate of eleven participants during the course of the trainings leading to the final sample of ninety-seven participants.

The study was conducted during the election preparation period and the NURTW members are vital instruments for campaigns which in some cases were violent. Thereby leading to postponement of trainings and lengthening the period of the study.

## 5.7 Suggestions for Further Study

The study established the effectiveness of Functional Analytic Psychotherapy and Psychoeducation in Reducing Alcohol Addiction among the NURTW in Lagos State, Nigeria. However, to further broaden the frontier of knowledge, the following suggestions were made. The study may be replicated in other states in the country aside Lagos State to ascertain the effectiveness of the therapeutic strategies adopted for the study in reducing alcohol addiction.

The moderating variable absorbed by the study were Self-Efficacy and Distress, hence, other studies may adopt other variables to establish the moderating roles of such in reducing addictive intake of alcohol. Also, further studies may extend the treatment period and expand the participant base such that a larger proportion of the society can benefit from the study.

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## APPENDICES

## APPENDIX I

## FUNCTIONAL ANALYTIC THERAPY (GROUP I)

### SESSION ONE

### INTRODUCTION AND ADMINISTRATION OF PRE-TEST

**Objectives:** At the completion of this session, participators should possess the ability to:

(i) introduce and know each other by name;

(ii) understand and state the objective of the intervention programme;

(iii) sign the commitment form; and

(iv) complete the pre-test instrument.

**Step I**: The therapist welcomes all the participants, which will be followed by formal introduction of therapist and participants.

**Step II**: Therapist administers the alcohol and smoking questionnaire to obtain the pretest score of the participants.

**Step III:** The therapist talks about the main objective and purpose of the programme, which is to last for 10 weeks. Thus:

To eradicate alcohol and smoking addiction among the participants, using principles of functional analytic therapy.

- To inculcate in the participants skills to achieve objective I above.

**Step IV**: The therapist and the participants discuss and agree on the following:

Period of session: - 1 hours/week

Time of meeting: - 5 pm

**Step IV**: The participants ask questions, while the questions will be answered as appropriate. The therapist reads some of the resolutions of the session to the participants. The issue of confidentiality, mutual respect, and cooperation will also be mentioned and discussed.

**Evaluation/Class Activity**: Therapist asks students questions, such as: what are the main objectives of this programme? When do we agree to be meeting?

**Home Work**: How many bottles of beer or cigarette do you consider too much to consume?

**Conclusion**: The therapist appreciated the participants and the session was terminated.

## SESSION TWO

## IDENTIFYING CRB1S AND CRB2S

**Objectives**: At the completion of the session, participators should possess the ability to:

(i) identify the triggers of addictive alcohol intake; and

(ii) State the consequences of addictive alcohol addiction.

**Step I**: Participants are grouped into 3 groups namely:

Group 1: Mention negative behaviours that are prevalent among the NURTW.

Group 2: Mention reasons behind such negative behaviours.

**Behaviours Prevalent Among the National Union of Road Transport Workers (NURTW)**

1. Expending energy on excessive shouting especially when dealing with passengers.
2. Cigarette smoking.
3. Consistent alcohol intake.
4. Patronizing sellers of liquor in the garage.
5. Restless driving.
6. Lack of change to give to the passengers.
7. Dropping off passengers before the bus stop with the excuse of "hold up".
8. Nonchalant attitude towards keeping vehicles in good conditions.

Mention reasons behind such negative behaviours.

1. Being constantly under the influence of psychoactive substances.
2. Eagerness to meet up with the daily targets.
3. Deteriorative state of the roads.
4. Heavy traffic condition.
5. Aggressiveness of some passengers.
6. High inflation on the prices of vehicle spare parts.
7. Availability of liquor and cigarette sellers in every nook and cranny of the garage.
8. Low prices of liquor drinks.

**Step II**: Participants choose one representatives from each group to present their group discussions.

**Step III**: Researcher mentions negative behaviours known as CRB1s that can trigger the urge to engage in excessive smoking and alcohol addictions.

**Negative Behaviours that can Trigger the Urge to Engage in Excessive Alcohol Addictions**

1. Ignorance of the consequences of smoking and drinking and addictions.
2. Conforming to peer pressure.
3. Bet drinking and smoking.
4. Low level of assertiveness.
5. Low level of safety consciousness.
6. Poor conflict resolution skill.

**Step IV**: Participants mention the reasons why they engage in smoking and alcohol addictions.

**Step V**: Researcher enlightens participants on the advantages of avoiding smoking and alcohol addictions.

**Advantages of Avoiding Alcohol Addictions**

1. Safe driving.
2. Emotionally, mentally and physically healthy bodies.
3. Long-life.
4. High self-confidence and self-esteem.
5. Good maintenance culture in handling vehicles.
6. Cordial relationship with passengers and vehicle owners.
7. Job security.

**Step VI**: Assignment

1. State five negative experiences you have had as a result of your addiction to cigarette and alcohol.
2. Mention two reasons why there should not be a repeat of such experiences.

## SESSION THREE

## IDENTIFICATION OF THE MYTHS ENCOURAGING CRB1S (ALCOHOL ADDICTION) AND TRUTH ABOUT CRB1S

**Objectives**:At the completion of this session, participators should seamlessly understand the beliefs supporting their addictive intake of cigarette and alcohol as mere myths.

**Step I**: Participants are grouped by choosing numbers randomly into 2 groups:

Group 1: Mention the myths about smoking.

Group 2: Mention the myths alcohol addiction.

**Step II**: Participants choose representatives to represent them in a debate titled "Herbal Alcoholic Concoctions are better than doctor's Prescription".

**Step III**: Researcher explains the truths about the myths on alcohol and alcoholic herbal concoctions.

### MYTHS ABOUT ALCOHOLIC HERBAL CONCOCTION

1. The belief that it is a faster and more economical means to access recovery from illnesses such as pain in the back bone, quick ejaculation, pile, etc.
2. It's too late to quit.
3. It gives a permanent cure.
4. The Alcoholic concoctions do not require medical and expensive tests or X-rays before drug prescription therefore, less distressful and economical.
5. Alcoholic herbal concoctions do not have any adverse effects even when used in excess.
6. Intake of alcohol based herbal concoctions before and during driving does not pose any danger.
7. Everybody in the transport business takes it for optimal performance.

### MYTHS ON ALCOHOL ADDICTION

1. Addiction is genetic.
2. Once addicted into addiction, forever addicted. It is a life-long thing.
3. One must have been addicted to alcohol for a very long time before it starts having effects on the body.
4. As soon as the body feels normal, all the drugs are already out of the body.
5. Coffee reduces the adverse effects of excessive alcohol in the body.

6. Alcohol relieves distress.
7. Alcohol is not as hazardous as other drugs.
8. Alcohol affords a good means of relaxing and catching fun.
9. Alcohol is good for the heart.

**Step IV**: Assignment on mentioning five myths about alcohol addiction that are most harmful.

## SESSION FOUR

## TRUTHS ABOUT ALCOHOL ADDICTION

**Objective**: At the completion of this session, participators should be able to:

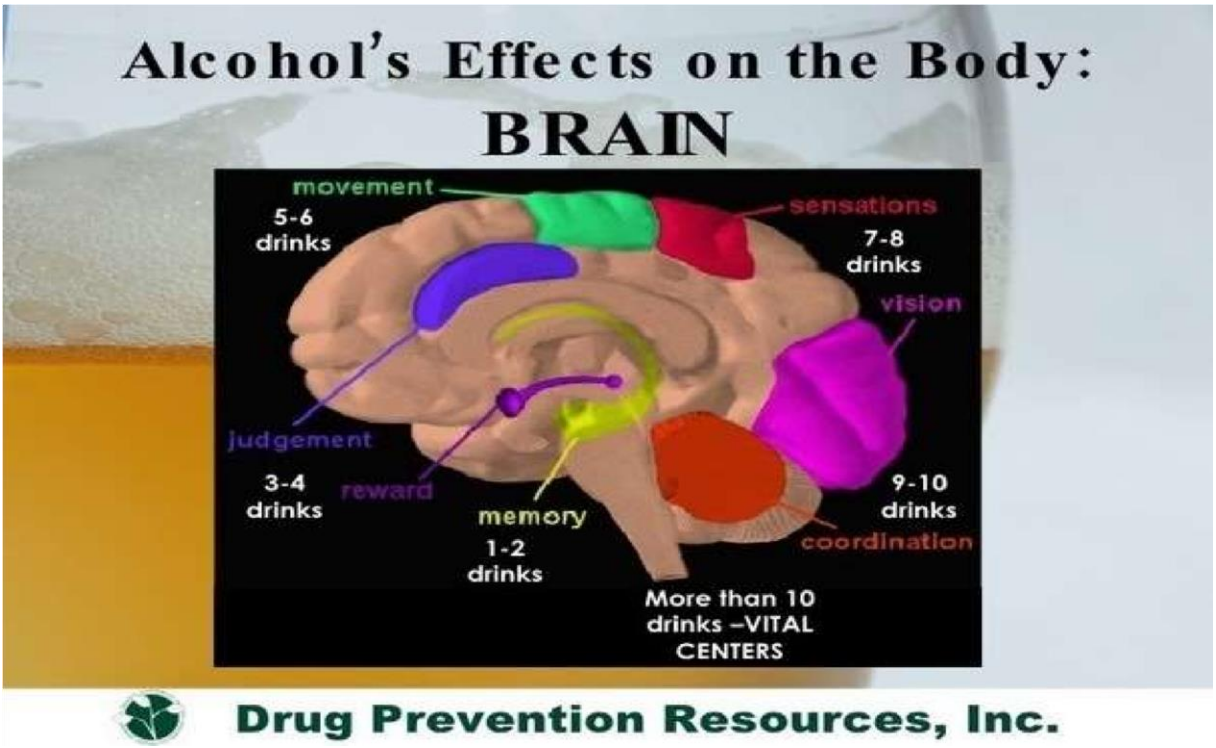
1. Highlight the truths about alcohol addiction.

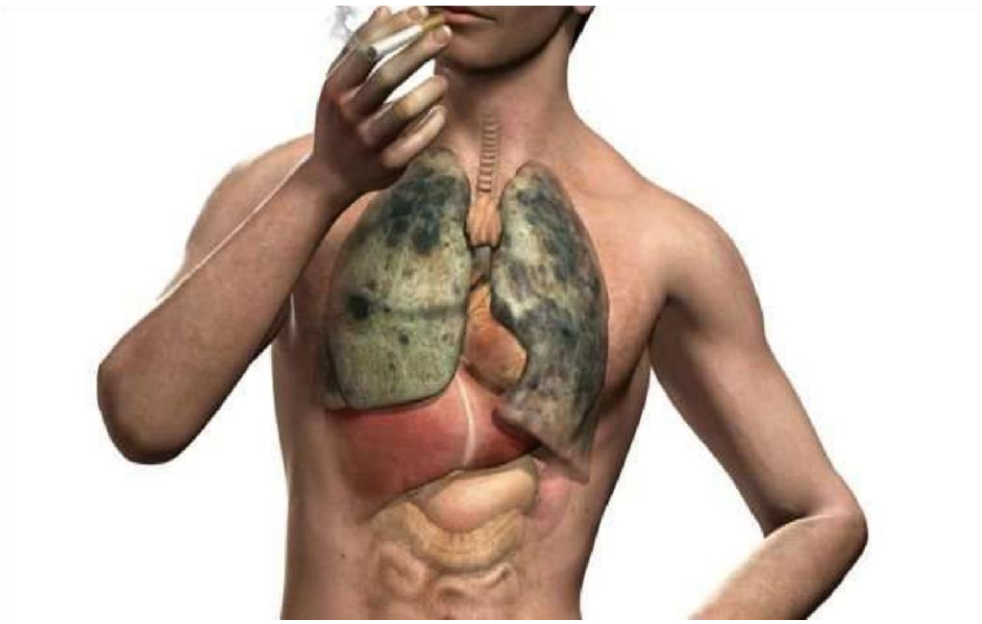
**Step I**: Researcher mentions the effects of addictive alcohol addictions.

1. Excessive alcohol intake causes the inability to reason clearly and adversely inhibits one's decision making ability.
2. Reflexes become slower, causing troubles in working and/or executing tasks, which requires psychomotor co-ordination
3. Alcohol addiction create mood swings, increasing aggressiveness and anger and increasing high risk taking tendencies.
4. Rapidly consuming large quantity of alcohol may impede breathing adversely or even abruptly halt breathing, thereby leading to fatality.
5. Adverse consequences of alcohol may upsurge if taken alongside certain drugs (such as cold medicines and sleeping pills).
6. Protracted use of alcohol can cause: swollen abdomen, hepatic cirrhosis, inflamed pancreas, certain malignant tumours of the alimentary canal, cancer of the buccal cavity and gullet, palsy, cardiac infarction, and execessive degeneration in bone structure (alcohol negatively affects body calcium and hampers bone building).
7. Alcohol addiction can also result to certain other forms of addiction such as smoking addiction, use of other stimulants like codeine, womanizing and gambling.

**Step II**: Researcher shows pictures of the parts of the body damaged by alcohol addiction.

**Pictures of Damages Done to Various Parts of the Body**





**Step III**: Participants mention the benefits of believing the truths about alcohol addiction.

**Benefits of Believing the Truths about Alcohol Addiction**

1. It helps in the quitting process and prevent relapse.
2. It leads to a healthy body by empowering the immune system to wade off infections.
3. It enables the proper functioning of the brain therefore helps reduce the risk of accidents on the road.
4. It makes individuals responsible individuals with relevant conflict resolution skills and reducing aggressiveness and violence.
5. Quitting addictive intake of alcohol is economical.

**Step IV**: Assignment

Mention any three of these truths that you have accepted and resolved as the truth in your mind and which has the capability of changing your perception.

## SESSION FIVE

## REINFORCING CRB2S

**Objectives**: At the close of this session, respondents should be able to understand theimportance of water over the cigarettes and alcohol.

**Step I**: Participants are presented with various stimuli which are dry gin sachet, water and alcoholic herbal concoction. Participants choose any of the three voluntarily.

**Step II**: Participants are grouped into three groups based on what they have chosen. Hence, there are:

Group 1: Water group

Group 2: Dry gin group

Group 3: Alcoholic Herbal Concoction

**Step III**: Participants discuss their choice based on the following:

1. Advantages of their choice over other
2. Accessibility
3. Price
4. Health benefits
5. Peers
6. Religiosity

**Step IV**: Presentation by each group head.

**Step V**: Researcher reinforces the benefits of water, fruits and vegetables as good replacementfor addictive intake of alcohol and frequent use of alcohol based herbal concoctions.

**The Functions of Water in the Body**

1. A bottle of water can…

**Film Show on the Dangers of Alcohol to Discourage CRB1s and Encourage CRB2s**

**Step I**: The researcher shows a film on the dangers of addictive intake of alcohol. **Step II**: Participants are randomly selected to explain dangers of alcohol as seen in the filmshow one after the other.

**Step III**: Participants are grouped to discuss the effects of such dangers on the following:

Group 1: The addict.

Group 2: Passengers.

Group 3: Family.

**Step IV**: Researcher gives a detailed explanation on the consequences on the three groups.

**Step V**: Assignment:

Practise quitting for a day before the next session.

## SESSION SIX

## THE CONSEQUENCES OF ACCIDENTS ON THE DRIVERS, FAMILY AND SOCIETY (TO DISCOURAGE CRB1S)

**Objectives**: At the completion of this session, participants should seamlessly mention the consequences of accidents on the following:

i.Drivers ii.Family iii.Society

**Step I**: Participants share personal experiences on road accidents.

**Step II**: A drama competition on the consequences of road accidents on the drivers, family and society.

**Step III**: Group A: Title: Psychological Trauma for Passengers.

(Role Play On Attitude Nursing Fear Of Accidents).

**Step IV**: Group B: Title: Effects of Road Accidents on the Drivers.

(Role Play on How the Excessive In-Take of Alcohol Can Cause Road Accidents and Effect on the Driver).

**Step V**: Group C: Title: Effects of Road Accidents on the Society.

(Role Play on Consequences of Road Accidents on the Society such as high dependent rates, loss of lives and properties, drop in the standard of living).

**Step VI**: Researcher expatiate on the various dangers of road traffic accidents.

**Dangers of Road Traffic Accidents**

1. High dependency ratio.
2. Disability caused by injuries sustained during road traffic accidents such as spinal cord injuries, brain injuries, etc.
3. High anxiety while using the road for road users.
4. The transport sector becomes less lucrative as most investors would not have a good return for their investments due to constant mishandling of vehicles as drivers would often be under the influence of psychoactive substances.

**Step 7:** Assignment:

Participants are to mention ways in which they may contribute to road traffic accidents.

