

**The Impact of Nyaope use among the Youth in the Rural Communities of Thulamela Municipality, Vhembe District, Limpopo Province, South Africa**

**by**

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## ABSTRACT

The aim of the study was to explore the impact of *nyaope* among the youth in the rural communities of Thulamela Municipality. The study adopted qualitative approach and exploratory research design. Population of the study were from Itsani, Maniini and Muledane villages in Thulamela municipality, both males and females, 18-31 and who were involved in the use of *nyaope*. Non-probability purposive and snowball sampling methods were adopted because participants who use *nyaope* are hard to locate. The total number of participants (8) who formed part of the study was determined by data saturation. Semi-structured interviews were used as a method of data collection. To ensure trustworthiness, pre-testing of the instrument was conducted to identify any potential problems. Credibility, transferability and conformability was well considered. Thematic data analysis was employed since the researcher was more involved in interpretation of collected data, thematic analysis enabled the researcher to capture complex meaning.

Keywords: Adolescents, Impact, *Nyaope* and Substance abuse

## DECLARATION

I, Phathutshedzo Priscilla Nevhotalu (Student number 11541702), hereby declare that the dissertation for the Masters of Arts (Psychology) degree at the University of Venda, hereby submitted by me, has not been submitted previously for a degree at this or any other university, that is my own work in design and execution, and that all reference material has been duly acknowledged.

Signature

Date

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## ACKNOWLEDGEMENT

To my loving and supportive mother, even though you're not with me anymore to see this dissertation completed.

My kids and my grandmother thank you for always being there for me and for your encouragement

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## CHAPTER 1: INTRODUCTION AND BACKGROUND OF THE STUDY

### 1.1 Introduction

South Africa has witnessed a rapid increase in substance abuse since independence from the white minority rule ('Apartheid') in 1994 (Parry, Plüddemann & Myers, 2007; Ramlagan, Pertzner & Matseke, 2010). Research has shown that this rapid increase is largely among the youth (Carney, Flisher, Lomabrd, Louw & Meyers, 2013). Alcohol and other drug abuse are issues of major concern to any society in terms of the population's loss of psychological well-being, physical health, life and productivity (Wormer & Thyer, 2010). The increasing number of people living with human immunodeficiency virus and the availability of anti-retroviral therapies (ART) have brought attention to the recreational use of HIV anti-retroviral therapy into drugs such as *nyaope*, yet, South Africa is experiencing an HIV epidemic with enormous social and economic consequences (Grelotti, Closson, Smit, Safren, Bangsberg & Mimianga, 2014). Recent estimates suggest that between 4.5 and 6.2 million of the 43 million South Africans are infected with HIV and requires ART treatment (Dahab, Charalambous, Karstaedt, Fielding, La Grange, Churchyard, Grant, & Hamilton, 2010). However, it was reported that ART's are reportedly diverted into an addictive drug called "*nyaope*" in South Africa (Chinouya, Rikhotso & Mulaudzi, 2014).

*Nyaope* is a cheap drug unique to South Africa and is mostly prevalent among youth and unemployed black people who live in socio-economically depressed areas. The youth, which South Africa described it as anyone between the ages of 14 to 35 has been reported as the most common users of this particular drug (Mokwena, 2015). Media interest in new trends of drug in South African drug market has increased dramatically over the past four years. These drugs include the recreational use of Antiretroviral (which is a treatment therapy for HIV/AIDS patients) (Masombuka, 2013; Rough *et al.*, 2013). *Nyaope* (also known as Whoonga), is one of the new drugs that have raised a major concern in the media and the country in general. *Nyaope* has been described as a mixture of household domestic products, other drugs and antiretroviral (most likely crushed efavirenz). For instance, it can be a mixture of heroin, detergents, rat poison, marijuana and antiretroviral as the main components as explained by (Dietrich, Essien, Grelotti, Ransberg, Gray & Katz, 2013; Grelotti *et al.*, 2014). *Nyaope* was only classified as illegal in March of 2014, although it had been used since the year 2010 (Mokwena, 2015). *Nyaope* drug can adversely impact on the

life of the youth, adherence to HIV treatment and psychological wellbeing (Grelotti *et al.*, 2014). A study by Ellis, Stein, Mainjies and Thomas (2012) noted that, South Africa has one of the highest lifetime prevalence of substance abuse disorders across the globe, yet the country has been reported to be one of the top producers of cannabis drug.

Several studies (Carney *et al.*, 2013; Fang & Guo, 2012; Grana, Black, Sun, Rohrbach, Gunning & Sussman, 2009; Pinchevsky, Fagan & Wright, 2014) have linked the adolescents' and youth stage with the use of substances, yet South Africa has the most unemployed youth living in an underprivileged environment, leaving them susceptible to the use of drugs such as *nyaope*.

The most common illicit drugs which are used in South Africa are:

- Narcotics: this kind of drug is known for pain relieving. It can be smoked or inhaled. An example of this type of drug is Heroin (Degenhardt & Hall, 2012).
- Depressants: these kinds of drugs are also known as sedatives. They slow down the central nervous system and cause disorientated behaviour. They can be taken orally, and an example is tranquilisers (National Drug Master plan 2013-2017, 2013).
- Stimulants: these kinds of drugs are also known as energy boosters. They are mostly used by adolescents, for example, cocaine, amphetamine and others (Ellis, Stein, Mainjies & Thomas, 2012).
- Hallucinogens: these drugs induce hallucinogens (sense of hearing and seeing something which is not there) and they can cause disoriented mental behaviour. These kinds of drugs can be taken orally, for example, marijuana (Benzuidenhout, 2004; Ellis, Stein, Mainjies & Thomas, 2012; Hitzeroth & Krammer, 2010).
- Solvents: also known as inhalants are gases or chemical-based vapours which are designed for commercial use. They can cause amnesia, and nerve damage, for example, hair sprays, detergent and others (Ellis *et al.*, 2012; Hitzeroth & Krammer, 2010).

Substance abuse can be described as a condition in which an individual uses chemical agents when there is no legitimate medical need to do so (Berk, 2007). Although men are more likely than women to be diagnosed with substance-abuse problem, it is believed that the gender gap is closing rapidly, which means substance abuse is the problem of both gender

(Seivewright, 2009). Nevertheless, the female body make-up can lead to abuse of substances more quickly (Fang & Guo, 2012; Wagner & Waldrom, 2011). Findings from study conducted in South Africa by Mokoena (2015) reported that, the use of *nyaope* takes over the lives of the users, mostly the youth, and instances such as school dropping out of school or job loss highlighted the use of *nyaope*, because is all they could think of is getting the next fix. It has been noted that the young generation (the youth) use substances to change their mood, boost their confidence and cope with problems. Stress was also reported the main contributor to the inclination to use alcohol and drugs (Benzuidenhout, 2004).

## 1.2 Background

There are several factors that motivate the youth to substance substances. These include family circumstances, personality traits, childhood experiences, biology, the influence of friends and peers, the communities where they live, and media advertisement (Stiles, 2013; Taylor, Merritt & Austin, 2013). It has also been reported that gang-related problems have increased in rural areas as well as increased bullying and victimization which are associated substance use (Stiles, 2013; Taylor *et al.*, 2013). Physical environments can also influence the taking of substances among adolescents (Mignon & Holmes, 2013). Research has indicated that smoking marijuana can increase the risk of depression (Clack *et al.*, 2013; Pinchevsky *et al.*, 2014). A desire to lose weight also contributes to drug abuse for girls and this can leads to physical, mental and social consequences, especially when their bodies and brains are still developing (Diagnostic Statistical Manual, 2000).

Adolescents often experiment with a variety of activities and substances (Benzuidenhout, 2004; Seggie, 2012). This may impact individuals differently although they are mainly used for their euphoric effect and in order to obtain a consistent effect; the individuals have to increase the dosage. However, such increases can lead to substance abuse and addiction (Parry, Burnhums & London, 2012; Seggie, 2012). It is possible that anyone who uses any drug experiences negative life consequences, even if they do not know about it during the time of use (Ellis, Stein, Mainjies & Thomas, 2012; Seivewright, 2009; Taylor *et al.*, 2013).

There have been few national surveys to assess the extent of *nyaope* use, since the drug's appearance in 2010. Much of the research on substance abuse focuses on alcohol because alcohol is readily available and is considered a legal substance (Routledge, 2007). There is,

therefore need for a research focusing on other drugs such as *nyaope*, because of their severe impact on individuals.

South Africa, being one of the largest country in Africa in terms of population, which is about 52,000 000, has the highest number of people living with HIV/AIDS which is estimated to be about of 5, 600 000 (Statistics South Africa, 2013). It seems that these are major contributory factors to the recreational use of antiretroviral and the use of *nyaope* in South Africa. *Nyaope* has an impact on an individual's psychological well-being and has diverse impacts on the effectiveness of ARV treatment, especially in rural areas where there is easy accessibility of this drug (Grelotti *et al.*, 2014; Masombuka, 2013; Rough *et al.*, 2013). In Limpopo province, there are 13.7 percent of people living with HIV/AIDS with the biggest proportion (Statistics South Africa, 2013). The ease access of ARVs in the province makes it imperative conduct a study of this nature. To this extent, this study explored the extent of *nyaope* use among youth in rural areas, where marijuana and other substances are the most commonly abused substance, whilst, marijuana has been reported as one of the components of *nyaope* (Grelotti *et al.*, 2014; Masombuka, 2013; Rough *et al.*, 2013). Previous South African studies have focused on different kinds of drugs and predictors of substance use, while less attention has been given to substances, such as *nyaope*.

Findings by Pinchevsky, Wright & Fagan., (2014) suggest that, more than 4.4 million youth are alcoholics or abuse alcohol; more than two million use illegal drugs, mostly marijuana in South Africa and more than 31 million people smoke. According to a study conducted nationwide on substance use by (Brener, Kann, Kihen, Grunbaum, Whale, Eaton, Hawkins & Ross, 2011; Wagner & Waldrom, 2011) there was an increase in substance use for both male and female young people. Researchers warn that *nyaop* and other drugs still poses a potential risk to both youth and adolescents, and that parents should consider proper preventative, intervention methods and treatment (Carney *et al.*, 2013; Ramorola & Taole, 2013). Results by Brener *et al.* (2011) suggest that the youth between 18 to 26 or older are less likely to report use of any drugs.

Masombuka (2013) notes that, *nyaope* is a highly addictive drug used by young people and users are more likely to struggle with permanent irreversible physical, neuropsychological and psychological damage. In addition, other researchers have proven that adolescent youth turn to progress faster in substance use (Benzuidenhout, 2004; Clack *et al.*, 2013; Ellis *et al.*,

2012; Fang & Guo, 2012; Meier *et al.*, 2012). As already stated, *nyaope* contains highly addictive properties (Masombuka, 2013), and as a result abuse of this drug among young ones, it can have serious health effects (Thyer & Wormer, 2010). The present study would therefore, like to explore the extent to which this understudied phenomenon in a rural setting.

### 1.3 Problem Statement

Watching youth engage in behaviours that cause risk to their lives such as using *nyaope* on television has been a cause for concern. That there is a higher percentage of heavy substance use among the youth in both urban and rural areas is also a cause for great concern. (Fang & Guo, 2013). Grelotti *et al.* (2014) report, that the high prevalence of substance abuse is generally seen in lower to middle income households. Most of the households in the Thulamela municipality where this study was conducted fit into the lower to middle income households categorisation.

The minister of social development stated that, impact of substance abuse continues to ravage families, communities and society, and the youth of South Africa are particularly badly affected due to increased use and abuse of illicit drugs (National Drug Master Plan 2013-2017). Instances of school dropouts, addiction, violence and deaths are some of the manifestations of the negative consequences of *nyaope* and other substance abuse problems amongst the youth. However, there has been no known literature on the use of *nyaope* in the rural areas (of Thulamela municipality). *Nyaope* is a very accessible and affordable drug commonly used by adolescents and youth. Therefore, such substances are taken in huge amounts because of their accessibility and affordability. Its use does not only affect the user, but also significant others, such as parents, families and communities in general.

Substance abuse remains a problem world-wide, including South Africa. Without treatment, substance abuse at a young age can lead to serious consequences later in adulthood because of its profound impact, both physically and psychologically (Ellis *et al.*, 2012; Mignon & Holmes, 2013; Pinchevsky *et al.*, 2014). In one of his 1994 parliament opening addresses, the late Nelson Mandela said “Drug abuse is a problem among social pathologies and that needs attention” (Ramlagan, Peltzer & Matseke, 2010). Individuals using cannabis (one of the containments of *nyaope*) at the age of 15 and 18 have higher rates of psychotic illness by the age of 28, more than non-users and early use of marijuana has been associated with increased

likelihood diagnosis of schizophrenia after 10 years of frequent use (Paruk, Burns & Caplan, 2013).

#### 1.4 Significance of the Study

The study will make a significant addition to the effort of other previous studies on substance abuse. Publicity of *nyaope* use has been given in the urban areas, but there are no known studies in rural areas. Therefore, it was important to conduct research on this particular phenomenon in a rural area. The study might also enhance the knowledge and understanding of the impact, influential factors and effects of *nyaope* use. There has been little accurate research which addresses the impacts of *nyaope* use on the youth, psychological well-being, behavioural functions and emotion regulation, this is what this study has attempted to do (Grelotti *et al.*, 2014; Koji, Lorentz, Molham, Mustafa, Najat & Richard, 2013). Trends of new drug use in urban centres have been well documented, while similar phenomena in rural communities have received significantly less attention. This has made it very relevant for a research to be conducted in rural areas such as Limpopo and in Vhembe District under Thulamela Municipality communities, which is deep in the rural areas and where most of the people are in the low to middle income groups and most of the youth are unemployed.

Research shows that the individual components of negative effect interact with cultural background and are differentially related to substance-abuse outcome (Taylor *et al.*, 2012). Different reasons have been identified as to why drugs find their way into the lives of youth and there are certain generally agreed reasons as to why the age at which children are introduced to drugs continues to be lower each year. This is seen in a study conducted by Wright and Neeraja (2000) on substance use in the rural areas in which the results showed that the highest alcohol use is among persons aged 12 and older (Taylor *et al.*, 2012).

The results of this study, thus may be used to develop effective strategies for the reduction of *nyaope* use among the youth at an early stage. Findings of the study may also contribute to the National Drug Master Plan 2013-2017 as indicated that, it has been designed to bring together government departments and other stakeholders (universities) in the field of substance abuse to combat the use and abuse of substances and related problems. The research findings might assist in the rehabilitation process for substance abusers by equipping them with knowledge on the impact of *nyaope* and other substances. Previous researches

have already proven that *nyaope* and other substance use in South Africa is high, particularly, in townships such as Soweto and urban areas such as Cape Town, Gauteng and Durban (Carney *et al.*, 2013; Grelotti *et al.*, 2014; Masombuka, 2013; Parry, Myers, Morojele, Flisher, Bhana, Donson & Pluderman, 2004; Paruk, Burns, & Caplan, 2013; Rough *et al.*, 2013; Volker & Liezel, 2010). There was no any known studies reporting specifically on the impact of *nyaope* use among rural youth, particularly in communities under Thulamela Municipality, Vhembe District in Limpopo Province except for the current undertaken study. Some areas have been reported to have high instances of substance use among the youth in South Africa, which motivated the researcher to undertake the study on this phenomenon. Findings from earlier studies suggesting that, *nyaope* is a street drug which is easily accessible everywhere and has the potential to negatively affect its users (Masombuka, 2013) also motivated this study.

### **1.5 Aim of the study**

The aim of the study was to describe the impact of *nyaope* use and suggestion of strategies that can be used to reduce its use among the youth in the rural communities of Thulamela Municipality.

### **1.6 Objectives of the Study**

The following objectives guided the study:

- 1.6.1 To describe *nyaope* drug which is used among the youth in the rural communities of Thulamela municipality;
- 1.6.2 To identify the causes of *nyaope* use among the youth in the rural communities of Thulamela municipality;
- 1.6.3 To assess the impact of *nyaope* use among the youth in the rural communities of Thulamela municipality and;
- 1.6.4 To suggest strategies that can be used to reduce *nyaope* use among the youth in the rural communities of Thulamela municipality.



## 1.7 Research Questions

The following research questions were formulated:

1.7.1. How is *nyaope* described?

1.7.2. What are the causes of *nyaope* use among the youth in the rural communities of Thulamela municipality?

1.7.3. How does *nyaope* use impact youth in the rural communities of Thulamela municipality?

1.7.4. What strategies can be used to reduce the use of *nyaope* in the rural communities of Thulamela municipality?

## 1.8 Definition of key terms

***Nyaope***: is a highly addictive substance which is created when an antiretroviral, most likely *efavirenz*, is crushed, mixed with illicit drugs and is smoked (Grelloti *et al.*, 2014)

**Illicit drugs**: Illicit drugs also known as ‘illegal drugs’ are drugs which are used in an illegal manner, for instance, using a drug in an improper manner (sleeping pills to get high or pain pills for relaxation) or using a product or substance not intended to be a drug, in a way which produces a drug-like state (glues) (Degenhardt & Hall, 2012).

***Efavirenz* (Antiretroviral)**: This refers to as an antiretroviral medication intended for treatment therapy of HIV/AIDS (Ciccarelli, Fabiani, Giembenedetto, Fanti, Baldonero, Bracciale, Tamburrini, Cauda, De Luca & Silveri, 2011).

**Substance abuse**: This is when an individual takes a substance in excess of the unaccepted social standard or unaccepted medical practice (Berk, 2007).

**Youth**: South Africa National youth commission defines the youth as those of 14 to 35 years of age (Statistics South Africa, 2013)

**Adolescents**: This is the transitional stage of physical and mental human development that occurs between childhood and adulthood (Benzuidenhout, 2004).

**Drug:** It refers to any chemical substance that changes the physical, psychological, emotional and social state of the user (Oakley & Mosley, 1996).

## **1.8 Conclusion**

The chapter presented the general basics of the research report focusing on the following specifics: introduction, background of the study, problem statement, significant of the study, aim of the study, objectives of the study, research questions and definition of terms/keywords.

## CHAPTER 2: LITERATURE REVIEW

### 2.1 Introduction

This chapter presents conceptualisation, prevalence, factors contributory to *nyaope* use among the youth, which includes factors such as life experiences, personality traits, self-esteem, family, physical environment, physiological causes, emotions, media, school environment and peer pressure. *Nyaope* has an impact on a person's psychological wellbeing, social life, neurological and physiological functioning which are discussed in this chapter. Proposed strategies for the reduction of *nyaope* use are briefly discussed as well. The theoretical introduces theories which inform this study. These are the psychosocial theory, psychoanalytic theory, social learning theory and the physiological perspective. In this chapter the word impact and effects as well as youth and adolescents will be used interchangeably.

### 2.2 Conceptualisation

Substance use by the youth is increasing rapidly, leading some researchers to argue that even youth were now in increasing danger of abusing drugs (Grana *et al.*, 2009; Fang & Guo, 2012; Pinchevsky *et al.*, 2014; Carney *et al.*, 2013). Recently, there have been reports of the abuse of a highly addictive drug cocktail called *nyaope*, also known as 'whoonga', commonly found in many South African urban townships (Thomas & Velaphi, 2014). This new drug is being used mostly by adolescents (Masombuka, 2013). *Nyaope* also known as whoonga is a street cheap drug which is common among people living in the economically depressed environment (Grelloti, 2014; Masombuka, 2013; Mokwena, 2015) and is mostly common among the youth. The undertaken study was conducted among the youth living in the rural areas which are economically underprivileged. The challenge of *nyaope* has an impact on the social community environment and its use has a significant mental health issue (Mokwena, 2015). The users are mostly poor and unemployed, they pose a significant challenge because of the inability of the mental health services to provide them with the necessary assistance in the form of rehabilitation services which include tailor-made detoxification (Mokwena, 2015). Therefore, *nyaope* addiction worsens the already present crisis for psychological services in South Africa. Previous literature on similar phenomena reported that, in the past twenty years that there has been an increase in the prevalence of substance abuse among young people in South Africa (Moodley, Matjila, & Moosa, 2012). *Nyaope* has been noted to

be the most common drug which is accessible in most areas of South Africa because is cheap and easily available among the youth which contribute to the increasing problems of substance abuse (Mabovula, 2012).

It has been well documented that drug abuse is an issue of major concern to any society in terms of the population's loss of psychological well-being, physical health, life and productivity (Wormer & Thyer, 2010). Substance abuse can be more severe to individuals in different ways based on their gender and age (Migon & Holmes, 2013). *Nyaope*, is a smoked cocktail drug, which was first discovered in Durban; it contains illicit drugs and antiretroviral medication as the main component (most likely *efavirenz*) (Grelotti *et al.*, 2014; Rough *et al.*, 2013). It has been rumoured to be a mixture of crushed *efavirenz* with illicit substances such as marijuana, methamphetamine, and/or heroin and household products (such as detergent or rat poison). Use of *nyaope* can adversely impact the ARV treatment. The studies have also shown that the drug is very popular in the North West, Gauteng and Durban provinces (Ramlagan *et al.*, 2014). *Nyaope* can only contain *efavirenz*, which is described as an intoxicating substance, hence can be used, independently for its psychoactive effects. *Nyaope* is smoked for its hallucinogenic and relaxing effects (Grelotti *et al.*, 2014) and is a highly addictive drug (Mosombuka, 2013; Rough *et al.*, 2013). Despite the good effects of *efavirenz*, as part of an antiretroviral therapy, there are some side effects, such as cognitive disorders (Ciccarelli *et al.*, 2011).

Because of their body metabolism, youth tend to quickly progress in their substance abuse career, so females who use *nyaope* are more likely to suffer the consequences of addiction quicker (Masombuka *et al.*, 2013; Grelotti *et al.*, 2014; Law & Guo, 2013). Adolescents who experience problems with the whole variety of substances are usually left feeling stigmatised, marginalised, demoralised; substance abuse destroys the purity of the social environment and social hygiene which increases depression (Hitzeroth & Krammer, 2010; Stiles, 2013). According to Seivewright, (2009), Stiles, (2013) men are more likely to be diagnosed with the substance abuse problem than women; women tend to have shorter onset of drinking-related problems. For instance, women experience higher rates of physiological impairment at an earlier point in their drinking career; they become intoxicated more quickly with less alcohol because of lower body water content, hormone fluctuations and reduced enzymes used to metabolise alcohol (Seivewright, 2009; Stiles, 2013). Adolescent youth tend to use substances in seeking for sensation and in their eagerness to act like adults (Gladding, 2004).

Although the main purpose for using such drugs is for euphoric effects, drugs have effect on the brain chemicals (Benzuidenhout, 2004).

### 2.3 Prevalence of Substance Abuse

Findings of a study conducted in Mexico by the national addiction research centre show that more than 200,000 adolescents between 12 and 17 years use drugs (Ramorola & Taole, 2014). Between, 1999 and 2005, in Africa, particularly in countries in the west and south-east, cocaine use has increased (Pludderman *et al.*, 2004). This increase has been ascribed to the opening up of countries' borders, a decrease in very restrictive internal state controls, high levels of unemployment, and an increasing use of these countries routes for transshipment of cocaine from South America to Europe and occasionally North America (Adolescent Substance Abuse Knowledge Base, 2007). Substance use is also a growing problem among youth in both gender worldwide (Grana *et al.*, 2009). In the United States, approximately three quarters of all deaths among persons aged 12-17 years result from behaviour influenced by substance use (Ayers, 2005; Koji *et al.*, 2013).

Findings from studies conducted in South Africa suggest that the Western Cape is one of the provinces where the youth are mostly affected by substance abuse and that abuse is on the increase (Carney *et al.*, 2013). It has been also established that *nyaope* is one of the commonly used drug in the Western Cape (Ramorola & Taole, 2014). Ramlagan *et al.*, (2013) reports that either the prices of drugs seem to have come down or buyers (especially the youth) have more money available. Some of the findings of this study, which was conducted in all the 9 provinces in South Africa are that the onset of first use of illicit drugs was 15 years for sedatives, 16 years for cannabis, 17 years for opiates, 18 years for cocaine, 21 years for amphetamine-type stimulants, and 22 years for hallucinogens and alcohol, tobacco, cannabis, cocaine/crack, opiates and sedatives as primarily used drugs (Ramlagan *et al.*, 2013).

In South Africa, hazardous and harmful drinking appears to be high, especially on weekends, with 23% of males and 25 % of females drinkers in 2003 exceeding the World Health Organisation and South African National Department of Health recommended levels for responsible drinking (Ellis *et al.*, 2012). A National Youth Risk Behaviour Survey found that although a higher proportion ( 38.5%) of male learners than female learners (26.4 %) were

current drinkers, similar proportions of male and females reported binge drinking in the month preceding the study (Morojele *et al.*, 2002).

A total of 3,287 adolescents in Grades 9–12 were assessed on their beliefs regarding substance abuse and its perceived potential to help cope with personal and family stress. According to the researchers' data, about 68% of girls agreed that using drugs help adolescents cope with problems at home, 11% increase from the previous year's study. Over half of the female population (53%) believe that drugs can help adolescents forget their problems a 10% increase from female participants' response in 2008 (Ellis *et al.*, 2012).

Results from studies conducted by several researchers (Benzuidenhout, 2004; Carney *et al.*, 2013; Ramorola & Taole, 2013) suggest that adolescents demonstrate an increased acceptance of various illicit drugs use. The study shows that 59% of female participants engage in alcohol consumption in social settings—an 11% increase from 2008. Conversely, the males' level of alcohol acceptance at 52% was relatively the same as their data from the previous year. The study also showed a 29% increase in girls' acceptance of marijuana use while boys only demonstrated a 15% increase. Additionally, fewer girls stated that they do not want to hang out with others who use drugs, with 33% agreeing in 2009 while 38% had agreed in 2008. Lastly, girls were less likely to believe that the drug 'ecstasy' is an addictive substance, with 77% agreeing in 2009 while 82% had agreed in 2008. Male participants also reported increased support for substance abuse, around 52% of males agreed that drugs can help one relax socially—a 16% increase from the previous year. Moreover, 41% of males affirmed that parties where drugs are available are more fun, a 21% increase from the prior year. In 2004, 1.5 million girls started smoking and 675,000 started smoking marijuana (Carney *et al.*, 2013). The study's researchers find this data to show how youth consider drugs and alcohol as less dangerous, and more of a characteristic of social settings (Benzuidenhout, 2004).

## **2.4 Factors Contributory to *Nyaope* Use among the Youth**

Taylor *et al.* (2012) explores the pathways youth travel toward substance abuse by examining family circumstances, personality traits, childhood experiences, biology, the influences of friends and peers, the communities where they live and the advertising and media messages that bombard them. Rough *et al.* (2013) describe the medications used to make *nyaope* being stolen from patients and expressed concern that antiretroviral abuse jeopardizes the safety of

both patients and users. It has also been reported that either the prices of drugs seem to have come down or buyers (especially adolescents) have more money available and this is another factor in the increase of use (Ramlagan *et al.*, 2013).