## SESSION SEVEN

## THE DAMAGING EFFECTS OF ADDICTIVE USE OF ALCOHOL ON THE HEART

**Objectives**: At the close of the lesson, participants should readily comprehend the damaging effects of alcohol addiction on their hearts.

**Step I**: Researcher mentions the functions of some parts of the body to the researcher.

**Functions of the Heart**

1. The heart is the facility/organ that pumps blood to other areas of the body.
2. The left section of the heart receives oxygenated blood from the lungs.
3. The right side receives the resultant deoxygenated blood after oxygen had been transported round the body through the blood and returns it to the lungs in order to obtain more oxygen needed for energy production (when mixed with food) in the body (that is, respiration).
4. The blood conveys oxygen as well as all food classes (minerals and vitamins inclusive) that are essential for the body to execute the mundane living processes (such as thinking, moving, repairing and growing).
5. We cannot live without blood.

**Step II**: Researcher shows picture slides of some parts of the body to them.

**Pictures of some parts of the body**

**Step III**: Researcher explains how a healthy body functions and explains how a body that has been damaged by excessive alcohol consumption is incapacitated to function maximally.

**How a Damaged Heart Functions**

1. The heart beats quite fast. That is more than 70 times in one minute in adults and greater than 90 pulsations per minute in children.
2. Breathlessness and tiredness.
3. Shortness of breath.
4. Swollen ankles and legs.
5. Enlarged liver.
6. Dizziness.
7. Feeling sick.
8. Loss of appetite.

9. Chest pains.
10. Fatigue.
11. Symptoms are often present even at rest causing any physical activity to cause increased symptoms and discomfort.

**Step IV**: Participants are grouped into 3 and each to discuss what age they wished to live up to and what they want to be capable of doing at that age. E.g. 70 years, 80 years, etc.

**Step V**: Researcher mentions the possibility of reduced life time and poor state of health as an addict ages.

**Possibility of Reduced Life Time and Poor State of Health for Alcohol Addicts**

1. It can cause alcohol related cancers.
2. It can increase the risks of contracting sexually transmitted diseases.
3. Excessive drinking diminishes the efficacy of the body's immune system to wade off infections.
4. It can lead to clumsiness and low inhibition.
5. It can cause road accidents.

**Step VI**: Assignment:

Mention 5 health damaging effects of alcohol and smoking addiction.

## SESSION EIGHT

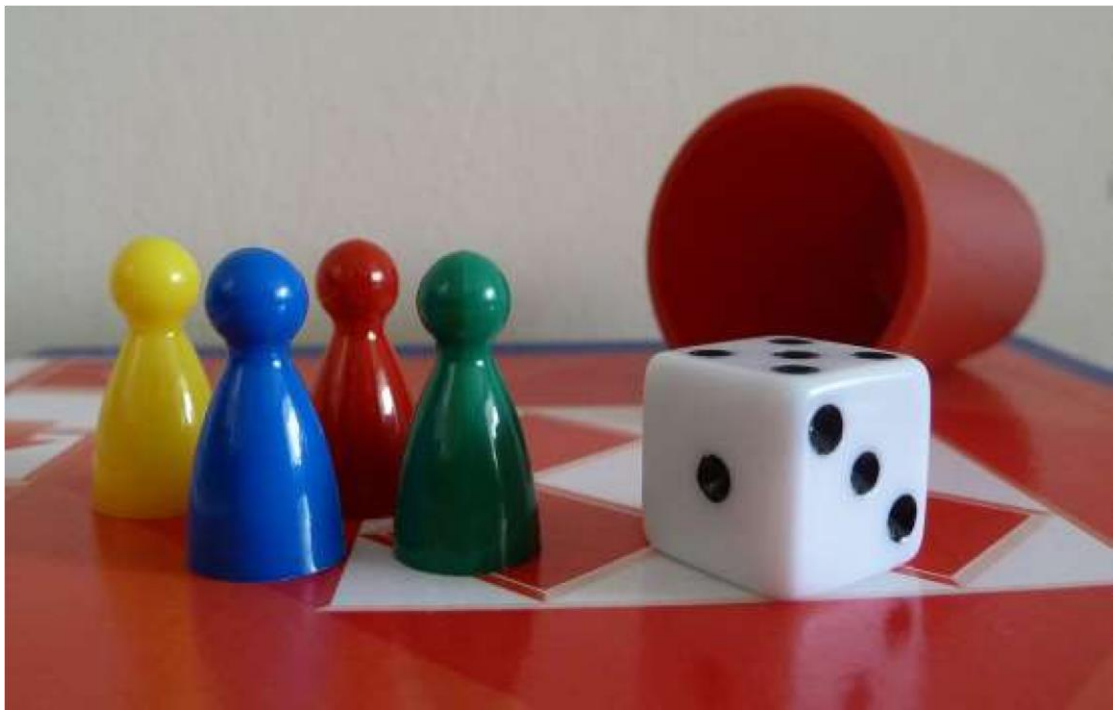
## LEARNING OF INCOMPATIBLE BEHAVIOUR THAT CAN REPLACE ADDICTIVE BEHVIOURS TO AVOID RELAPSE

**Objective**: At the completion of the lesson, participators should readily:

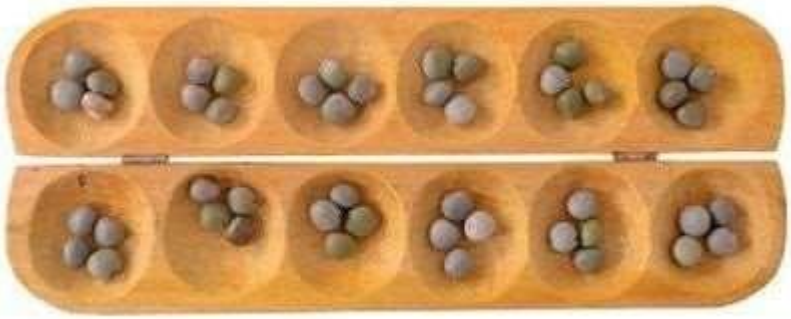
1. Play ludo, ayo or card games as incompatible behavior to be engaged in during their leisure instead of smoking and drinking.

**Step I**: Participants are grouped into 3 groups namely:

Group 1: Ludo



Group 2: Ayo



Group 3: Card

**Step II**: A game competition among the various groups.

**Step III**: The winner in each group teaches others to play.

**Step IV**: Researcher mentions other activities that an individual can engage in so as to curb or quench excessive cravings for additive smoking and drinking.

**Leisure Activities**

1. Playing games.
2. Learning some repairs skills from motor mechanics in the garage.
3. Spending time to create awareness for other vehicle drivers within the garage on the consequences of addictive smoking and drinking.
4. Taking a nap. **Step V**: Assignment

1.Mention 2 other creative activities you can engage in during your leisure time that can serve as a distraction from the smoking and excessive drinking behavior.

## SESSION NINE

## REPORT GIVING ON QUIT TRIAL BY PARTICIPANTS

**Objectives**: At the completion of this lesson, participators should readily give an account of their experience in the practice of quitting, expressing their improvements, discouragements and challenges.

**Step I**: Researcher groups the participants into various groups and name the groups.

Group A (Action group): Discuss challenges.

Group B (Solution group): Discuss improvements.

Group C (Quitting Method group): Discuss the most effective method of quitting.

**Step II**: Each group presents their discussions through their group leaders.

**Step III**: Researcher reinforces the efforts of the participants at practicing quitting. And mentions the benefits of quitting.

### Benefits of Quitting

1. Reduced risk for lung carcinoma and many other forms of malignant tumour.
2. Lowered susceptibility to contracting heart-related disease, palsy or stroke as well as peripheral vascular ailment (constricting of the blood vessels outside the heart).
3. Minimised tendency of contracting heart diseases within the first two years of quitting.
4. The tendency of contracting respirational symptoms, like wheeziness, coughing as well as dyspnea is greatly reduced. Although these symptoms may linger, they do not progress continually at the frequency amidst individuals who desist relative to those who proceed with smoking.
5. Impaired possibility of having some lung syndromes (like protracted obstructive pulmonary ailment, otherwise called COPD, a part of the most prevalent predictors of fatality in the United States).
6. Decreased likelihood of experiencing infertility in females of childbearing age. Women who cease smoking when pregnant are also at lowered risk of having a baby with low birth weight.

**Step VI**: Researcher discourages CRB1s by finding solutions to the possible challenges the participants experience in their process of quitting addiction.

**DISCOURAGING CRB1S (Clinically Relevant Behaviour 1) AND ENCOURAGING CRB2S (Clinically relevant Behaviour 2) IN PARTICIPANTS IN THEIR EFFORTS TOWARDS QUITTING ALCOHOL ADDICTION**

| S/N | Challenges | Solutions |
|---|---|---|
| 1. | Peer pressure | (a)Choosing peers that can encourage efforts towards quitting. |
| 2. | Inability to resist temptation to take addictive substances and attractive presentation of addictive substances. | (a) Reflect on any health complications resulting from the intake of the substance of addiction.<br>(b) Ponder on how the use of tobacco affects your relationship and social interaction.<br>(c) Consider the financial implications of the substance of addiction to you. |
| 3. | Inability to identify triggers. | (a)It could be an argument with your family, spouse or colleagues in the garage. |
| 4. | Uncertainty of how quitting would work. | (a) Be confident in your ability to make a change.<br>(b) Listen to stories of people who were once addicted to an addictive substance or behavior and how they quitted. |
| 5. | Availability of and accessibility to addictive products. | (a) Reviewing the purpose behind the goals of quitting.<br>(b) Looking out for the negative effects of the smoking alcohol addictions |

| | | |
|---|---|---|
| | | on them. (c)Taking a decision to see your life turnout better. |

**Step 5:** Assignment

1.Choose a quitting date and try quitting before the date.

## SESSION TEN

## CONCLUSION AND ADMINISTRATION OF POST-TEST

**Objectives**: At the completion of this session, clients should seamlessly: (1) narrate their experiences and state some of the changes they have observed; (2) fill the smoking and alcohol questionnaires correctly.

**Step I**: The therapist and the participants welcome each another. There will be discussion on the homework given to the participants. In addition, the participants will be appreciated for participation.

**Step II**: The therapist asks participants to state the progress made and what changes have been observed in terms of alcohol and smoking consumption.

**Step III**: The therapist explains that in order to ensure permanent extinction of alcohol and smoking addiction, participants should put to practice on daily basis, some of the things learnt in the programme.

**Evaluation**: The therapist gives alcohol and smoking scales to each of the participants to fill.

**Conclusion**: The therapist declares that the programme has come to an end. Participants will be lauded for their active involvement and cooperation during the course of the programme.

## PSYCHO-EDUCATION THERAPY (EXPERIMENTAL GROUP II)

## SESSION ONE

## INTRODUCTION AND ADMINISTRATION OF PRE-TEST

**Objectives:** Participant should be able to:

i. Introduce and know each other by name; ii.understand and state the objective of the intervention programme; iii.sign the commitment form; and iv.complete the pre-test instrument.

**Step I**: The therapist welcomes all the participants, which was followed by formal introduction of therapist and participants.

**Step II**: Therapist administered the alcohol and smoking questionnaire to obtain the pretest score of the participants.

**Step III**: The therapist talks about the main objective and purpose of the programme, which is to last for 10 weeks. Thus:

- To eradicate alcohol addiction among the participants, using principles of Psycho-education therapy.
- To inculcate in the participantsskills to achieve objective I above.

**Step IV**: The therapist and the participants discuss and agree on the following:

Period of session: - 1 hour/week

Day of meeting: - Thursday

**Step V**: The participants ask questions, while the questions will be answered as appropriate. The therapist reads some of the resolution of the session to the participants. The issue of confidentiality, mutual respect, and cooperation were also mentioned and discussed.

**Evaluation/Class Activity**: Therapist asks students questions, such as: what are the main objectives of this programme? When do we agree to be meeting?

**Home Work**: How many bottles of beer or cigarette do you consider too much to consume?

**Conclusion**: The therapist appreciates the participants and the session was terminated.

## SESSION TWO

## DEVELOPING EMOTIONAL INTELLIGENCE IN REDUCING ALCOHOL ADDICTION

**Objectives:** At the completion of this session, individuals from the selected sample should readily:

i. state ways of handling their emotions; ii.mention the various types of emotions; and iii.mention the benefits of being emotionally intelligent.

**Content**

**Step I**: Researcher definesEmotions andEmotional Intelligence

### Meaning of Emotions

Emotions are usually delineated as feelings and entail various states of mind or moods like grieve, anger, hate, panic, joy, fear, love etc. These sensations have a lot to do with moods.

**Step II**: Participants mention emotions the various emotions that usually trigger the urge to engage in excessive alcohol intake.

### Emotional Intelligence

Emotional intelligence involves how each individual understands his emotions, source and functions of the emotion and how to align a responsible set of actions that suit the emotions. Individuals differ in their competencies to regulate, interpret and react to their emotions, therefore, those with a higher and more socially satisfying means of relating with and to emotions are regarded as emotionally intelligent individuals.

**Step 3:** Researcher explains the benefits of being emotionally intelligent

### Benefits of Being Emotionally Intelligent

1. It improves general health status in every aspect of health including mental, physical, psychological and emotional health.
2. Optimism: emotionally intelligent individuals are always positive minded and ready to take challenge instead of indulging in avoidance.
3. Social Compatibility: Individuals with a good level of emotional intelligence are compatible with the ethics and norms of the society making them to be regarded as responsible individuals in the society.
4. It Promotes Anger Management Capacity: Anger is an aversive response to situations and if not well managed can trigger multiple negative reactions such as suicide, murder, fight, depression, etc. Emotional Intelligence helps in achieving a reduced a sane level of anger, i.e. in the right proportion as the situation

requires such that it will be corrective in nature and proper response to the emotion of anger as elicited by others, thereby making it a tool of positive restructuring.

5. Reduces Addiction/Prevents Addiction: Addiction is used as a means to dedistress, be high, or to numb. It is an escape route for most addicts from problems they perceive to be unbearable. Emotional Intelligence empowers an individual to deal with negative situations and prevent using addiction as an escape route.

**Step IV**: Researcher states how to develop emotional intelligence in reducing alcohol addiction.

**Developing Emotional Intelligence to Reduce Alcohol Addiction**

Emotional intelligence is a vital tool in addiction recovery and relapse prevention.

1. Resolve negative emotions instead of avoiding or repressing such emotions.
2. Learning to understand others and interact peaceably with them using conflict resolution skills to resolve misunderstandings.
3. Ability to Manage Distress: Distress is part of living, therefore, to be emotionally intelligent, distress should be perceived more of a plus and positive force put into the process of achieving a goal rather than a problem.
4. Assertiveness in expressing one's emotional state when necessary is a way of letting out negative emotions instead of getting such bottled-up.

**ASSIGNMENT**

Participants should practice emotional intelligence and monitor improvement in the extent to which their emotions can be put to use productively.

## SESSION THREE

## LEARNING HEALTHY RESPONSE TO ALCOHOL WITHDRAWAL SYNDROME

**Objectives:** At the end of the session, subjects participating in this study should be able to:

i. Delineate alcohol withdrawal syndrome.ii.Identify alcohol withdrawal syndrome.

iii. Resolve alcohol withdrawal syndrome psychologically.

**Step I**: Researcher explains the meaning of alcohol withdrawal syndrome.

**Meaning of Alcohol Withdrawal Syndrome**

This is the discomforts experienced physically, mentally and psychologically by addicts in trying to quit addiction. It depends on a vast array of determinants such as the level of addiction, level of supports and motivation for the addicts, personality characteristics of the addict, the nature of the environment and so on.

**Step II**: The participants discuss their fears about withdrawing from addictive alcoholconsumption.

**Step III**: Researcher lists and explains symptoms of alcohol withdrawal syndrome.

**Examples of Alcohol Withdrawal Syndrome**

1. Anxiety
2. Depression
3. Shaky hands
4. Headache
5. Vomiting
6. Insomnia
7. Sweating
8. Nightmares

**Step IV**: Researcher states how alcohol withdrawal syndrome can be handled psychologically.

**Resolving Alcohol Withdrawal Syndrome**

1. Eat nutritious food, take a lot of water, vegetables and fruits.
2. Stay with positive minded people who will encourage you in your addiction withdrawal process.
3. Engage in healthy incompatible behaviours, filling up your day with activities and avoiding idleness.

4. Join an addiction quitting group for encouragement and mutual support as individuals in the support group will share their challenges and encourage one another.
5. Perceive these withdrawal syndromes positively and not as a mishap with an understanding that the symptoms would fade off with time.

**Step V**: Assignment.

Participants should practice quitting making use of the healthy response to alcohol withdrawal syndrome learnt in coping.

## SESSION FOUR

## ASSERTIVENESS SKILL IN COPING WITH ALCOHOL ADDICTION QUIT AND RELAPSE PREVENTION

**Objectives**:At the end of the session, persons participating in this study should be able to:

i. Elucidate what assertiveness is.
ii. State the difference among assertiveness, aggressiveness and non-assertiveness.
iii. Identify ways in which assertiveness can assist in preventing relapse in alcohol addiction quit.