#### **2.4.1 Life experiences**

The feminist perspective has emphasized that victimization and exposure to violence may, more likely result in internalising problems among the youth victims as they struggle to cope with the stress of being harmed or violated, whereas boys may be more likely to respond in aggressive or externalising behaviour and may be more likely to use illegal substances such as *nyaope* as a coping strategy to escape from trauma (Colby, Hecht, Miller-day, Krieger, Syversten, Graham & Pettigrew, 2012; Pinchevsky *et al.*, 2014). Girls are more likely to be offered drugs by a female acquaintance, a young female relative or a boyfriend in private settings unlike their male counter-parts. Adolescents are also less likely to be asked to show proof of age when buying cigarettes and alcohol (Wagner & Waldrom, 2011). Negative life circumstances have long been identified as a risk factor for adolescent substance use and abuse (Taylor *et al.*, 2013). Therefore, negative factors such as early traumatic experiences may lead females to engage in survival strategies that result in illegal activities (Pinchevsky *et al.*, 2014) Girls are more likely, than boys to consider substances use as an effective coping mechanism for stress relief (Pinchevsky *et al.*, 2014).

Personality traits and beliefs have also been noted to increase substance abuse. People who get involved in diets or have eating disorders were reported to be at more risk of substance abuse. (Colby *et al.*, 2012; Pinchevsky *et al.*, 2014). Self-efficacy or confidence in personal ability has a central role in many conceptualizations about behavioural control and change (Ellis *et al.*, 2012; Koji *et al.*, 2013). Self-confidence has been shown to predict a variety of health behaviour outcomes and influences those outcomes by paying attention to achieving goals. Lack of a sense of ownership and personal control over one's surroundings can lead to substance abuse (National Drug Master Plan 2013-2017, 2013).

#### **2.4.2 Family**

The negative impact of parental drug use has been documented by a multitude of studies and reviews, especially for children of alcoholics" (Bröning, Kumpfer, Kruse, Sack, Busch, Moesgen, Pflug, Klein & Thomasius, 2012). However, Colby *et al.* (2012), provide literature review that demonstrates that culture often is one of the driving forces behind adaptation.

Children whose parents are abusers of substances show an early onset of substance consumption and their parents are unable to control them because the parents are not able to demonstrate proper control of their own lives (Seivewright, 2009; Mignon & Holmes, 2013). However, this type of situation can set a bad example for children. Marital difficulties, not spending enough time with children and verbal or physical abuse of a spouse or children may lead adolescents to seek comfort in negative activities such as substance abuse. Statements like “Some parents influence their children to substance use by sharing with them while other parents say that they better introduce alcohol to their children themselves than letting them to be introduced to alcohol by friends” show the extent of family factor in drug abuse (Colby *et al.*, 2012).

### **2.4.3 Physical environment**

The physical environment can also impact mental health, which in turn can influence substance use (Colby *et al.*, 2012). *Nyaope* is a very accessible and affordable drug commonly used by youth (Ramorola & Taole., 2014). Youth in poor quality neighbourhoods, low residential stability, which are considered dangerous, have higher levels of anxiety, depression, and conduct disorders than those in orderly neighbourhoods. Therefore, youth in poor physical environments may be subjected to *nyaope* and other substance use. They may use substances as defence as they may want to rebel against societal rules (Carney *et al.*, 2013). Such adolescents also use it as defence mechanism and also for experimentation as at this stage of transition, adolescents want to try everything; they are curious about everything. Results by Grana *et al.* (2009), note that “youth may use substance to relieve the stress caused by their physical environment”. According to a study conducted in Taiwan, Fang & Guo, (2013) have the view that women use substances to cope with negative feelings. Some literature view culture as one of the driving forces behind substance abuse (Colby *et al.*, 2012). Research findings show that substance-abusers have most often suffered from traumatic experiences, that is, violence, assaults, among others, (Fang & Guo, 2013).

### **2.4.4 Physiological causes**

Substance abuse problems to a generation are through several pathways, especially genetic disposition (Bröning *et al.*, 2012). Adolescents who experience early puberty are at increased risk of using substance earlier, more often and in larger amounts than their peers. Substance use can sink into abuse more quickly for adolescents even when using the same amount or less of a particular substance with those above the adolescents stage (Seivewright, 2009).



Withdrawal can lead to nausea, vomiting, drowsiness and withdrawal problems as a result many of them go back or continue using drugs (Benzuidenhout, 2004).

Youth with depression use drugs, although not all youth that are depressed abuse drugs, and not all drug-using youth are depressed (Butcher, Mineka, & Carison, 2004; Hitzeroth & Krammer, 2010). Most youth experience major depressive disorder at some time during their adolescent stage and many of them do not receive medical attention for their depression and remain undiagnosed (Koji *et al.*, 2013). This results in youth self-medicating through the use of marijuana and other drugs which is often used to relieve anxiety and to feel better (Pinchevsky *et al.*, 2014).

#### **2.4.5 Media**

Even though the media has recently become more responsible and become involved in the fight against underage drinking and smoking, it still remains one of the largest culprits in causing drug abuse among the youth (Seggie, 2012). The media has been keen in promoting, for the sake of advertisement revenues, drinking and smoking as “cool.” Also through advertisements, pharmaceutical companies have been promoting both prescription and non-prescription drugs as beneficial to the lives of the users without giving clear guidance on the usage and their potential abuse (Colby *et al.*, 2013). The media has also indirectly supported drug abuse by playing music videos or showing movies that glorify drug use. Once adolescents follow the lives of their role models as portrayed in the media, they find themselves in a trap which they are unable to come out from (Colby *et al.*, 2013).

#### **2.4.6 School environment and peer pressure**

The school environment is a central influence on adolescents’ well-being and consequent behaviour (Taylor *et al.*, 2012). Dysfunctional school climate and the physical aspects of schools in disrepair may have a detrimental impact on student behaviour including substance-abusing behaviour (Grana *et al.*, 2006). Substance-abusing youth often are alienated and stigmatized by their peers who are not in the use of substances. Adolescents using alcohol and other drugs such as *nyaope* also often disengage from school and community activities, depriving their peers and communities of the positive contributions they might otherwise have made (Ramlagan *et al.*, 2013).

## 2.5 Impact of *Nyaope* Use Among the Youth

Although harm to human physical health caused by *nyaope* use has been recognised, there is very little research addressing its impact on human psychological well-being, behavioural functions and emotion regulations (Koji *et al.*, 2013; Masomubuka, 2013). Drug abuse at any age can result in serious health impact, but adolescents who abuse drugs are at particular risk. Those who abuse drugs are more likely to struggle with addiction later in life, have permanent and irreversible brain damage, such as cognitive difficulties (Clack *et al.*, 2013; Newcomb & Bentler, 2012). There is compelling evidence that women progress faster to problem drinking and alcohol dependence than men, and compared to men experience an earlier onset of alcohol-related complications than men. Females' drinkers report more severe alcohol-related psychiatric, medical and social problems relative to their male counterparts (Ellis *et al.*, 2012; Stiles, 2013). However, the persisting high rates of substance use and the closing of the gender gap demonstrate that adolescent girls are still not getting the message (Butcher *et al.*, 2004; Newcomb & Bentler, 2012). Women are known to be nurturers of culture as they are responsible for caring for the children and passing cultural knowledge and traditions to youth (Mignon & Holmes, 2013). Therefore, the more they use substances, the more our societal values are compromised.

Suggestions by Diagnostic Statistical Manual IV (DSMIV) (2000) are that, substance use is often a component of the presentation of symptoms of mental disorders. When symptoms are judged to be a direct physiological consequence of substance, substance-induced disorder is diagnosed (Butcher *et al.*, 2004; DSMIV, 2000). Substance related disorders are also commonly comorbid with, and complicate the course and treatment of many mental disorders like conduct disorder, antisocial and borderline personality disorders, schizophrenia and bipolar disorders (DSMIV, 2000). Substance abuse effects may negatively impact student 'well-being by endangering their health and decreasing their opportunities for academic success' (Stiles, 2013). Substance abuse can also be related to violent or aggressive behaviour which may be manifested by fights or criminal activity and may result in injury to the person using substance or to others (Benzuidenhout, 2004; Hitzeroth & Krammer, 2010; Meier, Caspi, Amber, Harrington, Houts, Keefe, McDonald, Ward, Poulton & Moffit, 2012; Mignon & Holmes, 2013; Pinchevsky *et al.*, 2014; Seggie, 2012; Taylor *et al.*, 2012;). Substance abuse disorders are characterised by intolerance, withdrawal, increased consumption, persistent desire or unsuccessful attempts to reduce consumption. Substance-withdrawal

disorders are characterized by a substance-specific syndrome due to cessation of heavy prolonged use that causes clinically significant distress and impairments on functioning which is not due to medical disorders (Benzuidenhout, 2004; Newcomb & Bentler, 2012). Drug abuse among the youth has the common negative impact on the following areas:

### **2.5.1 Psychological impact**

Psychological disorders such as anxiety and depression have been associated with the use of *nyaope* among the youth (Grelotti *et al.*, 2014; Lehavot & Simoni, 2011). Substance such hallucinogenous drugs can seriously cause psychological irreversible damage, since these drugs induce hallucinations (sense of seeing or hearing something which is not there). People, who use this kind of drugs experience changes in sensory perception, a feeling of happiness that lasts for a short time, disoriented mental behaviour and an increase appetite (Benzuidenhout, 2004). These are drugs, such as mescaline, dagga (marijuana or cannabis), lysergic acid and diethylamide. They affect a brain chemical called ‘serotonin’ in the central nervous system which results in affected movement and can also cause seizures. The onset of schizophrenia has been associated with high familial risk and the risk of cannabis-related psychosis is higher in first degree relatives (Clack *et al.*, 2013; Paruk, Burns & Caplan, 2013). It has also been reported that cannabis increases vulnerability to the first episode of psychosis in genetically-vulnerable individuals (Bröning *et al.*, 2012; Paruk *et al.*, 2013).

DSM IV (2000) notes that substance abuse can cause clinically significant distress and impairment on functioning, not due to medical disorder. For example, the toxic effects of cannabis on brain may result in impaired neuropsychological functioning, poor academic performance, and subsequent school dropout, which may result in further neurological decline (Meier *et al.*, 2013). Psychological impact may be due to or can also cause social, emotional, behavioural and neurological effects, as well as addiction and dependence.

According to Wagner and Waldrom (2011), youth who abuse substances are likelier to be depressed and suicidal which is increasing the risk of substance abuse”. Marijuana worsens depression and can lead to other mental illness, such as schizophrenia or suicide (Meier *et al.*, 2012). Drug abuse can cause or mask problems such as anxiety, mood swings, and schizophrenia and also increase the severity of emotional problems (Hitzeroth & Krammer, 2010). Adolescents who involve themselves in the use of substance are at a high risk of social problems, depression and violence (Bröning *et al.*, 2012). Also those adolescents who abuse

drugs are more likely to engage in delinquent behaviour such as fighting and stealing. It has been reported that most girls who are sexually active at high school have reported that they have used drugs during their last sexual encounter (Seivewright, 2009). These same girls say they did not use protection because they were high. The youth who use drugs are more likely to have multiple partners; some even prostitute themselves to acquire drugs. Substance abuse can also be related to higher rates of unintended pregnancies because of decreased condom use (Pinchevsky *et al.*, 2014; Seivewright, 2009). Since drugs alter perception, adolescents then involve themselves in risky behaviours such as acting impulsively, having unprotected sex and sharing drug paraphernalia. *Nyaope* use increases the likelihood that girls will engage in risk behaviours that might lead them to be the victims of sexual assault (Masombuka, 2013; Mignon *et al.*, 2013; Seggie, 2012; Seivewright, 2009).

### **2.5.1.1           Addiction and dependence**

*Nyaope* is a highly addictive drug (Grelotti *et al.*, 2014; Masombuka, 2013; Rough *et al.*, 2013), when it floods the system with dopamine, these chemicals create feelings of pleasure and euphoria, which is known as ‘high’ (Benzuidenhout, 2004; Ellis *et al.*, 2012; Koji *et al.*, 2013). The first few instances cause people to like the feeling and they repeat the taking to obtain the high (DSMIV, 2000). Over time, the brain senses that it has too much dopamine, so it starts shutting down receptors and producing less of the chemical. Subsequent usage does not yield the same euphoria, so an addict begins using more and more of a particular substance in order to get the same high (Clack *et al.*, 2013; Benzuidenhout, 2004).

When adolescent youth start using drugs many problems can arise, from poor grades and relationship problems to dangerous health situations and criminal behaviour. As already stated, addiction is a complex condition of the brain. The youth brain is more susceptible to the influence of substance abuse or drug use because it is still developing; chemical pathways are interrupted when young people use drugs. Drugs interfere with the ability to think clearly, use cognitive skills and control behaviour (Meier *et al.*, 2013). It has also been shown that the continued use of drugs alters brain chemistry and neurological pathways until addiction develops (Meier *et al.*, 2013). Females who are more likely to become addicted to drugs are those with a family history of addiction; adolescents who use drugs at an early age and those with mental disorders such as depression and anxiety (Fang & Guo, 2013). The younger the person is when they start using substances, the more likely they are to develop substance problem and relapse later in life (Saggie, 2012). When alcohol enters the bloodstream, it

causes a wide range of effects across many different bodily systems (Benzuidenhout, 2004; Ellis *et al.*, 2012). Alcohol addiction is a public health challenge for any community, broken homes, social isolation and increasing health-care costs are some of the results of alcohol abuse (Benzuidenhout, 2004; Mignon & Holmes, 2013).

### **2.5.1.2 Neurological impact**

Results of a study conducted on how *efavirenz* can be associated with cognitive disorders in otherwise asymptomatic HIV-infected patients, suggest that the high prevalence of HIV-associated neuro-cognitive disorders was observed in apparently asymptomatic HIV+ individuals and it was associated with *efavirenz* use, suggesting the potential neurotoxicity of this drug (Cicarelli *et al.*, 2011). *Nyaope*, which is a highly addictive drug and contains ARVs has been reported as even being used by children as young as 14 years (Grelotti *et al.*, 2014).

The human body and brain are still developing throughout the youth and the adolescent stage. Marcel, (2001) and Clack *et al.* (2013) note that “Cognitive capacities for abstract thinking begin to take a prominent role during early adolescence”. Heavy alcohol drinking can damage the cerebellum, leading to poor coordination; reduce the size of the hippocampus, leading to memory loss; and damage the frontal cortex, leaving a cognitive deficiency throughout adulthood (Clack *et al.*, 2013; Koji *et al.*, 2013; Stiles, 2013; Taylor *et al.*, 2012). “Analysis showed significant negative relations between severities of narcotics drugs especially heroine and alcohol in the brain metabolism in the prefrontal cortex and temporal cortex, however alcohol was associated with lower metabolism in frontal premotor cortex and putamen and stimulants use with parietal cortex” is a quotation by (Lopez, Stamatakis, Serrano, Gomez-Rio, Fernandez, Perez-Gracia & Vedejo-Gracia, 2012). Abuse of drugs can cause severe psychological damage such as schizophrenia, insomnia, brain swelling, lower brain metabolism, seizures, convulsions, anxiety (during substance withdrawal), delirium and others (Ellis *et al.*, 2012; Hitzeroth & Krammer, 2010).

### **2.5.2 Social impact**

*Nyaope* use has an impact on the abuser and the significant others. Researchers have described medications used for *nyaope* mixture, being stolen from patients and expressed concern that antiretroviral abuse jeopardized the safety of both patients and users (Rough *et al.*, 2013). Youth are more likely to experience second effects, and these includes being

insulted or humiliated, having serious argument, having to care for the other peers who are intoxicated, property damage and experience an unwanted sexual advances, or being a victim of an assault (Stiles, 2013). The picture of crime-free, rural setting is declining as a number of rural jurisdictions have been reporting gang-related problems over the past few years (Taylor *et al.*, 2012).

### **2.5.3 Physiological impacts**

The youth who use substances more likely to experience adverse health consequences; have greater susceptibility to alcohol-induced brain damage, cardiac problems and liver disease (Eltore, 1992; Fang & Guo, 2013; Stiles, 2013). Reproductive problems have also been associated with chronic heavy drinking, which can lead to fertility problems (Ellis *et al.*, 2012). Which makes it more dangerous for youth to take *nyaope*. If a woman does get pregnant and continues to drink, it is not her health only that can be affected but also the foetus. The reason is, the alcohol in the blood is carried into the baby's bloodstream (Hitzeroth & Krammer, 2010). During pregnancy, the baby is still developing, consuming alcohol can lead to a miscarriage, foetal alcohol syndrome, foetal birth defects and it can also lead to permanent damages which are irreversible. Individuals with dementia are more likely to develop intoxication and impaired physiological functioning, and women may be at higher risk if they abuse substances (Clack *et al.*, 2013; DSMIV, 2000). Narcotic drugs can cause lung failure, cancer, cardiovascular diseases, peripheral vascular disease, bronchitis, and aggravation of asthma, infections, passive smoking complications and foetal abnormalities (Hitzeroth & Krammer, 2010). Stimulants can cause an individual to experience seizures, heart attacks, heart muscle inflammation, weak heart muscle, hypertension, headaches, strokes, brain swelling, brain bleeding, high fever and muscle damage (Hitzeroth & Krammer, 2010). Use of these substances can also cause physiological problem such as HIV/AIDS and hypertension due to negligence and behaviours influenced by the feeling of high; basically drug use can be fatal (Benzuidenhout, 2004; Ellis *et al.*, 2012; Hitzeroth & Krammer, 2010).

## **2.6 Reduction Strategies for the Use *Nyaope***

Seivewright (2009) describes the impact on substance use of key transitions in adolescents' life, such as moving from middle to high school and high school to college, and physiological

and emotional transitions experienced during adolescent stage. Most importantly, the author reveals vital opportunities for prevention and intervention during these key transitions.

It has been observed that the majority of substance abusers are usually people of low education, unemployed, living in poverty, and surrounded by substance abusers and the areas of most substance users lack recreational facilities as highlighted on the South African National Drug Master Plan 2013-2017, (2013). Working long hours was also identified as a contributing factor to substance abuse (Ramlagan *et al.*, 2014). Conversely, an orderly environment provides visual cues suggesting the area is safe and that rules and standards govern the environment. The appearance of a physical environment may regulate risky behaviour by sending messages to youth regarding the acceptability of behaviours and how deviance is tolerated (Bröning *et al.*, 2012; Stiles, 2012).

Encouraging youth not to terminate their studies prematurely will equip them with relevant education that will also enable them to fight poverty and also help others that are the victims of substances. Most of the people suffer because of lack of knowledge. Building rehabilitation centres in rural areas and recreational facilities which will be accessible to all the youth can also contribute in preventing substance use. As indicated on DSM V substance abuse can be described as a disorder depending on the criteria for diagnosis, according to DSM V (2013) and is a disorder that may need psychological or medical attention.

After a ban on tobacco advertising due to smoking causing severe public health burden, from tobacco's hazardous and harmful use, South Africa feels that a similar drastic action is needed against alcohol advertising, since most of the youth experiment substances when they are under the influence of alcohol (Parry, Burnhums & London, 2012; Seggie, 2012). The National Drug Master Plan 2013-2017, (2013) has highlighted six strategies to tackle substance abuse in the communities, re-education about better parenting, spiritual care, knowledge, and influence and a healthy mind, recreation, reduction of the availability of the drugs, law enforcement to reduce availability, rehabilitation, employment and reduction of poverty in order to reduce substance abuse in South Africa.

## 2.7 Theoretical Framework

### 2.7.1 Introduction

The psychological theory explains that drug use and abuse begins because of an unconscious motivation within individuals, who are not aware of these motivations, not even if they manifest themselves (Gladding, 2004; Vignolla & Corulla, 1999). There are unconscious conflicts and motivation that reside within individuals as well as their reactions to any events in their lives that move a person towards substance abuse (DSMIV, 2000; Gladding, 2004).

Psychological theories further more view risky behaviour, such as substance abuse, as being related to individual psychological factors, such as self-esteem, locus of control, need for acceptance, anxiety levels, sensation seeking, post traumatic experience (Pinchevsky, Wright & Fagan, 2013) and eagerness to act like adults (Gladding, 2004; Taylor *et al.*, 2012).

Hitzeroth & Krammer, (2010) note that “addiction is similar to other learnt behaviours”. Research has shown that the majority of children who are raised by parents who are alcoholics have high risks of developing problems with alcohol because of an inherent motivation to drink or sensitivity to the drugs (Routledge, 2007). Freud psychoanalytic theory puts forth the notion of psycho-sexual stages. Similar to Erickson’s psychosocial theory stages of development, both theories can be applied to the problem of substance abuse (Vignolla & Corulla, 1999). Yet, the physiological theory state that substance use is something that can be inherited from birth or genetically which is contradictory to psychoanalytic and psychosocial theories (Routledge, 2007).

The causes of substance abuse differ among individuals. Therefore, various theories with different explanations on the aetiology of substance abuse disorders such as psychosocial, psychoanalytic, social learning and physiological theories will be discussed below:

### 2.7.2 Psychosocial theory

Erickson in Vignolla & Corulla, (1999) suggests that drug addiction and abuse can be related to the failure of achieving an ego identity. Similar results regarding psychosocial theory were obtained on the undertaken study, regarding the point that the social environment has an influence on adolescents who are using drugs; peer pressure is the strongest causal factor (Vignolla & Corulla, 1999). Hence, victimization has been identified as a particularly salient risk factor for adolescents substance use, with violent victimisation often considered to be the



first step among youth, pathways to delinquency, crimes and substance abuse; these experiences may be problematic (Pinchevsky *et al.*, 2014). It has also been suggested that this can be a problem developed in the first stage of development (trust versus mistrust) according to psycho social's eight developmental stages (Vignolla & Corulla, 1999). The reliability, care and affection enable a person to develop trust, yet the lack of this lead to mistrust which may be a factor contributory to substance abuse during the adolescents' stage.

### **2.7.3 Psychoanalytic theory**

Freud emphasizes an unconscious conflict as the cause of substance abuse; he believed that fixation at certain psychosexual stages cause's problems such as addiction (Vignolla & Corulla, 1999). He also emphasises the fact that drug addiction is caused by some sort of conflict in the unconscious mind and this unconscious conflict may be the result of unacceptable sexual desires, violent motives, irrational wishes, fear, or even attempting to escape from certain feelings due to a shameful experience (Vignolla & Corulla, 1999; Pinchevsky *et al.*, 2014) and negative life experience as child (Fang & Guo, 2012). Drug use may continue over a period of time until one is addicted (Benzuidenhout, 2004; Ellis *et al.*, 2012; Meier *et al.*, 2012; Taylor *et al.*, 2012). In some cases, the individual may not even be aware of what is driving the addiction because people usually are not even aware of these unconscious factors. Freud also notes that such a person may have developed this fixation during the five stages of development. Therefore, the fixation caused the individual to believe that substances would provide the comfort (Gladding, 2004).

### **2.7.4 Social learning theory**

The Social Learning Theory by Albert Bandura suggests that, behaviour is primarily learned through a process of operant conditioning, in which behaviour is shaped by consequences that follow it. It also emphasises that people can learn just by observing what is happening to someone else, which is also known as modelling or observational learning (Barlow & Durand, 2005). Humans make decisions about conditions under which their own experiences would be very similar to other people that one is observing.

The social learning theory proposes that substance use and abuse develops through a process of observation and experience with the associated problematic behaviours and their consequences. Individuals form a sense of belonging to a social group, which influences

their definitions of norms and expectations, and also provides models for imitation (coping someone else behaviour) (Barlow & Durand, 2005).

### 2.7.5 Physiological Perspective

Biological Theories recognise substance abuse as disease requiring medical treatment. This disease has symptoms that may be acute, chronic or progressive. Substance abuse can be the result of metabolic abnormality, often with a genetic basis as the central causal factor (Paruk *et al.*, 2013). It is also believed that substance problems are transmitted to the next generation via genetic disposition (Berk, 2007; Brønning *et al.*, 2012; Routledge, 2007). But for adolescents who may be genetically vulnerable to substance use, they can still make decision whether or not to use substances (Ellis *et al.*, 2012). Recent research has focused on the particular gene, on chromosome 11, as related to alcohol abuse, while other findings to date has shown that, no single gene is responsible for development of alcohol abuse in individuals (Barlow & Durand, 1999).

“The common consequence of substance abuse addiction is that the affected individuals place the intake of addicting substances above the intake of nourishing foods” (Benzuidenhout, 2004). People suffering from addiction turn to lose self-control, craving for the drugs and they have a compulsion to continue using them (Hitzeroth *et al.*, 2010). Results by Benzuidenhout (2004) emphasise that the excessive use of alcohol breaks down the vitamin B complex in the body, weakening the body resistance to infection. While a majority of drug abusers die from overdose, drugs can cause break down of the nervous system resulting in permanent brain damage, for example, epilepsy (Benzuidenhout, 2004; Brønning *et al.*, 2012; Clack *et al.*, 2011; Paruk *et al.*, 2013).

The repeated use of the same needle, or the use of the needle someone else has used, increases the possibility of fungus infections, malaria, syphilis, hepatitis, HIV/AIDS, and other infectious diseases (Ellis *et al.*, 2012; Hitzeroth & Krammer, 2010; Stiles, 2013). While some diseases can be treated, some such as HIV/AIDS are untreatable. While alcohol can lead to severe health problems such as cirrhosis of the liver, which causes death, it can also cause the human brain to age prematurely (Clack *et al.*, 2011). In addition, the excessive use of alcohol can precipitate conditions such as gout and hypoglycaemia (Benzuidenhout, 2004).

Research has shown that the majority of children who are raised by parents who are alcoholics have high risks of developing problems with alcohol because of an inherent motivation to drink or sensitivity to the drugs (Routledge, 2007).

## **2.8 Conclusion**

This chapter focused on the previously conducted studies about substance abuse nationally and internationally. The introduction of the literature review was done. Aspects of the literature such as prevalence of substance use, factors contributory to the use of *nyaope* and impact of *nyaope* use among the youth were discussed based on the objectives of the study. The researcher also addressed the theories which has informed this study.

## CHAPTER 03: RESEARCH METHODOLOGY

### 3.1 Introduction

This chapter presents the research methods which were used for the study. Qualitative research approach was adopted for the study. Vithal & Jansen, (2010) states that the qualitative approach studies phenomenon outcomes within the social and cultural context in which they occur and which enables the researcher to explore human behaviours and thoughts by using various techniques including interviews. Exploratory research design was used. Description of the setting and identification of the population for the study has been elaborated. Non-probability sampling technique was used, the participants were selected purposefully and also using snowball sampling methods. Interviews were used as the principal research instrument of data collection, semi-structured one-to-one interviews were used to collect data. To ensure trustworthiness of the study the researcher conducted pre-testing before actual data collection. Thematic data analysis was employed to analyse data. The chapter concludes with the ethical frameworks that guided the research process and as well as ethical issues that were considered.

### 3.2 Research Approach

Qualitative research approach was adopted. The subjective experience and perception of the use of *nyaope* was the main focus in this research. Vithal & Jansen (2010) states that qualitative research aims to uncover those subjective meanings that participants place on the issues and phenomena that are being investigated. After considering the purpose of the research and what data would best serve the research questions, qualitative research approach was chosen to explore the impact of *nyaope* use among the youth in the rural communities of Thulamela Municipality. The qualitative research approach is an umbrella phrase covering an array of interpretive techniques which seek to describe, decode, translate and otherwise come to terms with the meaning of naturally occurring phenomenon in the social world (Babbie, 2012; Bless, Smith & Mitchell, 2006; Welman *et al.*, 2005;). The qualitative research approach enabled the researcher to understand the social or human problem based on building a complex holistic picture, reporting on a detailed view of informants and from conducting the investigation in a natural setting (De Vos, Strydom, Fouche & Delpont, 2005; Gray, 2009).