**Step I**: Participants are warmly received into the session and a review of last session is done as a foundation for the new one.

**Step II**: Participants are asked to role play resistance to invitation to engage in addictive alcohol intake.

**Step III**: Therapist explain assertiveness and state examples of assertive and nonassertive behaviours.

### Meaning of Assertiveness

Assertiveness is a skill usually regarded as a communication skill which simply means the tendency to demand for one's entitlements and those of others in a positive but firm way. Assertive individuals can successfully express their views even when it is different without hurting themselves or others. Assertiveness is an essential skill in quitting alcohol addiction.

**Assertive and Non-Assertive Behaviours**

| The Passive Person | The Aggressive Person | The Assertive Person |
|---|---|---|
| Is afraid to speak up | Interrupts and 'talks over' others | Speaks openly |
| Speaks softly | Speaks loudly | Uses a conversational tone |
| Avoids looking at people | Glares and stares at others | Makes good eye contact |
| Shows little or no expression | Intimidates by using expressions | Shows expression which matches the message |
| Slouches and withdraws | Stands rigidly, crosses arms, invades the personal space of others | Relaxes and adopts an open stance and expressions |
| Isolates self from groups | Controls groups | Participates in Groups |
| Agrees with others despite personal feelings | Only considers own feelings and/or makes demands of others | Keeps to the point |
| Values self less than others | Values self more than others | Values self equal to others |
| Hurts self to avoid hurting others | Hurts others to avoid being hurt | Tries to hurt no one [including self] |
| Does not reach goals and may not even know goals | Reaches goals but hurts others in the process | Usually reaches goals without hurting others |
| You're okay, I'm not | I'm okay, you're not | I'm okay, you're okay |

**Step IV**: Therapist states the differences among aggressiveness, assertiveness and non- assertiveness.

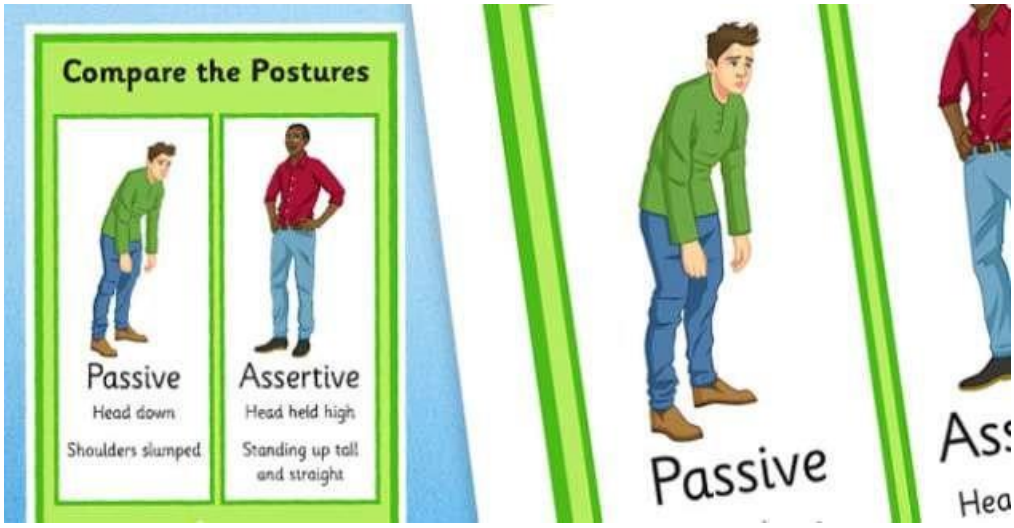
**Differences among Aggressiveness, Assertiveness and Non-assertiveness**

The concept “aggression” is basically about exercising control. An individual who imposes her or his intent on another individual and forces the latter to succumb, in effect obtruding upon such individual’s private boundary and space is adjudged aggressive. Although violence could be employed in this exertion, it is not an essential part of aggression. In the converse, passivity connotes compliance or indifference. This happens when an individual acquiesces to someone else’s power or control play, by placing their personal interests and intents after and below in order to give rapt devotion to satisfying the demands and cravings of the dominant party. More like extreme agreeableness. The submissive party may detest being subjugated (as most individuals do not), it however appears as though the shrewd option to adopt at the period (perchance to avert the risk of violence and/or its variants). Aggression involves obtruding upon, domination and invasion which is basically discourteous of relationship mate’s personal space(s). Passivity, on the other hand, is concerned with being invaded and eventual acquiescence which is equally uncharitable and disregarding of one’s personal precincts.

**Assertive Non-Verbal Behaviour in Turning Down Quitting Alcohol Addiction**

1. **Eye contact**: This implies staring directly at another, concentrating on her or his eyes. Stern or direct eye contact depicts assertiveness.
2. **Posture**: A man’s posture and /or carriage cascades information regarding his certitude and determination to quit. Slouching may say "I can still be convinced" or

   “I’m not sure of my decision to quit” or "I'm weary and can be readily worn down of trying to quit" or ". Slouching does not make the other to take you responsible. An implacable and obstinate posture suggests that you are in a heightened state emotionally. This could be perceived as apprehension or fury contingent on your other gestured behaviours. This form of posture presents you as one who is distraught or has lost control of himself. On the reverse, a relaxed and an erect posture while sitting and standing suggests self-control, energy, boldness and a plausibility that you would be adjudged as being serious.




**Assertive and Non-Assertive Postures**

3. **Facial expression**: The facial expression of an individual determines the seriousness that should be attached to the message given by him.
4. **Gestures**: This can be employed in buttressing and backing up your statements or to vilify and detract. Nervous uneasiness and taut herky-jerky movements divert attention. Such movements and body language suggest that you are no longer in charge and grossly water down your force of conviction.
5. **Personal Appearance**: The way an individual dresses affects credibility. Several individuals feel awkward when unduly underdressed or overdressed relative to other people. It is therefore expedient that you dress in a manner that is most appropriate to the situation.
6. **Tone of Voice**:The effect of verbal expressions on others is contingent on different aspects of the voice. Of all these aspects, the most vital and simplest to manipulate are speed and loudness. Nerviness can cause someone to talk too gently to be audible enough or so noisily in a manner that diminishes how much of the word is appreciated. Hence, it is instructive to verbalize your intent slowly and audibly enough to be heard and comprehended. The tone of voice portrays the seriousness attached to the decision to quit.

**Step V**: Researcher gives assignment – Practise assertiveness behaviour in renouncing the request to engage in alcohol addiction.

## SESSION FIVE

## HEALTH CONSEQUENCES OF ADDICTIVE USE OF ALCOHOL AND ALCOHOLIC CONCOCTIONS

**Objective**: Individuals participating in this study, at the completion of this session, should readily mention the damaging effects of addictive use of alcohol and alcohol concoctions.

**Step I**: Researcher presents different brands of alcohol and alcohol concoctions readily available the garage and ask participants to touch their favourite brand.

**Step II**: Participants are grouped into different groups and each group does the following:

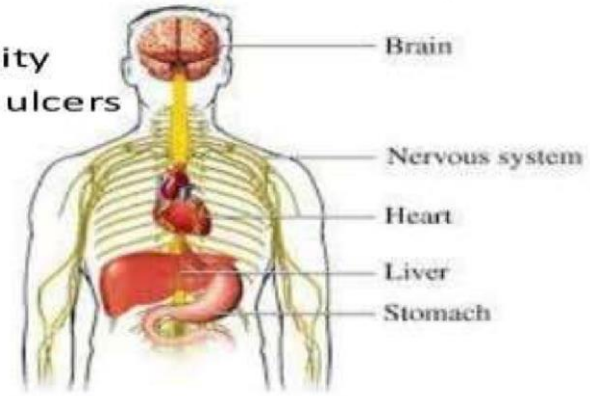
Group 1 (Herbal Concoction Group): Mention the various alcoholic herbal concoctions readily sold in the garage mention their functions in the body. Group 2: (Dry gin and Spirit Group): Mention the various brands readily available in the garage and state why they enjoy its consumption.

Group 3: (Beer) Mention the favourite brands and state the benefits they derive from its consumption.

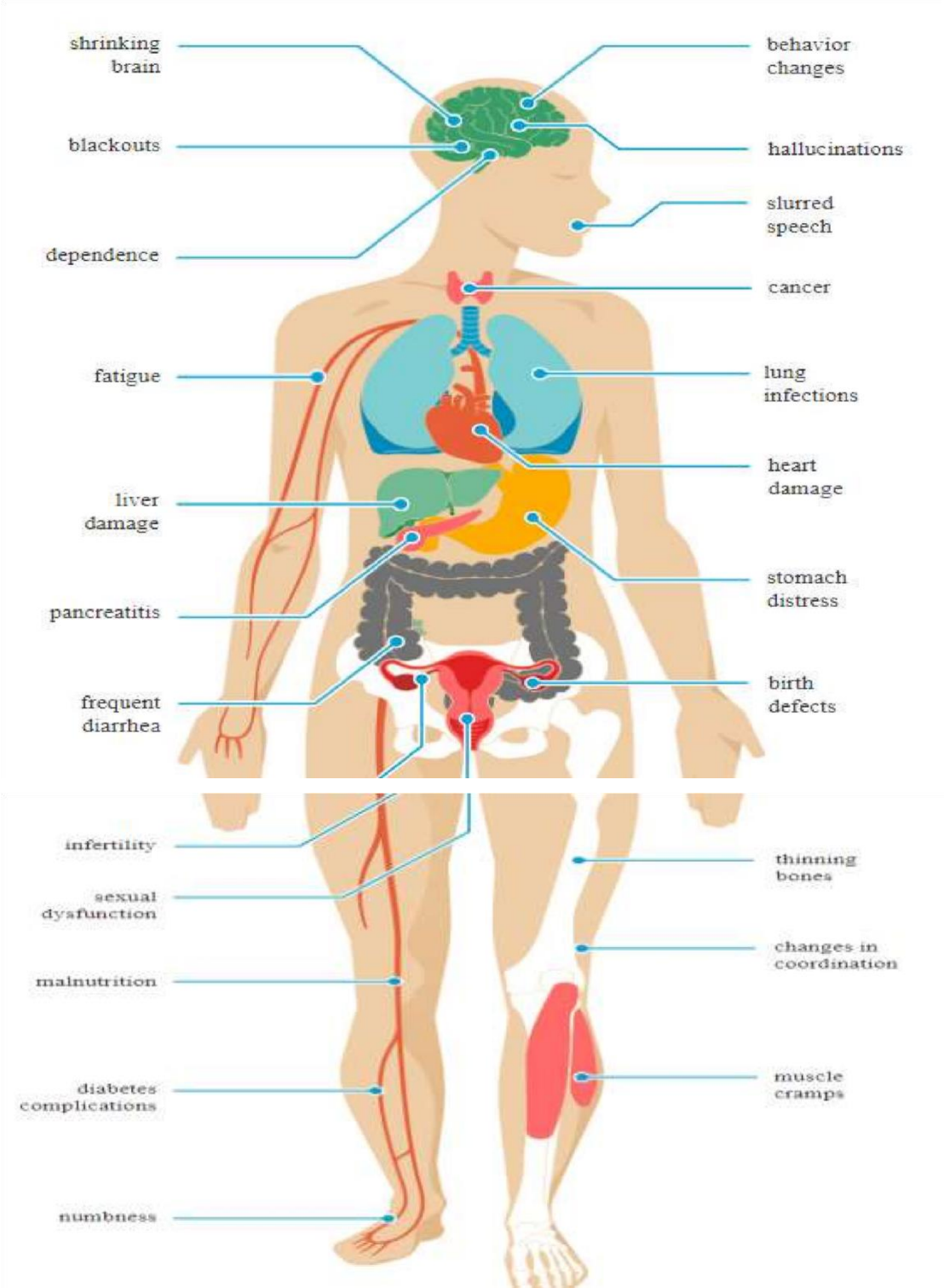
**Step III**: Researcher mentions the effects of these alcoholic drinks in the body and display it in a flash to enhance easy understanding and assimilation.

## Effects of alcoholism on body

- Heart diseases
- Impotency or infertility
- Intestinal cancers or ulcers
- Muscle weaknesses
- Osteoporosis
- Liver disease
- Bleeding throat
- Brain damage
- Stomach ulcers



**Effects of Alcoholism on Parts of the Body**




**Step IV**: Assignment.

Mention five health problems that can be caused by addictive smoking and drinking.

## SESSION SIX

## MYTHS AND TRUTH ABOUT ALCOHOL ADDICTION

**Objectives**: Participators should readily execute the tasks below at the completion of this session:

i.mention the myths about alcohol addiction; and ii.state the truth about alcohol addiction.

**Step I**: Researcher asks participants to mention some of their (beliefs) about smoking and alcohol.

**Step II**: Researcher debunks the irrational beliefs about smoking and alcohol addiction.

**Myths and Truth of Alcohol Addiction**

| S/N | Myths | Facts |
|---|---|---|
| 1. | Inordinate consumption of alcohol is a nice means of unwinding and entertaining oneself at gatherings. | You can utter words you should not verbalize under the influence of alcohol and engage in actions that you would conventionally not even imagine doing when not intoxicated. For instance, fighting with people, engaging in sexual intercourse casually, or endangering your life and those of others by indulging in irresponsible and untoward activities. |
| 2. | Unlike other drugs, taking alcohol is relatively less risky. . | People who consume alcohol are more susceptible to contracting life-threatening diseases and are likely to be addicted to other drugs. Several others are prone to accidents, sustaining grave injuries, committing alcohol-related suicides and murders. Excessive alcohol intake can also readily birth alcohol poisoning with fatal consequences. |

| | | |
|---|---|---|
| 3. | Quitting smoking now is not plausible because I have taken to it for so many years and it has become an intricate part of my being. | Anyone can and should quit smoking because it has the tendency of shortening human life span by as much as 14 years in both male and female smoker. |
| 4. | As a chain-smoker, the only disease that I can possibly contract and therefore bothers me is cancer of lung. | Smokers are strongly liable to contracting various maladies examples of which include bronchitis, emphysema, heart-related ailments, hypertension, hypercholesterolemia, oral cavity cancer, laryngeal cancer and esophageal cancer. As submitted by the American Lung Association, the plausibility of contracting pancreatic cancer, urothelial carcinoma as well as renal cancer is heightened by smoking. |
| 5. | Smoking is relaxing and improves your mood. | The whole human body is affected when man takes in the nicotine content of cigarette through smoking. It alters the blood pressure in the circulatory system by having a direct impact on the blood-pumping organ of the body, the heart. |

| | | |
|---|---|---|
| 6. | There is absolutely nothing wrong in smoking just a few sticks of cigarette per day. | It is never safe to indulge in smoking.<br>Each stick of cigarette has a nicotine content weighing 1-2 milligrams which gets to the brain between 8 and 10 seconds. Aside nicotine, several other harmful chemicals are added to the human body with each inhalation of cigarette.<br>There are 4000 toxins and chemicals in each inhalation of smoke from cigarette, and fifty of these harmful substances can engender cancerous growths in the body. For every moment you smoke, you are inhaling benzene, ammonia, formaldehyde, arsenic, cyanide, carbon II oxide (CO), tar and nicotine, alongside several such poisonous substances. |

**Step III**: Researcher motivates participants to begin practicing quitting.

**Practising Quitting by Setting a Quit Date**

1. Pick a quit date.
2. Work with people of related goals.
3. Know your triggers.
4. Celebrate yourself for every improvement made.
5. Consult your therapist.

**Step IV**: Assignment.

1.Mention five myths and five truths about smoking and alcohol addiction.

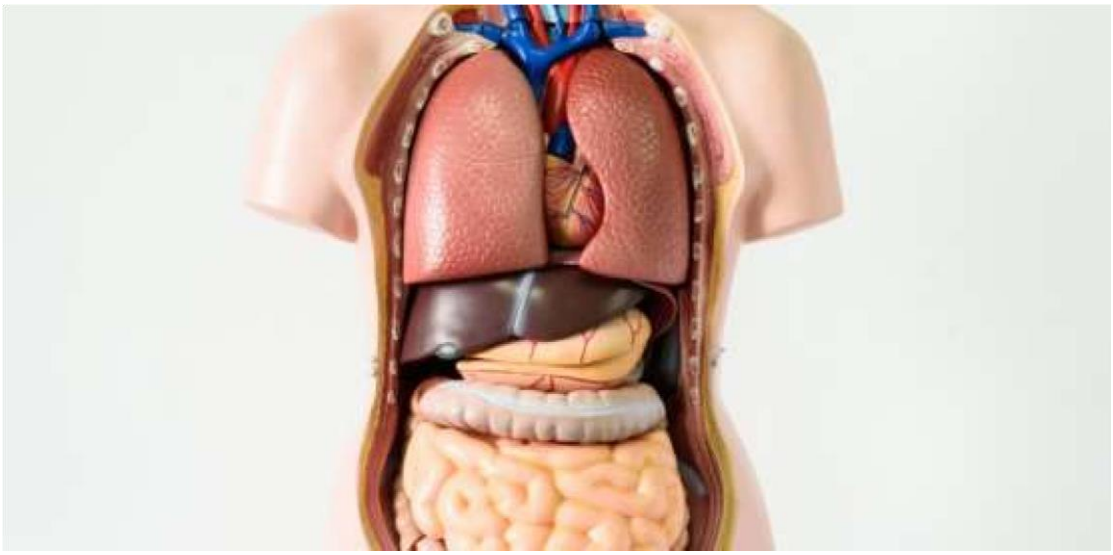
## SESSION SEVEN

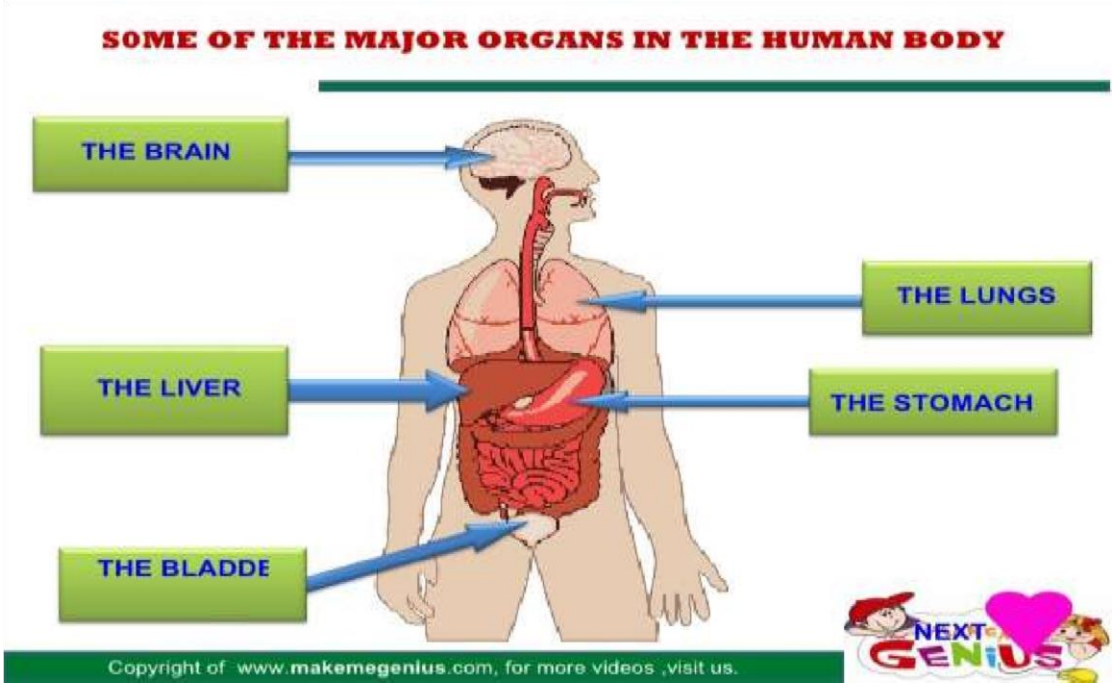
## EFFECTS OF ALCOHOL ADDICTION ON THE KIDNEY

**Objective**: Participators should readily execute the task below at the completion of this session:

1.Mention the effects of smoking and alcohol addiction on the kidney. **Step I**: Researcher asks participants to identify the kidney among different organs displayed on a chart.

**Pictures of the Various Organs of the Body**






**Step II**: Researcher mentions the functions of a kidney.

**Functions of the Kidney**

1. Filtration of blood.
2. Regulation of salts in the body.
3. Production of a hormone.
4. Excretion.
5. Osmoregulation.
6. Secretion.

**Step III**: Researcher mentions the damage addictive smoking and drinking can cause the kidney.

**DAMAGING IMPACTS OF EXCESSIVE ALCOHOL INTAKE ON THE KIDNEY AND BODY**

1. Reduced urine output.
2. Fatigue.
3. Nausea.
4. Swelling in the feet.
5. Unexplained itchiness.
6. Puffness of face.
7. Shortness of breath.

**Step IV**: Assignment

1.Mention five damages of excessive alcohol and smoking to the body.

## SESSION EIGHT

## EFFECTS OF ALCOHOL ADDICTION ON THE HEART

**Objectives**: Participators should be able to seamlessly carry out the activities below by the completion of this session:

i.elucidate what a heart disease means; and ii.mention at least five ways in which addictive drinking and smoking can cause heart diseases.

**Step I**: Participants are made to feel their heart beat and liken their heart to the engine of their vehicles.

**Step II**: Participants would mention importance of a good engine to a vehicle.

**Step III**: Participants mention activities that can damage the engine of a vehicle.

**Step IV**: The researcher explains the meaning of heart diseases and explain that each time individuals engage in addictive consumption of smoking and alcohol there is a damage done to the heart.

### Meaning of Heart Disease

Heart diseases occurs when the heart cannot function optimally to enhance the wellbeing of the body. It can be caused by smoking and drinking addiction in the body.

**Step V**: The researcher mentions how smoking and alcohol addiction can cause heart diseases.

### How Alcohol Addiction Cause Heart Diseases

1. It causes blockage of arteries, making it hard for it to supply the heart with oxygen.
2. The heart is prevented from pumping blood properly due to lack of access to oxygen.
3. The heart may stop beating.
4. This can lead to shortness of breath which usually becomes progressively worse.
5. No cure for heart failure yet.
6. It can cause heartbeat irregularity.
7. It can make the victim or individual bleed easily.

**Assignment**: Identify five (5) ways through which smoking and alcohol can cause heart diseases.

## SESSION NINE

## ALCOHOL ADDICITON AS A MAJOR CAUSE OF CANCER

**Objectives**: At the completion of the lesson, participators should be able to:

i. Explain what cancer means.
ii. Mention the kinds of cancer that can be caused by smoking and drinking addiction.

**Step I**: Participants mention their past experiences of various kinds of illnesses.

**Step II**: Participants are grouped into two to discuss the effects of their past illnesses.

Group 1: Effects on the family.

Group 2: Effects on their finances.

**Step III**: Researcher explains what cancer means in a layman's definition.

### Meaning of Cancer

Cancer is when the body can no longer co-ordinate some activities of the cell in terms of its division causing great pain and discomfort to the affected part which also has the tendencies of spreading to other parts of the body.

**Step IV**: Researcher explains smoking and alcohol addiction as a major cause of cancer.

### Alcohol Addiction as a Major Cause of Cancer

Regular consumption of alcohol can aggravate the risk of contracting seven different types of cancer. It is plausible that diverse cancers are birthed through various means.

However, cancers that could be resultant of inordinate drinking of alcohol are:

1. Liver cancer
2. Colorectal cancer
3. Mammary cancer
4. Laryngeal malignant (Voice Box)
5. Esophageal (food Pipe)
6. Pharyngeal cancer (upper throat)
7. Mouth cancer

The following types of cancer are traceable to smoking:

1. Abdominal or bowel cancer
2. Hypernephroma
3. Mouth/Oral cancer

4. Pancreatic carcinoma
5. Malignant lung tumour

**Step V**: Assignment on the parts of the body in which cancer can develop as a result of alcohol addiction.

## SESSION TEN

## THE IMPORTANCE OF HEALTH SUSTAINING LIFESTYLE

**Objectives:** Clients should be able to do the following by the time this session elapses:

1. Mention the consequences of unhealthy lifestyles.
2. Mention the benefits of maintaining health enhancing behaviours.

**Step I**: Participants mention some health endangering behaviours that can spring up from smoking and alcohol addiction.

### Health Endangering Behaviours that can Spring up from Addictive Drinking

1. Reckless driving which can lead to accidents.
2. Risky sexual behaviours. .e.g. unprotected sex.
3. Violence and aggression.
4. High risk taking behavior. E.g. sleeping under parked vehicles, neglecting safety procedures in operating machines, disobedience to traffic rules and regulations.
5. Loss of valuables e.g. money, phones, etc.
6. Domestic violence.
7. Environment unfriendly behaviours such as weeing and pooing anywhere, dropping cigarette leftovers anywhere which can cause fire carelessly, etc. **Step II**: Researcher state some health enhancing lifestyles which boost a healthy and Well-functioning body.

### Health Enhancing Lifestyles Which Boost a Healthy and Well-Functioning Body

1. Drinking a lot of water.
2. Eating vegetables and fruits frequently.
3. Eating a healthy diet.
4. Sleeping for at least 8 hours each day.
5. Exercising.
6. Healthy sexual activities.
7. Medical check-ups.

### Benefits of Maintaining Health Enhancing Behaviours

1. A healthy and well-functioning body.
2. Financial buoyancy due to absence of health challenges and hospital visits.

3. High level of productivity.
4. Ability to plan for the future and make reasonable investments.
5. It enables independent living and not being dependent on others for basic survival needs.
6. Longevity of life.

**Step 3**: Assignment on the benefits on healthy living.

## SESSION ELEVEN

## CONCLUSION AND ADMINISTRATION OF POST-TEST

**Objectives:** At the completion of this session, clients should be able to: (1) narrate their experiences and state some of the changes they have observed; (2) fill the smoking and alcohol questionnaires correctly.

**Step I:** The therapist and the participants welcome each another. There was discussion on the homework given to the participants. In addition, the participants were appreciated for participation.

**Step II:** The therapist asks participants to state the progress made and what changes have been observed in terms of alcohol and smoking consumption.

**Step III:** The therapist explains that in order to ensure permanent extinction of alcohol and smoking addiction, participants should put to practice on daily basis, some of the things learnt in the programme.

**Evaluation:** The therapist gives alcohol and smoking scales to each of the participants to fill.

**Conclusion:** The therapist declares that the programme has come to an end. Participant were appreciated them for their cooperation and active participation during the course of the programme.

**CONTROL GROUP**

**SESSION ONE**

**GENERAL ORIENTATION AND RAPPORT**

**Objectives**: Participant should be able to:

i .introduce and know each other; ii.fill the pre-test instrument correctly; and

iii.agree on next day, time and period of meeting.

**Step I**: The therapist welcomes all the participants and he introduces himself. Participants thereafter greet and introduce themselves. The therapist discusses the issue of confidentiality and mutual respect among participants.

**Step II**: Therapist will administer the research instrument to the participants. The score obtained will form the pre-test score of the participants.

**Step III**: The therapist and the participants discusses and agrees on the following:

Period of session: - 1 hours

Day: Thursday

**Step IV**: The participants asks questions, while the questions will be answered as appropriate. Then, the therapist reads some of the resolution of the session to the participants.

## SESSION TWO

## IMPORTANCE OF USING WASTE BASKET IN THE VEHICLE

**Objective**: Participants should be able to state why they should have waste basket in the vehicle by the end of this session.

**Step I**: The therapist will welcome the participants, while they also exchange greetings among themselves.

**Step II**: The therapist teaches the participants on the need to keep waste baskets in their vehicles:

It is important to have waste basket in vehicles and ensure that passengers use it. This will help in controlling environmental pollution. Keeping waste baskets will also help to reduce sickness and disease that are associated with polluted environment. In addition, if a driver is caught for not having waste basket by government agents, such a driver could be made to pay huge fine. Simply, waste basket helps keep our environment clean and neat.

**Step III**: The above note will be deliberated on by the participants, while the therapist will moderate the discussion.

**Step IV**:The therapist will appreciate the participants for participating in the programme. Also, participants were reminded of the next meeting day and time.

## SESSION THREE

## CONCLUSION AND ADMINISTRATION OF POST-TEST

**Objective**: Clients should be able to fill the post-test instrument correctly at the end of the session.

**Step I:** The therapist and participants greet each other.

**Step II:** The researcher administered the instruments to the participants. While the participants were filling the instruments, the researcher provide guide and help to participants as required. Afterward, the researcher will talk on the need for the participants to avoid alcohol and smoking addiction, because addiction leads to costly disease and sickness to the addicts. Also, addiction destroys important basic social relationship and lead to economic problems.

**Closing Remark:** The researcher appreciated the participants for their cooperation during the programme.

**IFIKUN KINNI**

**YUNIFASITI TI IBADAN, ẸKA ETO ẸKỌ ITỌSỌNA ATI IMỌRAN**

Sa,

Fi aanu fesi si awọn ohun wọnyii pẹlu, otitọ ti o yẹ iwe ibeere yii wa fun iwadii pọnbele ni. Eyikeyi alaye ti e ba se yoo je asiri. Jowo ma ko ORUKỌ rẹ tabi nọmba idanimọ.

O seun

**Orukọ Pataki**: Pataki Berger ☐ Pataki Agege ☐ Alimosho ☐

**Iru Ọkọ:** Ọkọ nla ☐ Takisi/ọkọ Ayokele ☐ Alupupu ☐

**Ipele ti Eko** Ko si☐ Alakobere ☐ Sekondiri ☐ Ile eko giga☐

**Ojo Ori:** 20 – 25 ☐ 26 – 30 ☐ 31 – 35 ☐ 36–40 ☐

**Iwe Ibeere Lori Oti Lilo Idanimo Idibaje**

| Nomba | Awon ohun | Eekan si Eemeji | Emaarun si emafa | O ju emeje si emewaa lo | O ju emeje si emewaa lo |
|---|---|---|---|---|---|
| 1 | Igba meelo ni o mu obhun ti o ni oti ni ose? | | | | |
| 2 | Emeloo ni awon ohun ti o mu maa n ni oti ninu loojo? | | | | |
| 3 | Bawo ni o se maa n niju ohun mimu mefa ati jubee lo ninu ayeye kan ni aarin osu kan? | | | | |
| 4 | Laarin osu ti o koja, bawo ni o se mo wipe o ko ti bere? | | | | |
| 5 | Laarin osu ti o koja, bawo ni inu re se ma n baje tabi ri wipe o jebi leyin ti o ba mu oti tan? | | | | |
| 6 | Laarin iriri ninu oti mimu ni ose to koja, bawo ni o se le ranti oun ti o sele ni ale, ki isele oti mimu to bere? | | | | |
| 7 | Ninu osu ti o ti koja seyin, bawo ni o se ma n nilo oti ni aaro lati mo ibi ti ara re ku si? | | | | |

| | | | | | |
|---|---|---|---|---|---|
| 8 | Ninu awon osu ti o ti koja seyin, bawo ni se kuna ti o ye ki o se nitori oti amuju | | | | |
| 9 | Bawo ni a ti se eniyan lese ni osu ti o koja seyin lori abajade oti mimu rc? | | | | |
| 10 | Bawo ni Ibatan re, ore tabi osise eleto ilera se nipa oti mimu re ati imoran lati siwo oti mimu losu kan seyin? | | | | |

**APPENDIX II**

**IFIKUN KEJI**

**YUNIFASITI TI IBADAN, EKA ETO EKO ITOSONA ATI IMORAN**

Sa,

Fi aanu fesi si awon ohun wonyii pelu, otito ti o ye iwe ibeere yii wa fun iwadii ponbele ni. Eyikeyi alaye ti e ba se yoo je asiri. Jowo ma ko ORUKO re tabi nomba idanimo.

O seun

**Oruko Pataki**: Pataki Berger ☐ Pataki Agege ☐ Alimosho ☐

**Iru Oko:** Oko nla ☐ Takisi/oko Ayokele ☐ Alupupu ☐

**Ipele ti Eko:** Ko si ☐ Alakobere ☐ Sekondiri ☐

Ile eko giga ☐

**Ojo Ori:** 20 – 25 ☐ 26 – 30 ☐ 31 – 35 ☐ 36–40 ☐

Itosona: Jowo farabale ka alaye kookan ki o si mu eyi ti o se apejuwe ihuwa si re julo.