### 3.3 Research Design

The exploratory research design was used because the research problem had only few studies to refer to. This design was used because of its flexibility to enable the researcher to address research questions relevant for the study (such as: what, why and how). It also assisted the researcher to gain insights (background information) of the problem as recommended by (Gray, 2014). The reason for this is that, the researcher was interested in well-grounded picture of the problem and the exploratory design provided an opportunity to define new terms and provide clarity on the existing concepts (De Vos *et al.*, 2005; Gray, 2014;).

### 3.4 Setting

The participants in this research originated from the rural communities of Thulamela Municipality, which are Itsani, Muledane and Maniini in the Vhembe District, Limpopo province, South Africa. These villages are the surroundings of the Thohoyandou Town. These communities does not have street names and the road is gravel which made it complicated that to locate the participants or to visit when is raining since the roads were slippery. During the process asking for permission see appendix B, the chief referred the researcher to the civic association of that particular community who also referred the researcher to some of the place which is known for having people who uses *nyaope*. To ensure the safety of the researcher interviews were conducted in an open space, but also ensuring that the confidentiality and also avoiding possible disturbances. The community halls offices which have security services were used.

### 3.5 Population

The total set of individuals or units which were studied. The inclusion criteria of the population for this study included:

- Youth of aged between 18 and 31, living in the rural communities of Maniini, Muledane and Itsani villages in the Thulamela Municipality were interviewed
- 08 participants using *nyaope* and other substances were interviewed.
- 06 males and 02 females formed part of the study.

*Nyaope* users are difficult to locate. Therefore, the researcher targeted a few with similar characteristics as this population. Most of the people living in the communities of Thulamela Municipality fall under low to middle income household category. *Nyaope* is considered as the most accessible drug which is also affordable to people living in the underprivileged communities such as Maniini, Muledane and Itsani.

### 3.6 Sampling Procedure

Both purposive and snowball sampling methods which are non-probability sampling techniques were used in this study. These methods were used because only youths who were using *nyaope* were selected for the study and not everyone had an equal opportunity to participate in the study (De Vos *et al.*, 2005). The first participant who was known by the researcher was selected from the street of Thohoyandou, at the shopping complex, the participant was a resident of Maniini village. The youths of age between 18 and 31 were purposefully selected for this study as they were seen as the most active users of *nyaope*. Purposive sampling method enabled the researcher to obtain participants relevant for the study because the participants who were selected were known active users of the *nyaope* drug. As Gray, (2014) recommended that, participants should be selected purposefully on the basis of their information. After selecting a few participants purposefully, snowball sampling method was adopted which is also known as ‘network sampling’. The first participant who is a *nyaope* user introduced other *nyaope* users to the researcher. This snowball sampling method enabled the researcher to identify potential relevant participants, since *nyaope* users are difficult to locate. Substance abuse is a very sensitive issue, especially in rural settings. Hence the researcher was very unlikely to find participants who were going to voluntarily identify themselves. To obtain relevant participants and information the researcher asked the purposefully selected participant to identify and introduce the researcher to other youths with the same characteristics (De Vos *et al.*, 2005; Gray, 2014; Welman *et al.*, 2005). The researcher did not know the total number of youths who use *nyaope* and other substances in these particular selected areas, and the total number of youths who were going to agree to participate in the study. Eight participants agreed to be part of the study and this sample size was determined by data saturation.

### 3.7 Research Instrument

The semi-structured interview method was used as the principal instrument of data collection. This was a one on one interaction between the researcher and the participants. The researcher had a set of predetermined questions on an interview guide see appendix D, but the interview was guided by the schedule rather than dictated by it (De Vos *et al.*, 2005). The interview guide was focused and facilitated by open ended questions. This method gave the participant and the researcher more flexibility because the researcher was able to follow any particular avenue that emerged in the interview (Gray, 2014; Silverman, 2013; Welman *et al.*, 2005). This interviewing method enabled the researcher to gain detailed information on participants' perceptions about *nyaope* drug, and also allowed the participants to share anything about *nyaope* which the researcher had not thought about. As the researcher planned that the answers will be according to the interview guide, however some of the questions on the interview guide were answered before the researcher get to ask them.

### 3.8 Pre-testing

The researcher conducted a pre-testing on the research instruments to help identify potential problems with the design, particularly the research instruments. The pre-testing was done on the participant known by the researcher and the interviews were conducted at Thohoyandou community offices. At the end there were no problems and difficulties identified. Hence, Bless *et al.* (2006) indicate that, this process allowed the researcher to identify difficulties with the method or materials and to investigate the accuracy and appropriateness of any instruments that have been developed. In this study, a pre-testing study was conducted with two participants possessing the same characteristics as those in the main study. The youth from the surrounding villages of Thulamela municipality who were using *nyaope* were interviewed. This was done in order to determine if the instrument is accurate for this particular research. Therefore, the purpose was to determine whether the relevant data would be obtained from participants; these participants did not form part of the final sample of the study (De Vos *et al.*, 2005). Yet, they assisted the researcher to identify others with the same characteristics who actually formed part of the study.

### 3.9 Data Collection

The researcher approached the participants and introduced herself, before the process of data collection the researcher read through the information sheet with participants to give the participant information regarding the study see appendix A and therefore the participant gave consent to be part of the study by means of signing the consent form see appendix C. The data was collected by the means of semi structured one-on-one interviews with youth, which are essentially focused and facilitated by open ended questions. Semi-structured interviews were used to gain an in-depth description of the participants' perceptions and experiences regarding impacts of *nyaope* use on their lives. This method gave both the researcher and the participant more flexibility and it was suitable for the researcher since the researcher was interested in a complex and personal issue. The researcher's plan was to conduct the interviews at the community centre offices to avoid possible disturbances and that, based on the interviews conducted when pre-testing the instrument researcher planned that each interview will take 30-45 minutes.

However, on the day of appointment the participants' kept on changing the venues and time of the appointment and sometimes reschedule the appointment. The time which was spent when conducting interviews was depending on the participant, some participants interviews took more than an hour as they were also expressing their grievances and their need to get help. Which therefore the researcher advised them to see the psychologist at the nearest hospital. Data was captured by writing notes and a tape recorder as it was important that events observed should be substantial and real (De Vos *et al.*, 2005; Gray, 2014; Silverman, 2013; Welman *et al.*, 2005).

The use of drugs is a highly personal and sensitive issue, hence the suitability of semi-structured interviews was apparent for this study (De Vos *et al.*, 2013). On the process of introduction to of the study to the participant, the participant didn't want to disclose that they were using *nyaope* since they thought the researcher was a police detective. Therefore, the researcher had to explain herself, participants rights, the confidentiality and that their participation is voluntary then they admitted their use and gave consent to form part of the study. The researcher made use of a series of prompts and asked further questions in response to participants' answers. The researcher elicited further responses by probing and investigated issues that emerged.



Furthermore, the audio tape assisted in the transcription and interpretation of data and during the data analysis process. The researcher captured every detail given by the respondents during the interviews. Some of the participants were responding non-verbally to some of the questions and that kind of information related to study was noted down. For example, some of the participants would just show their arms with scars caused by injecting themselves using syringes.

### **3.10 Method of Data Analysis**

During the process of data analysis the researcher reviewed all the collected data to make sense of it and the data were transcribed by grouping them in different categories to make themes.

Thematic data analysis was employed because it offered an accessible and theoretically flexible approach to analysing qualitative data (Braun & Clarke, 2006). Since the researcher was more involved in interpretation of collected data, thematic analyses allowed the researcher to capture complex meanings. There researcher was more involved in counting explicit words or phrases as well as identifying and describing both implicit and explicit ideas within the data, that is, themes. Codes were then be typically developed to represent the identified themes and applied or linked to raw data as summary markers for later analysis. However, the purpose of data analysis was to make sense of accumulated information (Vithal & Jansen, 2010). Therefore, the researcher remained objective and set aside all prejudgments, bracketing his/her experiences (De Vos *et al.*, 2005).

#### **3.10.1 Preparing field notes and transcripts**

To make sense of the raw field notes which had been accumulated, researcher was more focused on identifying the theme of the study by reviewing the field notes. Notes were then converted into write ups.

#### **3.10.2 Indigenous categories and keywords**

The researcher identified important words and meanings attached to the words which participants used, such as street language. The researcher had asked for some meanings of the words which were used by the participants which she did not understand as it was important to get accurate information. Observation was also the most crucial step which the

researcher employed in the collection and analysis of data. This enabled the researcher to grasp certain meanings conveyed through certain emotions or behaviour attached to certain words or questions raised.

### **3.10.3 Searching for missing information**

It was the researcher's duty to go back to the field to check for the missing information if there was any missing information during data analysis. There were two participants whom the researcher missed information pertaining their age. Since the participants had not agreed show the researcher their homes and the fact that these participants were based in one location, it was so complicated for a researcher to go back to the field to locate them in order to get the missing information. Therefore, the researcher phoned the participants to ask for the missing information from the contacts numbers obtained during networking/snow bowling process.

### **3.10.4 Phases of data analysis**

#### **Phase 1 becoming familiar with the data**

Verbal data was collected using interviews and was transcribed. The process of data transcription enabled the researcher to become familiar with the aspects of the data collected. After transcription of data collected the researcher had to repeatedly read the transcripts and notes in order to be able to draw facts on which the study is based. Repeated reading also enabled the researcher to understand the meaning of the information. After reading the transcript, the researcher wrote down the ideas that came to mind (Braun & Clark, 2006). The issue of understanding the street language (which the participants were frequently using) was also taken into consideration by the researcher.

#### **Phase 2: Generating initial codes**

After thorough reading of the transcripts, the researcher generated some interesting initial list of ideas and how it links with the researcher's study. Therefore, the purpose of coding of details was to analyse and make sense of the data that had been collected (De Vos *et al.*, 2005). During the process of generating initial codes data which have the most basic element of information that can be described in a meaningful way regarding the phenomenon. This data were highlighted in different colours based on their similarity and the differences.

Therefore, different colours were used to generate the initial codes. The researcher coded the data which suited the best interest of the research phenomenon. Information which appeared not to fit the basic segment of the study was not coded.

### **Phase 3: searching for themes**

After coding a huge amount of data, the challenge for the researcher was how to manage it, because during this phase the researcher had a long list of coded data. Different data categories were developed. The information coded in different colours was allocated based on the category of the particular information (Welman *et al.*, 2005). Rather than just placing coded data into different categories, the process also involved sorting the different codes into potential themes, and combining all the relevant coded data extracts within the identified themes. At this stage, the researcher started analysing codes and considering how different codes could be combined to form an overarching theme. During this process the main themes were drawn and subthemes were also identified (Braun & Clark, 2006).

### **Phase 4: reviewing themes**

The researcher found the most descriptive wording for these categories and turned them into themes. The total lists of categories were reduced by grouping related coded data to each other. During this phase, the researcher reviewed the potentially identified set of themes and sub-themes. Some themes were identified as not relevant for this particular research and also there was not enough data to support them. Some themes did not tally with the extracts, therefore the themes were renamed and also the other information was discarded. Some information which was missed during the coding process was identified and re-coded (Braun & Clarke, 2006). During the reviewing of themes, the researcher realised that some themes had complex meaning which were modified into a simple meaningful themes. Some themes had two meanings; therefore the researcher split them and identified them individually (Welman, Kruger & Mitchell, 2005).

### **Phase 5: defining and naming themes**

The following themes were identified:

- Description of *nyaope* was identified as the first theme. During the transcription and reading of the collected data, the researcher noted that *nyaope* is a common drug which is described differently based on the containments and purpose of using the particular drug.

- Contributory factors to the use of *nyaope*- The researcher noted that several factors contribute to the use or ignition of the use of *nyaope*. The aim of this study is to describe the impact of the use of *nyaope* among the youth, which is crucial in that the causes are identified prior. Therefore, the researcher identified the contributory factors to the use of *nyaope* as theme 2.
- Impact of *nyaope* use among the youth- several impacts were identified by the researcher which are the results of the use of *nyaope*. Given that the researcher's has a background in psychology, based on the participant report and observation by the researcher, psychological impact of *nyaope* use were noted. The *nyaope* users who formed part of this study were from the socio-economically depressed background, the use of *nyaope* continuously increases economic struggle in the community. Most of the youth who were using *nyaope* they spend most of their time in Thohoyandou town making plans of getting the next fix of *nyaope*. Physiological impact of *nyaope* use was identified based on the researcher's observations and after what the participant indicated in terms of their health experience and changes after their initiation of using *nyaope*. Participants identified several health issues. Based on the participants' responses, *nyaope* has a diverse impact on the significant others in different ways which will be discussed in details in chapter 4. Therefore, theme 3 was employed based on the impact of *nyaope* among the youth.
- Reduction strategies of the use of *nyaope* – participants indicated that they want to quit the use of *nyaope* but they can't seem to be successful on their own. This theme is about the reduction strategies which the participants suggested and also what the researcher has noted which lead to her thinking about the reduction strategies of the use of *nyaope* (Braun & Clarke, 2006; Welman, Kruger & Mitchell, 2005). The researcher identified the reduction strategies as reported by the participant, which resulted in the establishment of theme 4.

### **Phase: producing reports**

The researcher evaluated the data for its usefulness and centrality. The evaluation was done to determine how the data collected was in illuminating the question being explored and how central they were to the unfolding story about the impact of *nyaope* use among the youth in the rural communities of Thulamela municipality. This was the final phase of packaging what

was found in the text and creating a visual image of the information. This was also the primary mode for reporting the results of the research. In this phase, the researcher presented data in text (Welman *et al.*, 2006).