Socrate 8a: Iwon oti mimu lati owo Miller ati Tonigan (1996)

Key (Botini)

SD = Strongly Disagreed (Ko gidigidi)

D = Disgreed (Ko)

U = Undecided (Ailoruko)

A = Agreed (Gba)

SA: = Strongly Agree (Gba gidgidi)

| Nomba | Awon Ohun | SD | D | U | A | SA |
|---|---|---|---|---|---|---|
| 1 | Mo fe ni awon ayipada lori oti mimu mi ni tooto | | | | | |
| 2. | Nigba miran, mo maa n roo boya oti mimu mi maa n pa awon eniyan lara | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 | Mo ti bere si ni n se awon ayidapa kan lori oti mimu mi | | | | | |
| 4 | Mo maa n mu oti pupo tele, sugbon mo ti yipada lori oti mimu mi | | | | | |
| 5 | Kii se boya wipe mo n se roo lati yipada lori oti mimu, mo ti nse nnkan lori re | | | | | |
| 6 | Mo ti yipada lori oti mimu mi, mo si ti n wa awon ona lati maa pada si bi mo se nse tele | | | | | |
| 7 | Mo ni awon isoro gidi pelu oti mimu | | | | | |
| 8 | Mo n se awon nnkan kan taratara lati din tabi dekun oti mimu | | | | | |
| 9 | Mo ti se awon ayipada kan lori oti mimu mi, mo ni nilo iranlowo lati maa pada si bi mo se n mu oti tele | | | | | |
| 10 | Mo n sise gidigidi lati yipada lori oti mimu mi | | | | | |

**APPENDIX III**

**IFIKUN KETA**

**YUNIFASITI TI IBADAN, EKA ETO EKO ITOSONA ATI IMORAN**

Sa,

Fi aanu fesi si awon ohun wonyii pelu, otito ti o ye iwe ibeere yii wa fun iwadii ponbele ni. Eyikeyi alaye ti e ba se yoo je asiri. Jowo ma ko ORUKO re tabi nomba idanimo.

O seun

**Oruko Pataki**: Pataki Berger ☐ Pataki Agege ☐ Alimosho ☐

**Iru Oko:** Oko nla ☐ Takisi/oko Ayokele ☐ Alupupu ☐

**Ipele ti Eko:** Ko si ☐ Alakobere ☐ Sekondiri ☐

Ile eko giga ☐

**Ojo Ori:** 20 – 25 ☐ 26 – 30 ☐ 31 – 35 ☐ 36– ☐

**Itosona:** Jowo farabale ka alaye kookan ki o si mu eyi ti o se apejuwe ihuwa si re julo.

Socrate 8a: Iwon oti mimu lati owo Miller ati Tonigan (1996)

Key (Botini)

1 = Rara 2 = Ki 3 = pupo 4 = Ni Iwontunwonsi

5 = Lailopin

**Iwon ipa '- ara mi lori yago fun oti**

| Nomba | Ipo | Rara | Ki se | Pupo | Ni Iwontunwonsi | Lailopin |
|---|---|---|---|---|---|---|
| 1. | Nigba ti mo ba wa ninu irora nitori a ti dekun ati siwo oti mimu | | | | | |
| 2. | Nigba ti mo ba ni ori fifo | | | | | |
| 3 | Nigba ti inu mi ba n baje | | | | | |
| 4 | Nigbati ti mow a ni isinmi ti mo si fe sinmi | | | | | |
| 5 | Nigbati ti oro enikan ba je mi lokan | | | | | |
| 6 | Nigbati mo ba daamu gidigidi | | | | | |
| 7 | Nigbati ti o ban se mi pe ki oti kan si lati le ri nnkan ti | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | yoo sele | | | | | |
| 8 | Nigbati ti won fun mi ni oti ni awujo | | | | | |
| 9 | Nigba ti mo ba la ala lori oti mimu | | | | | |
| 10 | Nigbati mo ba fed an agbara mi wo lori mimu oti | | | | | |
| 11 | Nigbati o ba se mi pe mo nilo re tabi fun ifekufe oti | | | | | |
| 12 | Nigbati o ba re mi si ara | | | | | |
| 13 | Nigbati ara n ro mi tabi farapa | | | | | |
| 14 | Nigbati o ban se mi pe ki n ru ibinu soke nitori ibanuje | | | | | |
| 15 | Nigbati mo ba ri awon miran to ba n mu ni ile oti nibi ayeye | | | | | |
| 16 | Nigbati mo woye pe gbogbo nnkan ko bo si fun mi | | | | | |
| 17 | Nigbati awon eniyan ti a jo maa n mu ba n gba ni iyanju lati maa mu oti | | | | | |
| 18 | Nigbati ti o ban se mi pe inu n bi mi lati inu. | | | | | |
| 19 | Nigbati mo ba ti ri iriri tabi iwuri ti o maa n ro mi lati mu oti ti o si maa n mu mi laimura sile | | | | | |
| 20 | Nigbati ti ara mi ba ya tabi se ayeye pelu awon miran | | | | | |

**APPENDIX IV**

**IFIKUN KERIN**

**YUNIFASITI TI IBADAN, EKA ETO EKO ITOSONA ATI IMORAN**

Sa,

Fi aanu fesi si awon ohun wonyii pelu, otito ti o ye iwe ibeere yii wa fun iwadii ponbele ni. Eyikeyi alaye ti e ba se yoo je asiri. Jowo ma ko ORUKO re tabi nomba idanimo.

O seun

**Oruko Pataki**: Pataki Berger ☐ Pataki Agege ☐ Alimosho ☐

**Iru Oko:** Oko nla ☐ Takisi/oko Ayokele ☐ Alupupu ☐

**Ipele ti Eko:** Ko si ☐ Alakobere ☐ Sekondiri ☐

Ile eko giga ☐

**Ojo Ori:** 20 – 25 ☐ 26 – 30 ☐ 31 – 35 ☐ 36 - ☐

**Itosona:** Jowo farabale ka alaye kookan ki o si mu eyi ti o se apejuwe ihuwa si re julo.

Iwon iwoye aapon lati owo Cohen (1994)

Key (Botini)

0 = Rara

2 = Nigba miran

3 = Iseto nigba gbogbo

4 = Ni igba gbogbo

| Nomba | Ipo | 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|---|
| 1 | Bawo ni o se binu si ni saa to koja nitori awon ohunj ti o ko ro tele ti o sele? | | | | | |
| 2 | Ninu osu ti o koja, bawo ni o se le ri pe o ko le dari awon nnkan ti se pataki ninu aye re? | | | | | |
| 3 | Ninu osu ti o koja, bawo ni o se ri pe okan re ko bale ti o si daamu? | | | | | |
| 4 | Ninu osu ti o koja, bawo ni o se ni igboya lori agbara lati kapa awon isoro re? | | | | | |
| 5 | Ninu osu ti o koja, bawo ni o se mo lara pe nnkan bo si? | | | | | |
| 6 | Ninu osu ti o koja, bawo ni o se ri pe a ko le se awon ohun ti o ye ki o ti se? | | | | | |
| 7 | Ninu osu ti o koja, bawo ni o se le dari awon ohun irira inu aye re? | | | | | |
| 8 | Ninu osu ti o koja, bawo ni o se pe o wa loke awon nnkan? | | | | | |
| 9 | Ninu osu ti o koja, bawo ni o se binu nitori awon nnkan ti o koja akoso re? | | | | | |
| 10 | Ninu osu ti o koja, bawo ni o se ri pea won isoro n po soke si ti o ko le fi bori won | | | | | |

**ITOJU AILERA TO N SISE NI SISE N TELE**

**(EGBE KINNI)**

**IFAAAR ATI ISAKOSO KI A TO SE AYEWO**

Awon erongba: Leyin ipejo yii, awon olukopa yoo le:

I. Fi ara won han, won yoo si mo ara nipase oruko
II. Loye, yoo si le so erongba ilowosi eto
III. Fi owo re si iwe ifaramo
IV. Pari awon irinse asaaju ayewo

**Igbese kinni:** Oniwosan ki gbogbo awon akopa kaabo, ti ifinihan oniwosan ati awon akopa yoo tele.

**Igbese keji:** Oniwosan pin iwe ibeere ati nnkan fifa lati gba esi asaaju ayewo.

**Igbese keta:** Oniwosan soro lori erongba ni pato ati eredi eto naa, yoo waye fun ose mewaa bayii.

- Lati dekun oti ati siga mimu ti o ti di baraku laarin awon akopa lilo awon ilana itoju ailera to n sise ni sise-n-tele.
- Lati gbin imoose sinu awon akopa lati se aseyori lori erongba ti o wa loke.

**Igbese Kerin:** Oniwosan ati awon akopa jiroro, won si fenuko lori awon ohun wonyii **Igbese Kaarun:** Awon akopa bere awon ibeere nigba ti won yoo fesi si awon ibeere naa bi o ti ye.

Oniwoan ka awon abajade ipejo kookan fun awon akopa lori asiri ibowo fun eniyan ati ifowosowopo ni yoo di mimenuba ti a o si jiroro lori won.

**Igbelewon/Ise Kilaasi:** Oniwosan bere awon ibeere lowo awon akekoo, bii, Kini awon koko erongba eto yi? Nigba wo ni a fenuko lati maa pade?

**Ise Amurele** Igo oti tabi siga lo ro wipe o po ju ni mimu?

Ipari: Oniwosan fi emi imoore han si awon akopa ipejo na si wa sopin

## IPEJO KEJI

## DIDA CRB1S ATI CRB2S MO

**ERONGBA:** Ni opin ipejo naa, akopa yoo le:

i. Da awon okunfa ti o mu oti mimu di baraku mo
ii. So awon abajade ibaraku oti mimu

**Igbese Kinni:** Won pin awon akopa si egbe meta, oruko akegbe

- Akegbe Kinni: Menuba awon iwa aito to wopo laarin awon omo egbe NURTW.
- Akegbe keji: Menuba awon idi ti won fi n hu awon iwa aito bee

Awon iwa ti o wopo laarin awon omo egbe awako (NURTW).

1. Lilo agbara ju bo ti ye lori ariwo pipa paapaa julo ti won ba n b ero oko dowo po.
2. Siga mimu
3. Oti mimu lorekoore
4. Jije onibaara oloti lile
5. Wiwa oko laini isinmi
6. Aini senji lati fun eo-oko
7. Dida awon ero oko sile ki won to de ibudo oko pelu awawi pe sun-kere-fa-kere-oko
8. Iwa aibikita lati mu oko wa ni ipo to dara

Menuba awon ohun to fa awon iwa aito bee

1. Lilo oogun apanilara lorekoore
2. Itara lati pa owo oojo
3. Ipo aidara awon ona
4. Ipo pupo sun-kere-fa-kere-oko
5. Ibinu awon ero-oko miran
6. Owon gogo awon eya ara oko
7. Riri awon to n ta oti lile ati siga ni ayika ati agbegbe ogba Moto
8. Poku lowo oti lile

**Igbese Keji:** Awon akopa yan asoju kookan ninu egbe won lati so ohun ti won jiroro. **Igbese Keta:** Oniwaadi menuba awon iwa aito gege bi CRB1s t7 o maa n je ki siga amuju ati oti afesodi waye.

Awon iwa aito ti o le ru oti amupara afesodi

1. Aimo awon abajade siga mimu ati oti afesodi
2. Sise afarawe ojugba
3. Tete oti mimu ati siga mimu
4. Aini igboya ti o kun oju osuwon
5. Aini imo to peye lori abo
6. Aini imo to peye lori ipinnu rogbodiyan

**Igbese Kerin:** Awon akopa menuba awon idi ti won fi n siga ati oti ti o di baraku.

**Igbese kaarun:** Oniwadii tan imole si awon anfani yiyera fun siga mimu ati oti afesodi fun awon akopa.

Awon anfani yiyera fun oti afesodi

1. Wiwa lailewu
2. Ara re yoo ni ilera nipa ti isesi, togbon ati tara
3. Emi gigun
4. Igboya to ga lori ara eni
5. Asa itoju awon oko lona to dara
6. Ibasepo to dara moran pelu won ero oko ati oloko
7. Aabo Ise

**Igbese Kefa: Ise Amurele**

1. So awon iriri aito marun ti o ti ni nitori siga afesodi ati oti
2. Menuba idi meji ti iru awon iriri bee ko ni fi waye mo

## IPEJO KETA

## IDANIMO AROSO TO RAN CRBIs (OTI AFESODI) LOWO ATI OTITO NIPA CRB1s

**ERONGBA:** Ni opin ipejo naa, o ye ki awon akopa le loye awon igbagbo o se atileyin siga mimu afesodi won ati oti mimu bi awon aroso lasan

**Igbese Kinni:** Won pin awon akopa nipa mimu nomba laileto si egbe meji

- **Egbe Kinni:** Menuba awon aroso nipa siga mimu.
- **Egbe Keji:** Awon akopa yan awon asoju ti yoo soju won ninu ijiroro ti akole re je "Agbo oloti dara ju oogun ti dokita ju we lo.

**Igbese Keji:** Oluwadi salaye awon otito nipa aroso lori oti ati oti eweko

### AWON AROSO NIPA OTI EWEKO

1. Igbagbo pe o maa n ya, ki na eniyan lowo pupo, ona lati mu ara ya kuro ninu aisan bii eegun eyin riro, titete domi – ara abbl
2. O ma npeju lati dawo duro
3. O maa n segun aisan patapata
4. Agbo oloti ko ki leyin, ti won ba tile mu ni amupara
5. Agbo oloti ki leyin, ti won ba tile mu ni amupara
6. Mimu oti ti fi egbogi ro ko lewu ki won to wa oko tabi ti won ba n wa oko
7. Mimu oti ti a fi egbogi ro ko lewu ki won to wa oko tabi won ba n wa oko

### AWON AROSO LORI OTI AFESODI

1. Afesodi je ajogunba
2. Ti o ba ti fe ohun kan ni afesodi laelae o di baraku titi o je ohun titi laelae.
3. Eniyan yoo ti fe oti si odi fun ojo pipe ki o to di wipe yoo han lara rc
4. Ni kete ti ara se pe on ya, gbogbo oogun ti jade lara
5. Kofi maa n din ewu ati amuju ku
6. Oti mimu ara
7. O ti maa n din aifokanbale ku
8. Ijamba oti ko po ti awon oogun miran
9. Oti o je ona to dara lati sinmi lati je igbadun
10. Oti dara fun okan

**Igbese Kerin**: Ise asetile wa lori mimenuba aroso marun-un lori ori afesodi to n se ni ijamba ju.

## IPEJO KERIN

**ERONGBA:** Leyin ipejo yi, o ye ki awon akopa le:

1. So awon otito lori oti afesodi

**Igbese Kinni:** Oluwadi menuba awon ipa oti afesodi

1. Oti mimu ki je ki eniyan le ronu bo ti ye ati pe yoo maa pa igbese re lara.
2. Ifaseyin diedie, fifa wahala ati sise awon nkan to n fa idojuko ara.
3. Oti afesodi maa n je ki isesi yipada, riru ibinu soke ati riru awon ifarahan ewu giga soke.
4. Oti pupo le je ki mimi fa seyin gidigidi tabi ki mimi duro na, o si n fa iku.
5. Awon ipa odi oti le po si ti won ba pa awon oogun kan mo (bi apeere, oogun oorun, oogun otutu).
6. Mimu oti fun ojo pipe le fa inu gbigbona tabi ti onroro, aarun edo, ati awon aarun kan ti o je ti inu ikun ati inu aarin ibi ti ounje gba wole lati enu wo ikun, aisan okan ati aarin eegun to ti maa n dabaru Kaliosiomu ati idagbasoke eegun).
7. Oti afesodi tun le yori si awon nnkan afesodi miran bii siga afesodi, lilo awon nnkan ti o ru soke bii kodin, feran obinrin ati tete tita.

**Igbese Keji:** Oluwadi fi awon aworan ti awon eya ara ti oti afesodi ti baje.

**Igbese Keta:** Awon akopa menuba awon anfani ti o wa ninu igbagbo lori awon otito afesodi.

Awon anfani nini igbagbo lori awon otito oti afesodi:

1. O maa ranilowo ninu didaduro, o si n se idiwo ifaseyin
2. O maa n yori si ilera ara nipa fifi agbara fun eto alaabo lati le awon arun akoran.
3. O maa n je ki opolo sise daradara nitori naa o maa n se iranlowo lati je ki awon ijamba dinku ni opopona.
4. O ma n je ki o je ojuse olukuluku pelu awon ogbon ipinnu ariyanjiyan ti o ye ati didin ibinu ati iwa-ipa ku
5. Dida oti afesodi duro gba opo

**Igbese Kerin: Ise Sise**

Menuba meta ninu eyikeyi awon otito ti o gba ti o si ti gba pe o je otito ni okan re ti o si ni agbara lati yi iro re pada.

**IPEJO KARUN UN**

**IFI-AGBARA KUN CRB25**

**ERONGBA:** Ni opin ipejo yi awon akopa yoo le oye pataki omi lori siga ati oti.

**Igbese keji:** Won pin awon akopa si egbe meta lori ohun ti won mu. Nitori naa awon ni:

- Egbe Kinni: Egbe omi
- Egbe Keji: Egbe oti Jinni
- Egbe keta: Oti elegboogi

**Igbese Keta:** Awon akopa jiroro lori ohun ti won yan, o dale lori:

1. Awon anfani ti ohun ti won yan ni lori ti awon yooku
2. Riraye si
3. Iye
4. Awon anfani ilera
5. Elegbe
6. Esin

**Igbese Kerin:** Olori egbe kookan se afihan

**Igbese Kaarun:** Oluwadi n se afikun awon anfani omi, awon efo gege bi ohun ti o dara lati fi dipo oti mimu afesodi ati lilo ati elegboogi lorekore.