### **3.11 Measures of Ensuring Trustworthiness**

#### **3.11.1 Credibility**

The internal validity was demonstrated by ensuring that the study was conducted in such a manner that the impact *nyaope* among the youth was accurately identified and described. The strength of this qualitative study aimed at exploring the problem within rural communities of Thulamela municipality, following certain process of qualitative research approach, within the youth between the age of 18 and 31. Semi-structured one on one interviews pattern of interaction was selected to determine the validity of the study. The validity was also ensured by adequately stating the parameters by placing boundaries around setting, population and theoretical framework of the study (De Vos *et al.*, 2005).

#### **3.11.2 Transferability**

The researcher always referred back to the original theoretical framework to show how data collection and analysis were guided by concept and models. The theoretical parameters of the research was also stated in the process. Information from different sources was used to collaborate, elaborate and illuminate the research in question. In order to achieve transferability, the researcher provided a dense description of the research methodology employed. Since this study seeks to explore the impact of *nyaope* among the youth in the rural communities of Thulamela municipality, it may be possible to transfer findings to similar settings in which researchers may work. Direct quotes from the interviews with the participants were included (De Vos *et al.*, 2005).

#### **3.11.3 Dependability**

The researcher had to account for changing conditions in the phenomenon of the study which determined the changes in the study design. This was created by increased refined understanding of the setting. Changes in the setting of the study resulted from the reason that the social world is always being constructed (De Vos *et al.*, 2005). *Nyaope* users are the hard to find population and they are always changing spot and locations. However, the changes in

the settings did not impact the consistency; the data seemed to be repetitive after the researcher interviewed 8 participants from the same characteristics and in a similar context.

#### **3.11.4 Conformability**

This is the final construct which captured the traditional concept of objectivity. The inherent characteristics of the researcher during the evaluation were removed to ensure objectivity. Data was presented in a direct and uncompromising manner without deviating to one side (replacing the characteristics of the researcher) (De Vos *et al.*, 2005). Therefore, the data helped confirming the general findings and which can lead to implications (De Vos *et al.*, 2005).

### **3.12 Ethical Considerations**

To ensure protection of the participants, ethical approval for the study was obtained from the University of Venda research ethics committee, see appendix E. Given the sensitivity of the matter, the following ethics were taken into consideration when the study was conducted: informed consent, discontinuance, avoidance of harm, deception, confidentiality and anonymity.

#### **3.12.1 Informed consent**

When participants were recruited, the researcher had an obligation to respect the privacy of respondents and the researcher ensured that the respondents were informed regarding the purpose of the study/research. Written, informed consent was obtained from each participant. The participants were fully informed about the benefits and the possible risks of participation and that their participation was voluntary. The researcher ensured that the participants were fully informed about all the procedures that were going to be followed in conducting the research beforehand (De Vos *et al.*, 2005).

#### **3.12.2 Discontinuance**

Participants were given every assurance that they were free to discontinue their participation at any time without being asked for explanation. Thus participants who decided for any reason that they would like to stop participation were allowed to do so and their wishes were respected and were told that their decision would not affect their candidateship if they desire to participate in future (Bless *et al.*, 2006).

### **3.12.3 Avoidance of harm**

Ethical obligations rests with the researcher to protect the participants, within reasonable limits, from any form of physical discomfort that may emerged from the research project. The participants were informed beforehand about the potential impact of the investigation. Such information offered the respondents the opportunity to withdraw from the investigation if they would have wished to do so. However there were no potential impacts observed from this particular study. It is an essential responsibility of the researcher to protect any participant (De Vos *et al.*, 2005).

### **3.12.4 Confidentiality and anonymity**

In their release of results obtained, the participants were assured that all the information that was obtained from them was confidential. The participants were also informed that their names were going to be omitted and that numbers would be used to identify the respondents (Kerlinger & Lee, 2000) for example ny001. Data were going to be kept safe in case there would be queries about them at a later stage. Audio tapes were locked away and computer data was protected by a password. Participants were informed that, data were only going to be used for stated purposes and no other person would have access to interview data except the supervisor and the co-supervisor of the study and the university of Venda research ethics committee, if need be. After the results of the study, all documents or information provided will be shredded and tapes will be erased to maintain confidentiality regarding the identity of the participants (Welman, 2006).

### **3.12.5 Deception**

The researcher also avoided any possible form of deception of participants as all the participants were consistently asking for money. The researcher gave their true identity, stated the real purpose of the study and emphasized that the study was voluntary. Yet, some participants wanted to be paid for being part of the study. The researcher also fully informed the participants that there won't be any material of reward for participation or for recruitment (De Vos *et al.*, 2005).

### 3.13 Conclusions

The researcher discussed the use of qualitative research design. The chapter also discussed the sampling methods which were employed in the study, methods of data collection, pre-testing, method of data analysis and the various phases of data analysis and methods used to ensure trustworthiness of the findings. Details on ethical issues and ethical measures were addressed in depth.



## CHAPTER 4: PRESENTATION AND DICUSSION OF THE RESEARCH FINDINGS

### 4.1 Introduction

In this chapter the results of the study are presented together with their discussion. Following this section is the demographic profile of the participants, followed by the themes and sub-themes. The following themes are presented and discussed with literature control: description of *nyaope*, contributory factors to the use of *nyaope*, impact of the use of *nyaope* and reduction strategies of the use of *nyaope*. The responses were considered as evidence of the analysed data with the use of pseudonyms to indicate the author of the response. For example, Ny001.

### 4.2 Demographic Profile of the Participants

**Table 1: Demographics**

<b>Participants</b>	<b>Age</b>	<b>Gender</b>	<b>Level of education</b>
<b>Ny001</b>	<b>31</b>	<b>Male</b>	<b>Grade 11</b>
<b>Ny002</b>	<b>24</b>	<b>Male</b>	<b>Grade 10</b>
<b>Ny003</b>	<b>26</b>	<b>Female</b>	<b>Grade 11</b>
<b>Ny004</b>	<b>18</b>	<b>Male</b>	<b>Grade 12</b>
<b>Ny005</b>	<b>19</b>	<b>Male</b>	<b>Grade 12</b>
<b>Ny006</b>	<b>24</b>	<b>Male</b>	<b>Dropped at 2<sup>nd</sup> year level of university</b>
<b>Ny007</b>	<b>27</b>	<b>Female</b>	<b>Grade 11</b>
<b>Ny008</b>	<b>30</b>	<b>Male</b>	<b>Grade 10</b>

Table 1 above illustrates the demographic profile of the participants that were interviewed. The participants were drawn from users of *Nyaope* among Tshivenda speaking youth. The participants ranged from 18 to 31 years of age, both males and females as shown in Table 1 above.

### 4.3 Themes

This section provides the themes and sub-themes that emerged from the collected data. Table 2 provides the summary of themes and sub-themes. The aim of the study was to explore the impact of *nyaope* use among the youth in the Thulamela municipality. The research questions were:

- How is *nyaope* described?
- What are the causes of *nyaope* use among the youth in the rural communities of Thulamela municipality?
- How does *nyaope* use impact youth in the rural communities of Thulamela municipality?
- What strategies can be used to reduce the use of *nyaope* in the rural communities of Thulamela municipality?

Themes and subthemes which merged during the thematic analysis are outlined in the table below table 1 below.

**Table 2:** Themes and sub-themes

Themes	Sub-Theme
1. Description of <i>nyaope</i>	<ul style="list-style-type: none"> <li>• Presentation of <i>nyaope</i></li> <li>• Concoction of <i>nyaope</i></li> <li>• Obtainment of <i>nyaope</i></li> <li>• Consumption of <i>nyaope</i></li> <li>• Purpose of using <i>nyaope</i></li> </ul>
2. Contributory factors to the use of <i>nyaope</i>	<ul style="list-style-type: none"> <li>• Peer pressure</li> <li>• Curiosity</li> <li>• Accessibility</li> <li>• Family breakdown</li> <li>• Lack of parental support</li> </ul>
3. Impact of <i>nyaope</i> among the youth	<ul style="list-style-type: none"> <li>• Impact on the psychological well-being</li> </ul>

	<ul style="list-style-type: none"> <li>• Physical impact of <i>nyaope</i> use</li> <li>• Socio-economic impact of <i>nyaope</i> use</li> <li>• Impact of <i>nyaope</i> use on the significant others</li> </ul>
4. Reduction strategies of the use of <i>nyaope</i>	<ul style="list-style-type: none"> <li>• Rehabilitation centres</li> <li>• Spiritual assistance</li> <li>• Government support</li> </ul>

The youth around the Thulamela municipality have their certain ways of communicating. The researcher noted some few street words which are used by the *nyaope* users in the rural communities of Thulamela municipality. The following table illustrate the street words which came up during the interviews and their meanings.

**Table 3:** Street Words and their meanings.

Words or sign	Meaning
Snyman	<i>Nyaope</i> dealer/sales person
Dulas, Bola, Flobo and Baclays	Names of <i>nyaope</i> , depending on the shape and size when wrapped.
Utila	When you mix <i>nyaope</i> it with other things for example marijuana
Sakha	Cravings
Uriwa	When your intoxicated or extremely high
Ma ou	Parents
Ou lady	Mother
Taima	Father
Forefinger pointing up	Requesting the dealer to attend you
Little finger attached to the thumb with three middle fingers pointing up.	Showing the dealer to bring the drug

#### 4.3.1 Description of *Nyaope*

This theme describes the presentation of *nyaope*, concoction of *nyaope*, obtainment of *nyaope*, consumption of *nyaope* and the purpose of using *nyaope*.

#### 4.3.1.1 Presentation of *nyaope*

*Nyaope* is a cocktail drug which is cream white/yellowish in colour.

*“It is cream white sometimes yellowish in colour” (Ny001).*

*“It comes in a form of a rock or brick, crumbles or powder. Yet, it can be easily crushed or dissolved when heated”(Ny005)*

*“What they do is that they will mix everything they use to make nyaope and it will come out in a form of a brick”(Ny006).*

This study finding supports findings of a study by Grelotti *et al.* (2014) who found out that *nyaope* is also known as *whoonga* which was described as a white powder that users smoke.

#### 4.3.1.2 Concoction of *nyaope*

Different ingredients are used differently by different people. Yet, there was no specific purpose for certain ingredients. Containments such as: vinegar, bath soap, powder soap, rat poison, multi-purpose cleaner, chalk, HIV/AIDS pills, cough syrup, powder from plasma flat screen, pain relief tablets, ethanol spirit and eye drop medicine are used to make *nyaope*. This was evident by the following statements:

*I know that they mix different kinds of soaps, vinegar and antiretroviral pills. I have heard that there is a specific pill that they mix with, but I don't have the name of that particular pill (Ny001).*

*It is a mixture of different things, which are: chalk, ratex, HIV pills and other stuff which I don't know about. So after the drug is made, it is up to the person whether they want to take nyaope as it is or if they want to mix it with other things like marijuana if they want to take it orally. But if you want to inject it, it has to be re-heated so that it becomes liquid (Ny009).*

*I think nyaope contains handy andy, ratex, and HIV/AIDS pills. They mix all those stuff together and boil until they become one brick like shape, depending on the shape of the pot they use for making it (Ny005).*

*Whoonga/nyaope* was described as a “new drug” in the community that is a “mixture of many things (Grelotti *et al.*, 2014). However, certain group of the users prefers different containments on the above mentioned ingredients and others will also have their specific ingredients. The mixture of the drug also depends on person's desire and the availability of the ingredients, with HIV/AIDS pills as the main containment of the drug *nyaope*. Therefore,

the purpose for specific ingredients were not known or not of impotence to the users since they are more interested in the satisfaction.

#### **4.3.1.3 Obtainment of *nyaope***

*Nyaope* is commonly sold from the streets of Thohoyandou town or the homes of the dealers'. When the user have relevant ingredients, including HIV pills, they can make their own *nyaope* drug from home. Yet there is no manufacturer of *nyaope* in the Thulamela municipality. *Nyaope* users indicated that the drug is supplied from Johannesburg and Polokwane. Many *nyaope* users indicated that, the homemade one is not as effective as the one you buy from the street, and also the homemade does not give the desired feeling as the ones they buy from streets.

*“The drugs are supplied from other areas since there is no one in the Thulamela municipality who manufactures it. They don’t have appropriate pots to make it, but I have heard that there is a manufacturer in Polokwane”*(Ny001).

*“The homemade and the ones you buy from the street do not give the same feeling or satisfaction.”*(Ny007).

*“Sometimes I don’t have to buy it, if I have the relevant ingredient I can do the mixture myself, all what is needed is a pill the rest is nothing to worry about, but the high is not the same”*(Ny008)

Previous literature reported about the abuse of a highly addictive drug cocktail called *nyaope*, also known as ‘whoonga’, commonly found in many South African urban townships (Thomas & Velaphi, 2014). Therefore, the current study has revealed that *nyaope* drug is also being abused in the rural areas, which has been confirmed by the undertaken study in the Thulamela municipality. Some users reported that the use of *nyaope* drug was introduced in the rural communities by the people who have experienced city life such as Johannesburg. The use of *nyaope* has escalated from the street of Thohoyandou to the surrounding secondary schools as one of the users reported that:

*“Nyaope is also found at the school corner and used at school”* (Ny005).

Since the HIV/AIDS pill is the main containment of the drug, users mentioned that some people who are on ART treatment sell their treatment to the *nyaope* users for money. Yet,

other known HIV positive patients are mugged/robbed for their pills to make the drugs. For example, “*I don’t do it myself, but I have heard the rumours saying that nowadays people are mugged for their ART treatment for drug purposes*” (Ny005). A study conducted in Soshanguve by Masombuka (2013) also reported that youth used crushed HIV/AIDS pills stolen from parents’ most likely efavirenz to make the drug.

#### **4.3.1.4 Consumption of *nyaope***

*Nyaope* can be taken orally or injected. Some of the users reported that *nyaope* can be taken with inhalants such as cigarettes or marijuana. *Nyaope* can be mixed with cough syrup to dissolve or heat until it dissolves for those who are injecting the drug. This was expressed in the following statement:

*“So after the drug is made is up to the person whether they want to take nyaope as it or if they want mix it with other things like marijuana if you want to take it orally”* (Ny001).

*“But if you want to inject it, it has to be re-heated so that it becomes liquid. Therefore you can either take it with cough syrup”* (Ny007).

Different ways of taking *nyaope* determine the effectiveness of the drug on the participants. Based on the participants experience, the injected drug works faster and more effective than the smoked one. However, the obtainment of the syringes was not disclosed by participants. *Nyaope* drug is the most commonly used cocktail drug among the youth in the Thulamela municipality as compared to other drugs in South Africa such as heroin, cocaine, rock, etc.

#### **4.3.1.5 The purpose of using the drug**

*Nyaope* is used for different reasons such as being alert, being focused at school, strength, boldness, sleeping, euphoric purposes, because the friends are using it, gaining confidence, and boldness and to reduce stress. As expressed in the following excerpt:

*“There is no specific reason for using the drug. It is just for fun. It is not like the person is sick or anything because it cannot heal”* (Ny008).

It was also reported that *nyaope* is used for its hallucinogenic and relaxing effects (Grelotti *et al.*, 2014).

The users realised that after using *nyaope* they don't easily and quickly become hungry, therefore they felt that their use of *nyaope* helps them to maintain energy required for the normal functioning of the body. The experience was expressed in the following words:

*“It helps me to focus at school or in class. It does give me strength and ability to focus at school, especially when smoked mixed with marijuana” (Ny005).*

*“It helps in terms of starvation because after you have taken it you can stay the whole day without feeling hungry”(Ny007).*

During the initiation of *nyaope* use, the users did not really have a specific reason for using it, but the feeling they achieved after using *nyaope* encouraged them to continue using the drug.

### **4.3.2 Factors Contributing to the Use of *Nyaope***

All participants were able to talk about the factors that they perceive to be contributing to the use of *nyaope*. They indicated that peer pressure, curiosity, accessibility, family breakdown and lack of parental support were the main factors that contribute to the use of *nyaope* among the youth in the rural communities of Thulamela municipality. Therefore the above mentioned factors will appear as sub-themes.

#### **4.3.2.1 Peer pressure**

Participants indicated that peer pressure had contributed to the use of *nyaope* among the youth in Thulamela. Some of the users share their life challenges and problems with their friends. Therefore, they were encouraged by their friends to use *nyaope* as a way of reducing stress. Some participants engaged in the use of *nyaope* because their friends were using it. Others used *nyaope* because they wanted to feel a sense of belonging within a certain group of peers who were also using it. Peer pressure, as a contributing factor can be attested from the extracts hereunder:

*“My friend introduced nyaope drug to me after I mentioned to him that I have problems, we were in a bottle store. He therefore gave me the fix and told me that it will relieve my stress and it did, I felt so good and relieved” (Ny001).*

*“My friends were using it and I realised that it was really working for them, and then I also tried and worked for me as well” (Ny003).*

The use of *nyaope*, like any other substances in rural areas has been influenced by peer pressure. Previous studies found out that gang-related problems in rural areas which are associated with negative impact, such as substance use had increased (Stiles, 2013; Taylor *et al.*, 2013). The social learning theory suggests that humans make decisions about condition under which their own experiences would be very similar to other people that one is observing (Barlow & Durand, 2005). This study has confirmed that the use of *nyaope* among some of the youth in the Thulamela municipality depended on interaction with the people who were around them.

*“nyaope is being sold at school, by the corner of the school, there at the bush. They even sell marijuana. Sometimes people even bring alcohol here at the school and we will find a way of drinking it without being caught (Ny004)*

#### **4.3.2.2 Curiosity**

Despite influence of peer pressure, some wanted to try *nyaope* as they had heard about it and seen others using it, therefore they were just interested in trying it themselves, just to have an experience. After the first experience the feeling was good to the point that they had a desire to do it over and over again. Curiosity contributed to the use of *nyaope* among the youth as it was mentioned below:

*“I just wanted to experience the feeling of using the drug” (Ny006).*

*“I just wanted to try it, but I enjoyed it. It made me feel so good” (Ny004).*

The study confirmed the fact that youth are curious about things around them to an extent that they would want to experiment it. This is evident in Carney *et al.* (2013) who indicated that during this stage of transition adolescents want to try everything and Stiles *et al.* (2013) who indicated that the desire to experiment things during the transitional stage of adolescents has contributed to the use of substances among the youth.

#### **4.3.2.3 Accessibility**

The participants indicated that *nyaope* is cheap and readily available for they can also make their own mixture since the ingredients are known and easily accessible. *Nyaope* users also mentioned the *nyaope* price starts from as little as R30 and accessible in the streets of Thohoyandou as well in the communities, where there are known spots where *nyaope* is sold.



*Nyaope* users 'crushes HIV/AIDS pills, mix it with other things like soup, vinegar, and rat poison to make-up *nyaope*. ART pills are free in South Africa which makes them accessible to everyone. Some people who are on HIV treatment sell their pills to *nyaope* users for money, yet some users break into the clinics to get the pills. Anti-retroviral pills as main containment of the drug are 'cheap' and freely available. The participants mentioned about the accessibility of *nyaope* in the following excerpts:

*“Anyone can make their own mixture of nyaope, simply crush the HIV pills combined with the ratex, then you have the drug” (Ny005).*

*Sometimes I don't have to buy it, if I have the relevant ingredients, I can do the mixture myself, all is needed is a pill the rest is nothing to worry about. But there are dealers here in Thohoyandou (Ny006).*

*Nyaope*, with a much cheaper price compared to other drugs such as “rock” as some of the users report, is the reason *nyaope* is the drug commonly used in the Thumela municipality compared to other common drugs. As reported by Mokoena (2015), the cost of *nyaope* joint is as low as R20 and R30, and the dealers are many.

#### **4.3.2.4 Family breakdown**

The majority of participants indicated that family breakdown was a major contributor towards *nyaope* use. Some of these users came from broken families due to divorce, parents working away from home, poor relationships between parents and single parent home, as well as orphanage. They indicated that they felt ashamed, rejected and blamed themselves with a feeling of losing direction of life. Therefore, they resorted to using *nyaope* in order to escape from stressful feelings. Extracts below attest to this:

*“I started using the drug after my mother and my father separated. The worst part was that my father brought another woman in the house who never cared about us and she was in control that my father end up not doing anything for us with her permission. In most cases we will not get what we actually wanted from our father even the school material. Therefore, we ended dropping out from school with my sister” (Ny001).*

*“My parents are always fighting, even in the street which was so humiliating and people I used to hang out with from the street would laugh at me for that reason. Therefore, I got new*

*friends who didn't care about anything in life, then I was also introduced to the use of nyaope" (Ny004).*

These findings are supported by the psychoanalytic theory which states that drug use is caused by some sort of conflict in the unconscious mind and this unconscious conflict which may be the result of irrational wishes, fear, or even attempting to escape from certain feelings due to a shameful experience (Pinchevsky *et al.*, 2014; Vignolla & Corulla, 1999) and negative life experience as a child (Fang & Guo, 2012).

#### **4.3.2.5 Lack of parental support**

Some of the participants indicated that lack of parental support also was as a contributory factor to the use of *nyaope*. They indicated that since parental support was not there even the obvious changes in behaviour could not be noticed when they started using this drug. This is how they said it:

*"When I started using it I would have terrible nightmares, sometimes it will feel like the house is falling and I will scream to the point that everyone will wake up ....the parent didn't even ask or even follow up about what could have happened to me" (Ny005).*

Participants further indicated that they were unable to share their developmental changes and life challenges with their parents because their parents were either too busy for them, working away from home, having a single parent or orphanage. One participant had this to say:

*"If parents had more time to spend with us and get to understand us it was going to be easy for them to notice even the changes in our lives, because after the first use of the drug everything just changes" (Ny006).*

Previous literature (Hitzeroth & Krammer, 2010; Koji *et al.*, 2013; Mignon & Holmes., 2013) demonstrated that, molestation can also be a contributing factor, as can lack of parental supervision and a family history of drug abuse.

Participants used *nyaope* to actually rebel against the transitional challenges they were encountering with any parental guidance and support. Things that the parents could have noticed were the behavioural changes such as loss of appetite, irritability, temper, anxiety,

poor hygiene, constantly changing friends and having many friends. Therefore, these findings serve as evidence to the study by (Carney *et al.*, 2013) that, youth also use substances as a defence mechanism and also for experimentation at this stage of transition.

The absence of parental support during this developmental stage appears to be playing a major role given the fact that at this stage proper parental support is considered significant (Ramorola *et al.*, 2014). This shows that the absence of such parental support will make it difficult for parents to see behavioural changes that are related to *nyaope* use.

### **4.3.3 Impact of the Use of Nyaope**

The following sub-themes emerged from the impact of the use of *nyaope*: the impact of *nyaope* use on the psychological well-being, socio-economic impact, physiological impact and *nyaope* impact on the significant others will be discussed here.

#### **4.3.3.1 Impact of *nyaope* on the psychological well-being**

When participants mentioned psychological experience they have countered, they were not really aware that it was something they would have to experience during the course of *nyaope* use, yet they were pleased with the feeling of being “high”. However, the study revealed that *nyaope* can lead to psychological impacts such as addiction, dependence, emotions, substance withdrawal symptoms and mental disorder.

Due to its addictive nature, participants reported that after their first use of *nyaope* they needed it again on the following day. The users mentioned that it did not even take time for them to develop the compulsive use of *nyaope*. They experienced problems with cravings and strong desire to use it. Evidence below justify this:

*“When the cravings gets you, ‘you can’t even sleep, you can’t even eat anything, you just feel tired that you can even walk even a smallest distance and sometimes you don’t even want to talk” (Ny001).*

*“When you have the urge to use the drug, you can even focus on anything or have strength to do anything (Ny008).*

*Once you start to use nyaope there is no way, is the only you would want and think about all the time (Ny003).*

These findings support DSM-V (2013) diagnostic criteria for addiction which includes cravings and strong desire to use substances. The addicted *nyaope* users continued to use the drug even in dangerous situations. For instance, as reported by one of the participants, “*When the person is addicted they can even walk more than 15 kilometres even in the middle of the night just to get nyaope*” (Ny005). Because of addiction, users continued to use *nyaope* even when this was worsening their psychological and physical problems. The addictive nature of *nyaope* is evident in Greloti *et al.* (2014) who suggested that *nyaope* is an addictive substance of which users are highly stigmatized and appears to have a devastating impact on persons who use it.

As another evidence of addiction, participants indicated that the person who is addicted cannot eat, talk or sleep. They cannot even do routine things that they were normally able to do. Such addiction also leads them to dependency on this drug. This is evident in the extracts below:

*So if the person who relies on nyaope, cannot get it then he can't eat, talk or do the usual stuff or even sleep” (Ny001).*

*“When the cravings gets you, ‘you can't even sleep, you can't even eat anything, you just feel tired that you can even walk even a smallest distance and sometimes you don't even want to talk. So if the person who is dependent on it gets it then he can't eat talk and do the usual stuff. But without people can't even sleep” (Ny002).*

*I will feel that my throat is dry, hungry and also when there is food even when the food is smelling nice you will feel that the smell is terrible because you want that drug, I can't even sleep without having to get it first (Ny003).*

Other than addiction and dependency participants also mentioned impaired judgment as another effect of *nyaope*. This is shown by the fact that *nyaope* has the potential to cause mental disorders. Some participants reported that what they experience when they are under the influence of *nyaope* is associated with witchcraft. The findings illustrate that *nyaope* users suffer from hallucinations, delusions, anxiety, emotions and depression. Similar findings

were reported by Grelotti *et al.* (2014) and Lehavot and Simoni (2011) who argue that, psychological disorders such as anxiety and depression have been associated with the use of *nyaope* among the youth in South Africa. On the other hand, *nyaope* has been reported to cause psychological problems as it is hallucinogenic drug (Masombuka, 2013). Therefore, people, who use this kind of drug experience changes in sensory perception, a feeling of happiness that lasts for a short time, disoriented mental behaviour and an increase appetite as reported by Benzuidenhout, (2004).

*“After getting the fix/joint you can do anything, it actually feels like you can do anything” (Ny003).*

*“People can easily engage in fight or violent behaviour when they are under the influence of nyaope, but after sometime when the drug is not strong anymore they regrets” (Ny008).*

The participants also reported to have the inability to control their emotions as they easily lose their temper and were also anxious about themselves. However, *nyaope* gives them that self-dignity and courage to feel that they can do anything to the point that they even ended up engaging themselves in a risky behaviours or life threatening situations. Some participants associated their habit of *nyaope* use with witchcraft by family and community members or curses by evil spirits.

*Nyaope* users quickly sank into the drug to the point that they could not function without it. Reports indicate that, *nyaope* users’ daily activities depended on getting the fix first. Problems such as the inability to sleep, perform simple activities or even eat before a person gets a fix of *nyaope* were reported. The participants reported to have increased their dose in order to achieve the desired feeling which resulted in addiction, yet, it was also confirmed by Masombuka (2013) that, the youth using substances tend to progress quickly in their substance abuse career yet, those using *nyaope* are more likely to suffer the consequences of addiction quicker compared to other substances. Other literature emphasizes that *nyaope* is a highly addictive drug (Grelotti *et al.*, 2014; Rough *et al.*, 2013) and when it floods the system with dopamine, these chemicals create feelings of pleasure and euphoria, which is known as ‘high’.