**Awon Ise Omi Ni Ara**

1. Igo omi kan le wiwo fiimu lori awon ewu oti mimu lati yago fun CRB1s ati lati gbaraku ti CRB1s.

**Igbese Kinni:** Oluwadi fi fiimu lori awon ewu ti o wa ninu oti mimu afesodi han.

**Igbese Keji:** Won yan awon akopa kelekele lati salaye lori awon ewu oti ninu fiimu naa ni eyo kookan.

**Igbese keta:** Won pin awon akopa si egbe lati jiroro lori awon imolara oti mimu bi a se se afihan re ni okan-o-jo-kan.

- Egbe Kinni Alafesodi
- Awon ero oko
- Idile

**Igbese Kerin:** Oluwadi se alaye kikun lori awon abajade lori egbe meteeta

**Igbese Kaarun:** Ise sise gbigbaradi lati duro fun ojo kan, ki o to di ipejo miran.

## IPEKO KEFA

## AWON ABAJADE IJAMBA LORI AWON AWAKO IDILE ATI AWUJO (LATI TRAKO CRB1s)

**ERONGBA:** Ni opin ipejo yii, awon akopa yoo le so awon abajade ijamba lori awon ohun wonyii:

- Awako
- Idile
- Awujo

**Igbese Kinni:** Awon akopa so awon iriri won lori ijamba loju popo.

**Igbese Keji:** Idije ere lori awon abajade ijamba oju popo lori awon awako idile ati awujo.

**Igbese Keta:** Egbe A: Akole ibalokanje awon ero oko ere lori iwa nini iberu awon ijamba).

Igbe kerin: Egbe B: Awon ipa ijamba ona lori awon awako.

(Ere bi oti amuju se le fa ijamba ona lori awujo).

**Igbese Kaarun:** Egbe D: Akole awon ijamba ijamba ona lori awujo

(Ere bi awon abajade ijamba ona lori awujo lori awujo bi igbarale pupo, ipadanu emi ati awon ohun ini).

**Igbese Kefa**: Oluwadi fe orisirisi ewu ijamba sun-kere-fa-kere ijamba ona.

Awon ewu ijamba sun-kere-fa-kere

1. Igbarale pupo
2. Ailera ti ipalara sun-kere-fa-kere ona fab ii opa ey, awon egbe opolo.
3. Iberu pupo nigba ti awon to maa n lo on aba n lo
4. Eka irinna ko lere lori pupo bi awon oludokoowo ko ni ere to dara lori idokowo won, nitori bi awon awako se maa n se awon oko lorekoore nitor oogun oloro ti won maa n lo nigba gbogbo.

**Igbese Keje:** Ise sise

Awon akopa yoo menuba awon ona ti o seese ki o kopa lori ijamba.

## IPEJO KEJE

## AWON IPA BIBAJE TI OTI AFESODI MAA N FA SI OKAN

**ERONGBA:** Ni opin ipejo yi, awon akopa yoo le loye awon ipa bibaje ti oti afesodi maa n fa si okan won.

**Igbese Kinni:** Oluwadi menuba awon ise awon eya kookan fun awon akopa

**AWON ISE OKAN**

1. Okan maa n fa eje si awon eya ara yooku
2. Apa osi okan maa n ri eje lati edo foro
3. Apa otun maa n ri eje leyin ti o fa ategun kaakiri ara, yoo si da pada si edo foro lati fa ategun si.
4. Eje maa n gbe ategun ati gbogbo ounje, ounje afun-ni-iyo ti ara rc nilo lati mi, ronu, dagba ati tunse
5. A ko le se wa laaye laisi eje

**Igbese Keji:** Oluwadi fi aworan awon eya ara kookan han won.

**Igbese Keta:** Oluwadi salaye lori awon ise ti awon ara lile nse, o salaye lori bi ara ti o fi amuju ti baje, ko se ni agbara lati sise daradara.

**Bi okan ti o baje se n sise**

1. Okan maa n lu sare. O ju igba aadorin lo laarin iseju kan fun awon agbalagba, ti awon omode ju igba aadorin laarin iseju kan.
2. Ailemi ati rire
3. Eemi kukuru
4. Wiwa kokose ati ese
5. Gbigboro edo
6. Didaku
7. Sise aisan
8. Aini ife ati jeun
9. Aya didun
10. Rire
11. Awon ami maa n saba wa ti a ba fi le n sinmi, eyikeyi ise sise ti o le fa ki ami ati inira po si.

**Igbese Kerin:** A pin awon akopa si egbe meta ki won si salaye iye odun ti o wu won lati lo laye ati nnkan ti won fe ki won ni agbara ati maa se ni ojo ori naa. Bi apeere: aadorin odun, ogorin odun ati bee bee lo.

**Igbese Kaarun:** Oluwadi menuba iseesi ki igbesi aye dinku ati ipo ilera ti, ko dara gege bi awon ojo ori ti a kundun.

**Iseesi ti igbese aye dinku ati ipo ilera ti ko dara fun ti afesodi**

1. O le fa arun jejere to jo mo oti
2. O le ru awon ewu kiko aarun ibalopo soke
3. Oti amuju maa n din agbara eto alaabo lati dojuko arun akoran.
4. O le yori si isupo tabi idiwo die
5. O le fa ijamba oju popo

**Igbese Kefa**: Ise Sise

Menuba ipa ibaje ilera marun ti oti ati siga afesodi

**IPEJO KEJO**

**KIKO TI IHUWASI RE KO NI IBAMU TI O LE DIPO IHUWASI AFESODI LATI YAGO FUN IFASEYIN**

**ERONGBA:** Ni opin eko yii awon akopa yoo le Taludo, ayo tabi awon ere kaadi gege bi ihuwasi ti ko baramu ti yoo ma se ni akoko faaji won dipo siga mimu ati oti mimu.

**Igbese Kinni**: Won pin awon akopa si egbe meta, oruko won ni.

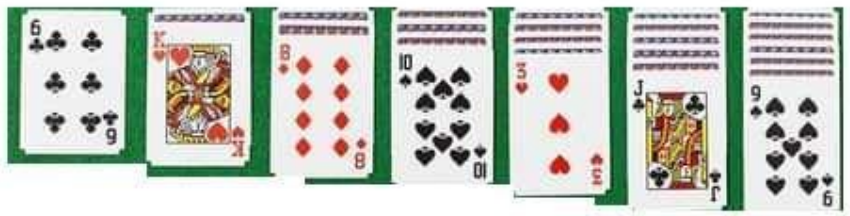
**Egbe Kinni**

**Llud**

**Egbe Keji**

Ay

**Egbe Keta**



Kaadi

**Igbese Keji:** Idije ere laarin opolopo egbe.

**Igbese Keta:** Eni ti o gbegba oroke ninu egbe kookan nko awon yooku lati ta.

**Igbese Kerin:** Oluwadi menuba awon nnkan miran ti eniyan le se lati le dekun tabi pana ifekufe ati afesodi ati siga.

**AWON NNKAN TI ENIYAN LE SE NIGBA FAAJI MEKANIKI MOTO**

1. Sise ere
2. Kiko bi a se n tun nnkan se lati ogba mekaniki moto
3. Lilo akoko lati polongo fun awon awako miran laarin gareeji lori ayprisi siga afesodi ati oti
4. Sisun

**Igbese Kaarun:** Ise Sise

Menuba awon nkan meji lori awon nnkan miran ti o le se lasiko faaji ti o le sise idamu ati siga ati iwa oti mimu afesodi.

## IPEJO KESAN

## IJABO TI AWON OLUKOPA SO LORI IGBIYANJU SIWO

**ERONGBA:** Ni opin eko yii, o ye ki awon akopa le iroyin iriri won nipa gbigbiyanju lati fi sile, sisalaye ilosiwaju, irewesi ati ipenija won.

**Igbese Kinni:** Oluwadi pin awon akopa si orisirisi egbe ati oruko awon egbe naa

Egbe A (Egbe ise) Jiroro awon ipenija

Egbe B (Egbe ona abayo) Jiroro awon ilosiwaju

Egbe D: (Egbe ona didawa duro). Jiroro lori ona ti o maa sise ju ni didawo-duro.

Igbese Keji: Egbe kookan gbe ijiroro won kale nipa olori egbe won.

Igbese keta: Oluwadi n fi agbara kun sii papa awon akopa ninu gbigbiyanju lati siwo O menuba awon anfani sisiwo.

### AWON ANFANI SISIWO

1. Didin ewu akan edo ku ati epo akan miran
2. O maa n din ewu aisan okan, arun ro-lapa-ro lese ati aisan isan kekeeke. (Din awon ohun elo eje ni okan)
3. O maa n din ewu aisan okan laarin odun kan si meji ni sisiwo
4. O maa n din ewu awon aami aisan ategun bi iko hihu, gbigbon ati eemi kukuru. Nigba ti awon ami wonyi le ma farasin, won ki dagba si bi ti awon eniyan to ti siwo.
5. O maa n di ewu didagba awon arun edo foro ku (bi arun edoforo ti o le, a tun mo si kodiidi, okan ninu awon aisan to n fa iku orile ede Amerika).
6. O maa n din ailese abiyamo awon obinrin ni asiko ti won si n bimo. Awon obinrin ti o mu da siga mimu ni asiko ti won loyun naa n din ewu agbewon to ku laarin ikoko.

**Igbese Kerin:** Oluwadi ko faramo CRB1 nipa wiwa ona abayo si awon idojuko to seese ki awon olukopa ri nipa sisiwo afesodi.

TITAKO CRB1s (Iwa ti o ni ibamu pelu asegun) ati fifowsi CRB2s (Iwa ti o ni ibamu pelu asegun 2) laarin awon akopa nipa siga won lori ati siwo afesodi

| NOMBA | AWON IDOJUKO | AWON ONA ABAYO OTI IFESODI |
|---|---|---|
| 1. | Fifarawe akegba | Yiyan awon akegbe ti o le o gba niyanju nipa awon ipa liri sisiwo |
| 2 | Ailekoju idanwo awon nkan afesodi ati awon nkan afesodi to wuni | a. Se afihan lori eyikeyi awon isoro ilera ti o sele nipase lilo nkan afesodi.<br>b. Ro bi taba lilo se n dabaru ibasepo ati igbesi aye awujo rc.<br>d. Ro ti awon idiyele inawo ti nkan afesodi na |
| | Ailagbara lati se idanimo awon okunfa | a. O le je ariyanjiyan pelu ebi re iyawo tabi awon egbe ni gareeji |
| 4 | Aini idaniloju bi sisiwo yoo sise | a. NinI igboya ninu sise ayipada<br>b. Teti si awon itan awon eniyan ti won ti fi igba kan ri ni ife afesodi nnkan tabi iwa ati bi won se siwo |
| 5 | Wiwa ati nini anfani si awon nkan afesodi | a. Sise atunyewo awon ibi afesde sisiwo.<br>b. Wiwa ewu mimu siga, oti afesodi lori won.<br>d. Sise ipinnu yiyi aye re pada si rere. |

**Igbese Kaarun**: Ise Sise

Mu dee ti sisiwo ki o si gbiyanju lati siwo saaju deeti naa

## IPEJO KEWA-AN

## IPARI ATI ISAKOSO LEYIN AYEWO

**ERONGBA:** Leyin ipejo yi, awon onibara yoo le

1. So iriri won ati siso awon ayipada ti won ti se akiyesi si.
2. Dahun iwe ibeere siga mimu ati oti daradara.

**Igbese Kinni**: Oniwosan ati awon akopa ki won kaabo. Alaye yoo wa lori ise asetilewa ti a fun awon akopa. Ni afikun, won yoo fi imoriri si awon akopa fun kikopa won.

**Igbese Keji**: Oniwosan so pe ki awon akopa so itesiwaju to ti waye ati awon ayipada ti won ti se akiyesi lori oti ati siga mimu.

**Igbese Keta**: Oluwosan na salaye lati ri pe oti lo si oko iparun ati siga afesodi ki awon akopa maa gbiyanju re lojojumo ninu awon nnkan ti o ko ninu awon eto.

**Igbelewon**: Oluwosan fun awon akopa niwon oti ati siga lati ko

**Ipari**: Oluwosan je ki won mo pe eto wa na ti wa si ofin. A ro fi imoriri han si awon akopa fun ifowosowopo ati kikopa lasiko eto naa.

**ITOJU AILERA TO NSISE NI SISE –TELE**

**(EGBE KEJI)**

**IPEJO KINNI**

**IFAARA ATI ISAKOSO KI A TO SE AYEWO**

Awon erongba: Leyin ipejo yii, awon olukopa yoo le:

i. Fi ara won han, won yoo si mo ara nipase oruko
ii. Loye, yoo si le so erongba ilowosi eto
iii. Fi owo si iwe ifaramo
iv. Pari awon irinse asaaju ayewo

**Igbese Kinni**: Oniwosan ki gbogbo awon akopa kaabo, ti ifinihan oniwosan ati awon akopa yoo tele.

**Igbese Keji**: Oniwosan pin iwe ibeere ati nnkan fifa lati gba esi asaaju ayewo.

**Igbese Keta**: Oniwosan soro lori erongba ni pato ati eredi eto naa yoo waye fun ose mewa. Bayi:

- Lati dekun oti ati siga mimu ti o di baraku laarin awon akopa, lilo awon ilana itoju ailera to n sise ni sise-n-tele.
- Lati gbin imoose sinu awon akopa lati se aseyori lori erongba ti o wa loke.

**Igbese Kerin**: Oniwosan ati awon akopa jiroro won si fenuko lori awon ohun wonyii.

**Akoko Ipejo**: Aago marun irolwe.

**Igbese Kaarun**: Awon akopa bere awon ibeere nigba ti won yoo fesi si awon ibeere naa bi o ti ye.

Oniwosan ka awon abajade ipeko kookan fun awon akopa oro lori asiri ibowo fun eniyan ati ifowosowopo ni yoo di mimenuba ti a o si jiroro lori won.

Igbelewon/Ise Kilaasi: Oniwosan bere awon ibeere lowo awon akeeko, bii, kinni awon koko erongba eto yi? Nigba wo ni a fenu ko lati maa pade?

**Ise Amurele:** Igo oti tabi siga lo ro wipe o po ju ni mimu?

**Ipari:** Oniwosan fi emi imoore han si awon akopa ipejo naa si wa sopin.

## IPEJO KEJI

## SISE IDAGBASOKE OGBON EDUN NI DIDIN OTI AFESODI KU

**ERONGBA:** Ni opin ipejo yi, awon akopa yoo le

- So awon ona ti won n gba dojuko edun won
- Menuba awon anfani nini ogbon edun

Akoonu

**Igbese Kinni**: Olukopa so itumo edun ati ogbon edun

**ITUMO EDUN**

Edun ni won ma n pe ni mimo lara, o si pelu awon iriri bii ife, ikorira, ibinu, ayo, ipaya pupo nse pelu isesi

Igbese keji: Awon akopa menuba oniruuru edun to maa n saba n ru oti amuju soke.

**OGBON EDUN**

Ogbon edun lowo si enikookan se maa n loye edun re, orisun ti awon ise edun ati bi a se le se atunse ojuse igbese ti yoo ma ba edun lo. Olukuluku ni o yato ninu ijafafa lati dari tumo ati dasi edun won, nitori naa, awon to ni pupo ti o se ni ibasepo ni eni ti o ni oye edun.

**Igbese Keta**: Oluwadi salaye awon anfani nini ogbon edun.

**AWON ANFANI NINI OGBON EDUN**

1. O n mu ipo ilera gbogbogbo dara si ni gbogbo ona pelu opolo, ti ara, ihuwa ati ilera edun.
2. Ire ti awo ti o ba ni ogbon edun maa n ni ero rere ni gbogbo igba, won si setan lati dojuko ipenija dipo lati year.
3. Biba awujo mu: Awon ti o ni ogbon edun to dara maa n ni ibamu pelu iwa ati ilana awujo ti yoo mu ki awujo ri won gege bi omoluabi.
4. O maa n fun ni lagbara lati dari ibinu, ibinu maa n fa ikorira ti o lagbara ti a ko ba si sakoso re daradara, o le ru opolopo ohun ibi bii, igbemi ara emi, ipaniyan, ija, irewesi okan ati bee bee lo. Ogbon edun maa n ran eniyan lowo lati din iwa were ibinu ku, ti o je ona ti o to ni ipo ti o ye yoo si le se atunse ati idahun ti o to si edun ibinu ti a ti yo lara awon miran, nitori naa siso irinse eto atunto rere.

5. O maa n din afesodi ku, o maa n se idiwo fun afesodi. Won maa n lo se idiwo fun afesodi lati mu wahala kuro, ga tabi lailegbe. O je ona abayo fun alafeesodi lori awon isoro ti won lero pe won ko le dojuko. Ogbon edun maa n fun eniyan lagbara lati ohun ti ko dara, o si maa n dena afesodi gege bi ona abayo.

**Igbese Kerin**: Oluwadi so bi a se ogbon edun dagbasoke ninu oti afesodi ku.

**SISE IDAGBASOKE OGBON EDUN LATI DIN OTI AFESODI KU**

Ogbon edun je irinse pataki lati bo lowo afesodi ati lati dena ifaseyin

1. Yanju awon edun ti ko dara dipo yiyera tabi segun iru edun bee.
2. Kikekoo lori liloye lori awon eniyan ki o si ba won soro pelu alafia nipa lilo ogbon rogbodiyan lati yanju ede ayede.
3. Agbara lati sakoso wahala: Wahala wa lara gbigbe, nitori naa, lati je ologbon edun, o ye ki a ri wahala gege bi afikun agbara rere lati de ibi ti a fe de dipo.
4. Titenumo siso edun nigba ti o se pataki ni ona lati je ki edun ti kodara waye dipo ti a fi maa je kli o kun denu.

ISE SISE: Awon akopa gbiyanju ogbon edun ki won si mojuto ilosiwaju debi pee dun won le di lilo fun eso rere.

## IPEJO KETA

## KIKO EKO LORI IHA TI NINI ILERA KO SI AILERA YIYO OTI KURO

**ERONGBA:** Ni opin ipejo yi, awon akopa yoo le:

1. So itumo yiyo owo kuro ni ailera oti.
2. Da yiya owo kuro ni ailera oti nipa eko nipa okan.
3. Yanju yiyo owo kuro ni ailera oti nipa eko okan.

**Igbese Kinni**: Oluwadi salaye lori itumo yiyo owo kuro ni ailera oti itumo yiyo owo kuro ni aileron oti yiyo owo kuro ni ailera oti je iriri inira nipa ti ara, opolo ati okan ti alafesodi ba n gbiyanju lati siwo afesodi. O da lori orisirisi awon ti o le fa, boya bi afesodi naa se po si, bi won se gbaraku si tabi iwuri fun alafesodi awon abuda alafesodi, bi ayika se ri ati bee bee lo.

**Igbese Keji**: Awon akopa jiroro lori iberu won lori yiyawo lori afesodi oti mimu.

**Igbese Keta**: Oluwadi se akojo, o si salaye awon ami ailera yiyo oti kuro.

Awon apeere ailera yiyo oti kuro

1. Ijaya
2. Irewesi okan
3. Owo gbigbon
4. Ori fifo
5. Bibi
6. Airi oorun sun
7. Lilaagun
8. Awon ala bubuku

Igbese kerin: Oluwadi so bi a se le ailera yiyo oti nipa eko nipa okan.

Yiyanju yiyo owo kuro ni ailera oti

1. Je ounje asaralore, mu omi pupo efo ati eso.
2. Wa pelu awon elero rere ti yoo maa gba – ni iyanju ninu igbese yiyawo kuro ni afesodi.
3. Kikopa lori awon iwa ailera ti ko baramu jije awon ohun mimuse looje kun de enu yiyago fun asise.

4. Darapo mo egbe ti dawo afesodi duro fun iwuri ati atileyin ara eni gege ni enikan ninu egbe ti a nse atileyin yoo so awon ipenija ki won si gba ara won ni iyanju.
5. Sise akiyesi ailera yiyo oti kuro ni ona ti o dara, ki a maa si ri bi asise pe yoo pora.

**Igbese Kaarun**: Ise Sise

Ki awon akopa gbiyanju sisiwo nipa lilo ona abayo to ye lori yiyo ailera oti kuro ti won ti ko lati farada a.

## IPEJO KETA

## OGBON IGBOYA NINU FIFARADA SISIWO NINU OTI AFESODI ATI DIDENA IFASEYIN NINU OTI AFESODI ATI DIDENA IFASEYIN

**ERONGBA:** Ni opin ipejo yii, awon akopa yoo le

i. Salaye ohun ti igboya je.
ii. So iyato ti o wa laarin igboya, ibinu ati aini –igboya.
iii. Da awon ona ti igboya le gba se iranlowo ninu didena ifaseyin nini sisiso ati afesodi.

**Igbese Kinni**: Won gba awon akopa wole ipejo pelu idunnu won si se atunyewo ipejo ti o koja gege bi ipile fun awon tuntun.

**Igbese Keji**: Won ni ki awon akopa sere ti a nse atako ifanimora afesodi mimu.

**Igbese Keta**: Oniwosan salaye igboya, o si so awon apeere iwa igboya ati aigboya.

**Itumo Igboya**

Igboya ni ogbon ibaraenisoro, eyi ko tumo si agbara lati ja fun eto eni ati awon ti o ni ero rere. Igboya eniyan se aseyori nipa siso ero eni bi o tile yato laise ara eni tabi awon miran. Igboya ogbon pataki lati siwo oti afesodi.

**Awon Iwa Igboya ati Aigboya**

| **Eniyan alaisetaara** | **Onibinu eniyan** | **Onigboya eniyan** |
|---|---|---|
| O maa n beru lati soro | O maa n dini-lowo, o si maa n soro bori oro ti awon eniyan ba n soro | O maa n soro si gbangba |
| O ma n soro jeje | O ma n pariwo | O maa n lo ohun ibaraeni soro |
| O maa n yera lati woju eniyan | O maa n tejumo eniyan pelu oju buruku | O maa n wo eniyan ti o dara |
| O le soro tabi ki o maa soro | O maa n deruba eniyan nipa sisoro | O ma n ko iha ba oro lo han |
| O maa n yera o si maa n | O maa nduro sinsin, o si | O maa n sinmi o si maa n |

| | | |
|---|---|---|
| yo kuro | maa yoju si eto ara eni | so oro ti o maa faye gba olukuluku |
| O maa n yera soto laarin egbe | O maa n dari egbe | O maa n kopa ninu egbe |
| O maa n gba ero awon eniyan miran wole pelu pe o ni ero tire | O maa nro ero tire nikan tabi ki o bere fun ti awon iyooku | Ko ki koja koko |
| O maa n ka awon yooku si ju ara re lo | O maa n ka ara re si ju awon yooku | O maa n ri ara re si ogboogba pelu awon yooku |
| O maa n se ara re ki o maa se awon yooku | O maa nse awon yooku ki o ma ba se ara re | O ma n gbiyanju lati mase se enikeni (ati ara re). |
| Ko kii de ibi to ye ko de, o si le maa mo ibi to fe de | O ma n de ibi ti fe de sugbon o maa n se awon eniyan ninu igbese | |
| O dara fun o, ko dara fun mi | O dara fun mi ko dara fun o | O dara fun mi o dara fun o |

**Igbese Kerin:** Oniwosan so awon iyato to wa laarin onibinu, onigboya ati alaigboya

**Awon iyato to wa laarin onibinu, onigboya ati alaigboya**

Bibinu da lori gigara. Eniyan je onibinu nigba ti o ba fi ipa mu eniyan lati se ohun to nfe ki o si fi ipa mu won lati teriba, ti o si maa n ja si kikoja aye ara eni. Lilo ipa le waye pelu igbiyanju yi, sugbon ki se ohun to pon dandan bibinu. Aisetaara ni ona miran je nipa fifi ara eni jin. Aisetara maa n waye nigba ti eniyan ba fi ara re jin fun eniyan ba fi ara re jin fun gigabale eniyan miran, pipa ero ara ati ipinnu ti si egbe lati le koju mo je ki ero ati ipinnu onigabale won wa si imuse. Won le ma feran ki won gaba le won. (Opo eniyan ko fe) sugbon o dabi pe ohun to jafafa lati se nigba miran (boya lati yago fun irokeke iwa ati ipa tabi ifipa-muni miran). Bibinu eni didake da lori titeriba ati jije gbigbogun ti o je ipinle aibowo fun aye ara eni.

**Iwa Igboya Aile Soro ninu Sisiwo ati Afesodi**

1. Oju wiwo: Oju wiwo tumo si wiwo eniyan taara, titeju mo oju eniyan wiwo eniyan taara je igboya.
2. Iduro: iduro re ati ibanisoro lori igboya re ati ipinnu lati siso alaisetaara le so pe “Mo le gba tabi ipinnu mi ko damiloju lati siso. O ti su mi, o si le je ki o re mi kiakia pelu igbiyanju o ti siwo. Aitaara ko ni je ki won ka e kun. Iduro sinsin re n soro nipa bi edun re se ga to. Won le tumo re si ijaya tabi ibinu.
3. O da lori awon iwa aisoro miran. Iru iduro bayii kii je ki won le dari re. Diduro sinsin pelu ifokanbale ati jijoke nsoro igboya. Isakoso edun, agbara ati ireti pe won yoo ka kun.

Awon iduro igboya ati aigboya

4. Ifihan oju: eniyan maa n so pataki to ye ki won so mo oro to ba n so.
5. Ifarawe: A le lo ifarawe lati tenumo ati lati se atileyin tabi oro re tabi lati da laamu ati ta abuku. Gbigbon aifokanbale ati sisi ipo pada pelu inira je titenumo. Iru awona ifarawe yi ati isipo pada yii ma n je ki o kuro labe idari ati o ma n din agbara piparowa re ku.
6. Iriri eni: Bi enikookan base mura ni ipa lori igi  igboriyin mimu raj u bi o ti ye tabi aimura to lati ni ibasepo pelu awon eniyan ko kii rorun mura bi o ba se ye ni akok re.
7. Ohun: Opo abala ohun ni wa ti o le ni ipa lori oro eniyan miran. Ainfokanbale le mu eniyan soro jeje ju bi o ti ye debi pe yoo din agbara koko ku. O se pataki lati soro soke ati lagbara to ki won le gbo ki o si ye, ohun n se afihan kika ipinnu lati siwo kun.

**Igbese Kaarun**: Oluwadi koi se sise “Gbiyanju iwa igboya ati koko bibere fun ati afesodi.

## IPEJO KERIN

## AWON ABAJADE LILO OTI AFESODI ATI OTI ALAGBO

**ERONGBA:** Ni opin ipejo yii awon akopa yoo le menuba awon ipa ipaje afesodi oti lilo ati oti alagbo.

**Igbese Kinni**: Oluwadi se afihan orisirisi awon eya oti ati oti alagbo to wa ni gareeji o si n ki awon akopa fowo kan ayanfe eya won.

**Igbese Keji**: Won pin awon akopa si egbe – egbe kookan sise awon ohun wonyi.

**Egbe Kinni**: (Egbe alagbo); Menuba orisirisi eya ti o wa ni gareeji ki o so idi ti won fi n gbadun re ni mimu.

**Egbe Keta**: (Oti Bia); menuba ayanfe eya ki o si so awon anfani ti won ri ni minu re

**Igbese Keta**: Oluwadi menuba awon ipa awon oti mimu wonyii ni ara ki o si se afihan re ninu filasi lati je ki o ye daradara ki o si di mimo lo.

**Igbese Kerin**: Ise sise: Menuba isoro ilera marun ti siga ati ogi afesodi le fa.

## IPEJO KARUN

## AWON AROSO ATI OTITO LORI OTI AFESODI

**ERONGBA:** Ni opin eko yii, awon akopa yoo le

1. So awon aroso lori oti afesodi.
2. So otito lori ota afesodi.

**Igbese Kinni**: Oluwadi so pe ki awon akopa menuba awon igbagbo kookan lori siga mimu ati oti.

## IPEKO KARUN

## AWON AROSO ATI OTITO OTI AFESODI

**ERONGBA:** Ni opin eko yii awon akopa yoo le

1. So awon aroso lori oti afesodi.
2. So otito lori oti afesodi.

**Igbese Kinni**: Oluwadi so pe ki awon akopa menuba awon igbagbo kookan lori siga mimu ati oti.

**Igbese Keji**: Oluwadi lodi si awon igbagbo ti ko mo gbon wa lori siga mimu ati oti afesodi.

**Awon Aroso ati Otito oti Afesodi**

| Nomba | Awon Aroso | Awon Otito |
|---|---|---|
| 1 | Oti amuju je ona to dara lati sinmi | Oti le mu o so awon nnkan ti ko ye ki o so ki o si se awon nnkan ti ko ye ki o se, apeere lilowo si ija, nini ibalopo laisi idabobo tabi wewu tire tabi awon miran pelu aibikita ati awon iwa to lewu |
| 2 | Oti ni ipalara die ati awon oogun miran | O ti je ki awon eniyan ni aisan asekupani, opo ipalara gidi ipalara eni, ijamba ati ipaniyan ni lowo si oti mimu. Mimu oti ni amuju le fa majele oti ti o si le paniyan. |
| 3 | Ko le rorun lati siwo | O se e siwo siga mimu le ge odun merinla kuro ninu odun ti o ye ki okunrin ati obinrin to laye |
| 4 | Aisan edoforo okan nikan lo je ki maa daamu lori re | Siga mimu le fa, o si ni ibamu to lagbara pelu ibanuje iko aisan okan, eje riru, idaabo awon pupo jejere enu, ofun ajo Amerika lori edoforo so wipe siga mimu n kopa |

| | | |
|---|---|---|
| | | lori jejere onroro, kidirin ati apooto. |
| 5 | Siga mimu wa fun isinimi o si maa n mu isesi re dara si | Lilo eroja taba maa n pa gbogbo eyo ara lara o se ise taara lori okan lati yi eje riru pada. |
| 6 | Mimu siga die loojo o dara | Siga mumi kii se nnkan ailewu lati se gbogbo siga ni o ni eyo kan si meji nyigiraamu eroja taba, o si ma n de opolo ni iseju aaya mejo si mewaa. Opolopo kemika ibaje miran wa ninu siga kookan ti a ba fa si imu. Siga mimu ni egberun marun kemika ninu awon majele adota eyi ti o le fa jejere. Ni igbakugba ti o ba fa si imu. Mu roja taba ategun fifa sinu iyo to ni majele gaasi to ni irora ammonia ati bensini ki a kan menuba die. |

**Igbese Keta**: Oluwadi fun awon olukopa ni iwuri lati bere si ni gbiyanju ni sisiwo

Gbiyanju sisiwo nipa siseto ojo isiso

1. Mu ojo isiwo
2. Sise pelu awon eniyan alafojusun to nise
3. Mo awon nkankan to ru e soke
4. Sajoyo  fun ara re fun gbogbo ilosiwaju
5. Kan si oniwosan re

**Igbese Kerin**: Ise Sise

Menuba awon aroso marun ati awon otito marun lori siga mimu ati oti afesodi.

## IPEJO KEFA

## AWON IPA OTI AFESODI LORI KIRIRIN

**ERONGBA:** Ni opin ipejo yi awon akopa yoo le:

Menuba awon ipa siga mimu ati oti afesodi lori kidirin.

**Igbese kinni:** Oluwadi ni ki awon akopa se idanimo kidirin laarin orisirisi eto ara ti aworan atoka.

Orisirisi awon aworan eto ara.

**Igbese Keji**: Awon akopa menuba awon ise kidirin

Awon ise kindirin

1. Ase ti eje
2. Tito iyo ara sona
3. Pipese homonu
4. Imukoro
5. O maa n to wahala osimotiiki
6. Yomijade

**Igbese Keta**: Oluwadi menuba ibaje ti afesodi siga mimu ati oti mimu le fa fun kidirin.

**IPA IPAJE TI OTI AMUJU MAA N FA LORI KIDIRIN ATI ARA**

1. Idinku ito tito
2. Rire
3. Inu rerun
4. Ese wiwu
5. Ara yinyin ti a ko salaye
6. Oju  yiyo
7. Eemi kukuru

**Igbese Kerin**: Ise Sise

Menuba ibaje oti amuju marun ati siga mimu si ara.

## IPEJO KEJI

## AWON IPA OTI AFESODI LORI OKAN

**ERONGBA:** Ni opin ipejo yi, awon akopa yoo le

1. Salaye ohun ti aisan okan tumo si.
2. Menuba o kere tan awon ona marun ti afesodi oti ati siga mimu le fa aisan okan

**Igbese Kinni:** Won ni ki awon akopa gbo lilu okan won, ki o si fi siro enjinni oko won.

**Igbese Keji:** Awon akopa yoo menuba pataki enjinni oko to dara.

**Igbese Keta:** Awon akopa menuba awon nkna ti o le ba enjinni oko je.

**Igbese Kerin:** Oluwadi salaye itumo awon aisan okan, o si salaye pe nigbakugba ti eniyan ba ti mu siga ati oti, o maa n ni ibaje ti o nse fun okan.

**Itumo Aisan Okan**

Aisan okan maa n waye nigba ti okan ko le sise pipe lati je ilera ara dara siga mimu ati oti afesodi le fa si ara.

Bi oti afesodi se n fa awon aisan okan

1. O maa n di sisan eje, o maa n je ki o nira lati fun okan ni ategun
2. O maa n dena okan lati fa eje daradara nitori ko si aye fun ategun
3. Okan le siwo lilu
4. Eyi le yori si eemi kukuru ti o si ma n buru si
5. Ko tii si imularada fun ikuna okan
6. O le fa aise deede lilu okan
7. O le je ki eni ti o ni ipalara tabi enikookan seje pelu irorun

**Ise Sise**: Se idanimo marun ninu awon ona ti siga mimu ati oti le gba fa awon aisan okan.

## IPEJO KEJO

## OTI AFESODI GEGE BI OHUN KAN GBOOGI TO NFA JEJERE

**ERONGBA:** Ni opin ipejo yi, awon akopa yoo le

1. Salaye ohun ti jejere tumo si
2. Menuba orisirisi jejere ti siga mimu ati afesodi oti mimu

**Igbese Kinni:** Awon akopa menuba awon iriri won ti o koja lori orisirisi ti won se koja.

- Ona kinni: Awon  ipa re lori ebi
- Ona keji: Awon ipa re lori ero isuna won

**Igbese Keta**: Oluwai salaye ohun ti jejere tumo si gege bi awon alailoye.

**Itumo Jejere**

Jejere ni igba ti ara ko le sisepo pelu awon ohun kookan ninu seli nipa pinpin ti nfa irora nla ati inira si eya to kan ti o seese ki o tun ka awon eya ara yooku.

**Igbese Kerin**: Oluwadi salaye siga mimu ati afesodi oti gege bi ohun kan gboogi to n fa jejere.

Oti mimu ni igba gbogbo le je ki awon jejere mee po si. O seese ki orisirisi jejere waye ni orisirisi ona, awon jejere ti o n tose nipa oti ni.

1. Jejere  enu
2. Jejere  ona ofun
3. Apoti ohun
4. Jejere omu
5. Jejere ifun
6. Jejere edo

Siga mimu maa n fa orisirisi jejere wonyii

1. Jejere ifu
2. Jejere kidirin
3. Jejere enu
4. Apoti oronro
5. Jejere edoforo

**Igbese Karun**: Ise sise lori awon eya ara ti jejere ti le dagba soke nitori afesodi oti.

## IPEJO KESAN

## PATAKI ILERA MIMU IGBESI AYE DURO

**ERONGBA:** Ni opin ipejo yi, awon akopa yoo le:

1. Menuba awon abajade igbe aye ailera
2. Menuba awon anfani iwa ilera to dara

**Igbese Kinni**: Awon akopa menuba awon iwa to lewu fun ilera ti o le sun jade lati ara siga mimu ati afesodi oti.

**Awon Iwa to Lewu fun Ilera ti o le Sun Jade lati Ara Siga Mimu ati Afesodi Oti**

1. Oko wiwa laibikita ti o le yo si ijamba
2. Ihuwasi ibalopo eewu bi apeere, ibalopo ti ko ni abo
3. Iwa ipa ati ibinu
4. Iwa wiwewu pupo, bi apeere sisun si abe oko ti o duro si ibikan sise aibikita awon oko ti o duro si ibikan sise aibikita awon ilana fifi ero sise aigboran si awon ofin ati ilana oju popo
5. Pipadanu awon ohun iyebiye bi apeere , owo foonu ati bee bee lo
6. Iwa ipa abele
7. Iwa aimu ayika wuni bi tito ati yiyagbe si ibikan jiju amuku siga si ibikibi ti o si n fa ina ni aibikita ati bee bee lo.

**Igbese Keji**: Oluwadi so awon igbese aye kookan to nmu ilera dara ti o si je mu ilera po si ati mimu ara sise daradara.

Awon igbesi aye kookan to n mu ilera dara ti o si le mu dara po si ati mimu ara sise daradara.

1. Mimu omi pupo
2. Jije efo ati eso lorekoore
3. Jije ounje asaralore
4. Sisun fun wakati mejo o kere tan ni ojumo
5. Ere idaraya sise
6. Awon ise ibalopo ni ilera
7. Sise ayewo ilera

Anfani hihu iwa ailera to dara

1. Ilera pipe ati mimu ara sise daradara
2. Nini owo lowo nitori ko si ipenija ilera ati lilo si ile iwosan
3. Ipese pupo
4. Agbara lati gbero fun ojo iwaju ati doko owo toto
5. O n je ki a ni igbe aye ominira kii sin se gbigbe ara le awon eniyan miran fun awon ohun igbe aye pataki
6. Igbesi aye gigun

## IPEJO KEWA

## IPARI ATI ISAKOSO LEYIN AYEWO

**ERONGBA:** Leyin ipejo yii awon onibara yoo le

1. So iriri won ati siso awon ayipada ti won ti se akiyesi si.
2. Dahun iwe ibeere siga mimu ati oti daradara.

**Igbese Kinni:** Oluwosan ati awon akopa ki won kaabo. Alaye yoo wa lori ise asetilewa ti a fun awon akopa. Ni afikun, won yoo fi imoriri si awon akopa fun kikopa won.

**Igbese Keji:** Oluwosan so pe ki awon akopa so itesiwaju to ti waye ati awon ayipada ti won ti se akiyes lori oti ati siga mimu.

**Igbese Keta:** Oluwosan naa salaye lati ri pe oti lo si oko iparun ati siga afesodi ki awon akopa maa gbiyanju re lojojumo ninu awon nnkan ti a ko ninu awon eto.

**Igbelewon:** Oluwosan fun awon akopa ni oti ati siga lati ko.

**Ipari:** Oluwosan je ki won mo eto wa naa ti wa si opin. A ro fi imoriri han si awon akopa fun ifowosowopo ati kikopa lasiko eto naa.

**EGBE ISAKOSO**

**IPEJO KINNI**

Alaye gbogoogbo ati iroyin

**Erongba**: akopa yoo le

I. Fi ara won han won yoo si mo ara won nipa oruko
II. Dahun irinse asaaju ayewo daradara
III. E fenuko lori ojo igba ati akoko ti ipade yoo waye

**Igbese Kinni**: Oniwosan ki gbogbo awon akopa kaabo, o si fi ara re han leyin naa awon akopa ki won si fi ara won han. Oniwosan salaye lori oro asiri ati ibowo fun ara eni laarin awon akopa.

**Igbese Keji:** Oniwosan fun awon akopa ni ohun elo iwadi ohun ti won ba gba yoo je aseju ayewo awon akopa.

**Igbese Keta**: Oniwosan ati awon akopa jiroro won si fenuko le awon ohun wonyi:

- Akoko ipade: wakati
- Ojo ojobo

**Igbese Kerin:** Awon akopa bere ibeere nigba ti won yoo dahun won bi o ti ye leyin naa, oniwosan ka abajade kookan ti ipejo naa fun awon akopa.

## IPEJO KEJI

## PATAKI LILO APEERE IKODOTI SI NINU OKO

**ERONGBA:** Leyin ipejo yii awon akopa yoo le so iriri ti o fi ye ki won ni apeere ikodoti ninu oko.

**Igbese Kinni:** Oluwosan yoo ki awon akopa kaabo, nigba ti won yoo si ki ara won.

**Igbese Keji:** Oluwosan ko awon akopa lori nini apeere ikoditi si ninu oko won o se pataki lati ni apeere ikodoti si ninu oko, ki o si ri pe awon ero oko n lo. Eyi yoo ran didari didoti ayika lowo pipa apere ikodoti si mo yoo tun se iranlowo didin aisan ku ati aisan to so ko didoti ayika ni afikun ti awon osise ijoba ba mu awako ti ko ni apere ikodoti si, iru won le mu ki iru awako bee san itanran pupo. Ni kukuru apeere ikodoti si maa n je ki ayika mo.

**Igbese Keta**: Awon akopa yoo jiroror lori akiyesi oke yi, nigba ti oniwosan yoo moju to ijiroro naa.

**Igbese Kerin**: Oniwosan yoo fi imoriri han fun kikopa ninu eto naa. Bakanaa won ran awon akopa leti ni ojo ati akoko ti won yoo tun ni ipade.

## IPEKO KETA

**ERONGBA:** Ni opin ipejo ti awon akopa yoo le dahun irinse eyin ayewo daradara.

**Igbese Kinni:** Oniwosan ati awon akopa ki ara won.

**Igbese Keji:** Oluwadi pin irinse fun awon akopa. Nigba ti awon akopa ni dahun ibere naa, oluwadi pese itonisona o si ran awon akopa lowo bi o ti ye. Leyin naa, oluwadi yoo soro lori bi o se ailo fun awon akopa lati siwo oti ati afesodi siga mimu, nitori afesodi ni yori si aisan to lagbara ati aisan alaifesodi. Bakannaa ifesodi maa n ba pataki ipile.

Ibasepo awujo je o si ma n yori si isoro oro ajw

**Ipari Oro**: Oluwadi fi imoriri han awon akopa fun ifowosowopo won ni akoko eto yi.

**APPENDIX V**

**UNIVERSITY OF IBADAN, FACULTY OF EDUCATION**

**DEPARTMENT OF GUIDANCE AND COUNSELLING**

Dear Sir,

Kindly respond to the following items as honest as possible. This questionnaire is purely for research purposes. Any information obtained is highly confidential. Please do not write your

NAME or identification number. Thanks

Name of Park: Berger Park ☐ Agege Park ☐ Alimosho ☐

Type of Vehicle: Truck ☐ Bus ☐ Taxi/Cab ☐ Motorcycle ☐

Level of Education: None ☐ Primary ☐ Secondary ☐

Tertiary ☐ ☐

Age: 20 -25 ☐ 26 – 30 ☐ 31– 35 ☐ 36 – 40 ☐

**Instruction**: Please, read each statement carefully and pick the option that best describes your behaviour.

**Alcohol Use Disorder Identification Test (AUDIT) Questionnaire**

| S/N | Items | 1-2 times | 3-4 times | 5-6 times | More than 7-10 times |
|---|---|---|---|---|---|
| 1 | How often do you have a drink containing alcohol in a week? | | | | |
| 2 | How many drinks containing alcohol do you take on a typical day when drinking? | | | | |
| 3 | How often do you have more than six or more drinks on one occasion in a month? | | | | |
| 4 | During the past month, how often do you find that you were not able to stop drinking once you started? | | | | |
| 5 | During the past month, how often have you had a feeling of remorse or guilt after drinking? | | | | |
| 6 | During the previous week drinking experiences, how often have you been able to remember what happened the night before the drinking episode? | | | | |
| 7 | In the past few months, how often have you needed a drink in the morning to get yourself together? | | | | |
| 8 | During the past few months, how often have you failed to do what was normally expected of you because of excessive drinking? | | | | |
| 9 | How often in the past month has someone else been injured as a result of your drinking? | | | | |
| 10 | How often has your relative, friend or other health worker been concerned about your drinking and advised you to cut down in the past one month? | | | | |

**APPENDIX VI**

**UNIVERSITY OF IBADAN, FACULTY OF EDUCATION**

**DEPARTMENT OF GUIDANCE AND COUNSELLING**

Dear Sir,

Kindly respond to the following items as honest as possible. This questionnaire is purely for research purposes. Any information obtained is highly confidential. Please do not write your

NAME or identification number. Thanks

Name of Park: Berger Park ☐ Agege Park ☐ Alimosho Park ☐

Type of Vehicle: Truck ☐ Bus ☐ Taxi/Cab ☐ Motorcycle ☐

Level of Education: None Primary ☐ Secondary ☐ Tertiary ☐

Age: 20-25 ☐ 26 – 30 ☐ 31-35 ☐ 36-40 ☐

**Instruction**: Please, read each statement carefully and pick the option that best describes your behaviour.

**Socrates 8a Alcohol Drinking Scale by Miller and Tonigan (1996)**

Key: SD = Strongly Disagreed A = Agree

D = Disagree SA = Strongly Agreed

U = Undecided

| S/N | Items | SD | D | U | A | SA |
|---|---|---|---|---|---|---|
| 1 | I really want to make some changes to my drinking. | | | | | |
| 2 | Sometimes, I wonder if my drinking is hurting people. | | | | | |
| 3 | I have already started making some changes in my drinking. | | | | | |
| 4 | I was drinking too much at one time but I have managed to change my drink. | | | | | |
| 5 | I am not just thinking about changing my drinking, I am already doing something about it. | | | | | |
| 6 | I have already changed my drinking and I am looking for ways to keep from slipping back to my old pattern. | | | | | |
| 7 | I have serious problems with drinking. | | | | | |
| 8 | I am actively doing things now to cut down or stop drinking. | | | | | |
| 10 | I have made some changes to my drinking and I need some help to prevent me from going back to the way I | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | used to drink. | | | | | |
| 11 | I am working hard to change my drinking. | | | | | |

**APPENDIX VII**

**UNIVERSITY OF IBADAN, FACULTY OF EDUCATION**

**DEPARTMENT OF GUIDANCE AND COUNSELLING**

Dear Sir,

Kindly respond to the following items as honest as possible. This questionnaire is purely for research purposes. Any information obtained is highly confidential. Please do not write your

NAME or identification number. Thanks

Name of Park: Berger Park ☐ Agege Park ☐ Alimosho ☐

Type of Vehicle: Truck ☐ Bus ☐ Taxi/Cab ☐ Motorcycle ☐

Level of Education: None ☐ Primary ☐ Secondary ☐ Tertiary ☐

Age: 20 – 25 ☐ 26 – 30 ☐ 31 – 35 ☐ 36 – 40 ☐

**Instruction**: Please, read each statement carefully and pick the option that best describes your behaviour.

**Alcohol Abstinence Self-Efficacy Scale**

| S/N | Situation | TEMPTED | | | | |
|---|---|---|---|---|---|---|
| | | Not at all | Not very | Moderately | Very | Extremely |
| 1 | When I am in agony because of stopping or withdrawing from alcohol use. | | | | | |
| 2 | When I have headache | | | | | |
| 3 | When I am feeling depressed | | | | | |
| 4 | When I am on vacation and want to relax. | | | | | |
| 5 | When I am concerned about someone | | | | | |
| 6 | When I am very worried. | | | | | |
| 7 | When I have the urge to try one more drink to see what happens. | | | | | |
| 8 | When I am offered a drink in a social situation. | | | | | |
| 9 | When I dream about taking a drink. | | | | | |
| 10 | When I want to test my will power over drinking. | | | | | |
| 11 | When I am feeling a physical need or craving for alcohol | | | | | |
| 12 | When I am physically tired. | | | | | |
| 13 | When I am experiencing some physical pain or injury. | | | | | |
| 14 | When I feel like blowing up because of frustration. | | | | | |
| 15 | When I see others drinking at a bar or a party. | | | | | |
| 16 | When I sense everything is going wrong for me. | | | | | |
| 17 | When people I used to drink worth encourage me to drink. | | | | | |
| 18 | When I am feeling angry inside. | | | | | |
| 19 | When I experience an urge or impulse to take a drink that catches me unprepared. | | | | | |
| 20 | When I am excited or celebrating with others. | | | | | |

**APPENDIX VIII**

**UNIVERSITY OF IBADAN, FACULTY OF EDUCATION**

**DEPARTMENT OF GUIDANCE AND COUNSELLING**

Dear Sir,

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NAME or identification number. Thanks

Name of Park: Berger Park ☐ Agege Park ☐ Alimosho ☐

Type of Vehicle: Truck ☐ Bus ☐ Taxi/Cab ☐ Motorcycle ☐

Level of Education: None ☐ Primary ☐ Secondary ☐ Tertiary ☐

Age: 20-25 ☐ 26 – 30 ☐ 31 – 35 ☐ 36 – 40 ☐

**Instruction**: Please read each statement carefully and pick the option that best describes your behaviour.

**Perceived Distress Scale by Cohen (1994)**

**Key**:

**2** Never;

**3** Almost never;

**4** Sometimes.

**3** Fairly often;

**4** Very often;

| S/N | Items | 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|---|
| 1 | In the last term, how often have you been upset because of things that happened unexpectedly? | | | | | |
| 2 | In the last month, how often have you found that you were unable to control the important things in your life? | | | | | |
| 3 | In the last month, how often have you felt nervous and “distressed”? | | | | | |
| 4 | In the last month, how often have you felt confident about your ability to handle your personal problems? | | | | | |
| 5 | In the last month, how often have you felt that things were going your way? | | | | | |
| 6 | In the last month, how often have you found that you could not cope with all the things that you had to do? | | | | | |
| 7 | In the last month, how often have you been able to control irritations in your life? | | | | | |
| 8 | In the last month, how often have you felt that you were on top of things? | | | | | |
| 9 | In the last month, how often have you been angered because of things that were outside of your control? | | | | | |
| 10 | In the last month, how often have you felt difficulties were piling up so high that you could not overcome them? | | | | | |

**THE RESEARCHER AND PARTICIPANTS DURING THE RESEARCH WORK**