#### 4.3.3.2 Physical Impact of *Nyaope* Use

Some of the participants reported withdrawal symptoms that also impacted on them to a point that they feel helpless making it difficult to quit the use of *nyaope*. They indicated that they had experienced a very painful feeling when they attempt to quit and that the painful feeling only goes away when they take joint/fix. Withdrawal symptoms were reported as the worst experience that they have ever had in their lives and it is reported that it feels like *nyaope* has taken control of the lives of the users. The reports indicates that it feels like they are trapped in something that they can't escape no matter how many times they try and how much effort they put. Symptoms such as nausea, hallucinations, explosion in the stomach, vomiting, headaches, and insomnia were reported, which is also evidenced in the (DSMIV, 2000) as the substance withdrawal symptoms.

*“The symptoms that I experience when attempting to quit is so painful to the point that I needed another fix to help with pain at the clinic help them, they will just give panado which does not even help (Ny007).*

*Being powerless, sweating, feeling like you have flu, nose feeling dry and also drooling, severe headaches and also stomach discomfort, less appetite (Ny008).*

These findings support findings by Benzuidenhout, (2004); Newcomb and Bentler, (2012) who reported that, substance-withdrawal disorders are characterized by a substance-specific syndrome due to cessation of heavy prolonged use that causes clinically significant distress and impairments on functioning which is not due to medical disorders. Some of the participants who were injecting the drug continued to inject themselves even when they were developing wounds in an injected area. Some users indicated that they had dropped out of school because of poor school performance and also because they had to make plans to get the next fix. Therefore, users continued despite the problems with other important obligation of their lives. Some users reported to have painful experiences when the body responded to the cessation of the drug. They indicated that their experience included: feeling of irritable, edgy, intense anger, nightmares, fatigue and painful stomach cramps (which the participants indicate as explosion). The following quotes are evidence of what the participants said:

*“When I attempt to stop using, sometimes I will feel edgy, irritable and tired. But if I can get a fix I feel fine, but when the drug starts to lose its strength on the body, you will feel sleepy on a serious note” (Ny003).*

*“The stomach can be so painful to the point that it can even make the grumbling noise that even the person on a distance can hear it. Sometimes it feels like there is something in the stomach that is moving towards the throat. And the pain is so severe. But if you inject the drug they will instantly go away (Ny001).*

Mokwena, (2015) notes that that *nyaope* is highly and uniquely addictive and withdrawal symptoms include painful stomach cramps which the users describe as similar to an ‘explosion’ in the local language. Withdrawal experience was very unpleasant to the participant that they were unable to successfully quit their use of *nyaope*.

It is also evident from the participants’ responses that the use of *nyaope* and the way they use it for example, injecting themselves put them at physiological health risks that leave them with scars in their skin, thus making them vulnerable to HIV infection. As they have already developed some scars, sharing injections might also transfer infections from one user to the other.

*“Whether I have HIV or not we are all still going to die so I don’t care much of that disease because if one way or another your still going to get it anyway” (Ny008).*

*“Using this drug with syringe has the scars like this one which looks like they have been scratched, isn’t that we draw the blood and mix it with the drug and then we reject it again”(Ny001).*

*“You see these scars on my arm? Is the syringe that we use to inject the drug. They were so bad because I even developed wounds because of using the needle” (Ny009).*

The finding about physiological risks is consistent with other literature that show that other harmful effects of using *Nyaope* are skin changes (Grelloti *et al.* (2014) and the one that show that the use of substances can also cause physiological problems such as HIV/AIDS,

hypertension and death (Benzuidenhout, 2004; Ellis *et al.*, 2012; Hitzeroth & Krammer., 2010).

The researcher noted that people who are using *nyaope* have poor diet as they have reported they can't even eat anything if they have the cravings of *nyaope*, while others indicated that after taking the drug they cannot even feel hungry. Some participants confirmed that since they started using *nyaope* they have lost weight. They indicated that when they have the craving, they can't even eat the nicest food which they normally used to enjoy because what the body wants is a drug. The researcher noted that poor appetite resulted in weight loss among the participant. After they start using the drug, they indicated that:

*“Even if they can give you Nandos or KFC you can't eat it when you have the desire of the drug” (Ny001).*

*“The fact that you don't feel like eating every time when you have the craving for nyaope I think is the reason sometimes I feel intense pain in my stomach. I once went to the clinic and they told me that it could ulcers; they have encouraged me to eat food before I actually feel hungry” (Ny008).*

*“Loss of weight, persistent cough occurs when a person is using nyaope” (Ny002).*

*“It's hunger, just like glue, it makes people to stay longer without getting hungry. So is the same with nyaope (Ny006).*

#### **4.3.3.3 Socio-economic impact**

It is evident in the participants' responses that *nyaope* use has socio-economic impact in the lives of the participants and other users. They indicated that people who are using *nyaope* have a tendency of being school drop-outs due to poor academic grades. That is because they spend much time out of class while getting a fix of this drug during class periods. As illustrated by the following excerpts:

*“But unfortunately it even led me to be suspended from the school I was going. But I don't do anything except going out with friends, it is unstoppable now. I get bored if I don't use any substance” (Ny008).*



*“When I am in school, sometimes I will feel edgy, irritable and tired. Another thing after smoking you will feel fine, but when the drug starts to lose its strength on the body, you will feel sleepy on a serious note (Ny005).*

Mokwena, (2015) shared the similar sentiments with the above when he mentioned that *nyaope* takes over the lives of its users because they drop-out of school or because all they think of and pursue is getting the next fix. This implies that *nyaope* users are likely to score low in their education profile which can also justify living in poverty due to premature termination of their life careers. One can also assume that *nyaope* has an impact on the development of the community as it causes premature career termination. This finding links up with what Meier *et al.* (2013) reported, that drugs interfere with the ability to think clearly, use cognitive skills and control behaviour, which may have contribute in to school drop-outs among *nyaope* users.

Some participants were unemployed youth who dropped out of school prematurely. Users mentioned that they had lost their jobs because of bunking school in order to get the next fix, while others indicated that they engaged themselves in the use of *nyaope* because they were unemployed and spent most of their time doing nothing as a result, they ended up using *nyaope*. One participant had this to say:

*“In most cases the person who is using nyaope, if they get a job they end quitting”* (Ny002).

The use of *nyaope* takes over the lives of the users because they lose their jobs because all they think of is getting the next fix (Mokwena, 2015). Participants further indicated that using *nyaope* can be linked to criminal activities like clinic break-ins, selling of ARV’s and robbery of ARV’s from HIV positive patients. Although they did not personally associate themselves with crime participants in this study attested to the fact that *nyaope* use has a socio-economic impact not only on the users, but also the country at large. The following statements attest to this:

*“I know that there is certain group of people who wait for those who are on ART treatment when they come back from the clinic and hijack them their purses so that they can get the pills”* (Ny008).

*“People are breaking in the clinics and hospitals to get the pills that can help them in making the drug of their desire. I believe it is also another reason why there are security people at the clinics” (Ny005).*

The findings about criminal activities associated with *nyaope* use as an impact was also mentioned in Meier *et al.* (2013) who demonstrated that instances such as criminal behaviour may occur when the adolescents start using drugs. It was also indicated that the crime-free communities in the rural setting is declining as a number of rural jurisdictions have been reporting gang-related problems over the past few years due to the use of substances (Taylor *et al.*, 2012). This is because *nyaope* users steal very expensive property to sell at a very cheap price so that they can get the drug. They sell whatever they have in hand for the price of the fix they desire even if it means the price of single joint/fix. For example:

*“You will find a person selling the set of plates for only R10, expensive stuffs with prices like R50, R20. It may even get to the point that the person can even hire a truck to come and buy everything from their home, things that they didn’t buy just to get the drug” (Ny003).*

These findings support earlier findings by Mokwena (2015) who found out that the social impact of *nyaope* use includes increasing number of young people who are addicted to the drug and find it very difficult to stop the use.

#### **4.3.3.4 The impact of *Nyaope* use on the significant others**

The use of *nyaope* does not only have an impact on the users, but also has impact on the significant others in different ways. That is because the use of *nyaope* influences change of lifestyle and behavioural patterns in an unanticipated manner, which severely impacts the significant others such as family, friends and community. Instances such as criminal activities, stigma and social withdrawal are the experience which the significant others have to go through because of *nyaope* use. The following statements support this:

*“I think its use affects my mother when I take her treatment, because I could see she was starting to become sick again” (Ny003).*

*“I believe that HIV patients are affected and they are facing double crisis in their lives. They are taking the ART to improve their health condition and other people are threatening those patients’ lives because of the drug” (Ny005).*

*“Sometimes I feel bad that I take my mother’s treatment and sell it to my friends. I don’t do it anymore because I don’t want my mother to become very sick” (Ny008).*

This also shows that the use of *nyaope* has an impact on the adherence to antiretroviral treatment, particularly for HIV positive patients who become victims of *nyaope* users. In such instances these patients fail to adhere to prescribed treatment (Grelotti *et al.*, 2014). On the other hand, parents (patients) fail to report criminal activities that their children engage in which further leaves the community to live in fear of *nyaope* users. Such failure to report the criminal activity is consistent with Masombuka (2013) who also stated that parents blame themselves for their children’s addiction, that they don’t report them for their violent behaviour and also for stealing their antiretroviral treatment.

Some of the participants indicated that they have engaged themselves in violent behaviour when they were having the feeling of high. They also indicated that when they are under the influence of *nyaope* they feel so powerful to an extent that they can do anything without fear. That is the reason that they engage in violent behaviours in streets. This personal perception seems suggests that *nyaope* use interferes with the ability to think clearly, use cognitive skills and control behaviour. This is illustrated in the following quotations:

*“The person who uses nyaope gets angry very quickly, we can’t even simile with you when we have the craving, and we get angry very quickly. We are short tempered. We easily get annoyed by everything” (Ny008).*

This shows that when *nyaope* users get angry they engage in criminal activities which affect other people.

*“After using the drug you don’t even feel the pain or regret (Ny004).*

Previous studies indicate that in United States of America, approximately three quarters of all deaths among the youth resulted from behaviours influenced by substance use (Ayers, 2005; Koji *et al.*, 2013).

Although there is value in children raised by their own families, evidence from this study shows that *nyaope* users prefer to stay away from home where they will get freedom to use the drug without people who will discourage their use of *nyaope* and stigmatise them. In some cases parents leave them with the houses out of fear. These impact their siblings and their parents, and other families, particularly those who ended up staying in their friends' homes. Participants illustrated the following quotes:

*“Their community has attached a label drug on me, which doesn't make me feel comfortable at all, I have also become a target to the community, especially to the parents of other users, they think I am the influence”* (Ny001).

*They rebel against social environment and isolate themselves with family. They are uncontrollable* (Ny002).

*“The other time my mother even left me alone in the house and went to stay with her sister, because I used to steal her medication, but I am not proud of it. I can never do that again because it is putting my mother's health at risk* (Ny008).

Previous literature shows that adolescents who experience problems with the whole variety of substances are usually left feeling stigmatised, marginalised, demoralised because substance abuse destroys the purity of the social environment and social hygiene which increases depression (Hitzeroth & Krammer, 2010; Stiles, 2013).

This clearly shows that issues around stigmatisation do not only affect the users, but also their families because other family members are also labelled according to the one who uses *nyaope*.

#### **4.3.4 Reduction Strategies of the Use of *Nyaope***

The researcher noted that some participants attempted to quit the use of *nyaope* but were unsuccessful. Withdrawal symptoms were identified as the main reason for their inability to

quit the use of *nyaope*. Therefore, the participants suggested strategies that they think can be helpful in term of quitting the use of *nyaope*. These include rehabilitation, spiritual assistance and the government.

#### 4.3.4.1 Rehabilitation centre

When participants were asked to talk about strategies that can be used reduce the use of *nyaope*, they mentioned rehabilitation centres as it has been believed that they can bring solutions to those who are struggling to quit the drug. Nevertheless, it has been indicated that even for the past 20 years there has been an enormous increase in the use of substances in South Africa but there is still no rehabilitation centres in the Thulamela municipality. Yet the community is also going through the process of developments, which also comes with the use of substances since people from all kinds of background are flooding to the area. It also seems like people have lost hope in terms of getting help because of the unavailability of resource centres that can help them. This was expressed by participants in the following statements:

*“If there can be a rehabilitation centre here in the Vhembe district”* (Ny001).

*“There is no way that there can any possibilities that the can quit the drug. Especially for those who inject it on their veins”* (Ny003).

*“Rehab, change of friends and environment. Some the reason is that you are always having the same friends who are bad influence. If you spend so much time with friend who are smoking you will still continue even when you don’t want because of the environment is no allowing to forget and start over”* (Ny005).

Also there was one typical participant (Ny002) who thinks that if people are given permission (legalising *nyaope*) to do things it can reduce the number of people initiating the use of *nyaope* and cases of addiction. The increase in the burden of mental illness due to drug use in South Africa has also been highlighted as a consequence of the use of *nyaope*. The helplessness shown by participants who use *nyaope* is ample testimony that users of *nyaope*, their significant others and communities at large are unable to deal with this problem (Mokwena, 2015).

#### 4.3.4.2 Spiritual assistance

Some participants reported that they experienced the delusions and hallucinations think their use *nyaope* was triggered by the evil spirits and as a result they were unable to quit the drug. Hence they thought that if they could get assistance from the church their problem would disappear. Witchcraft was thus indicated by one participant as one of the causes of *nyaope* use of which the participant felt that only spiritual and faith healers could cure their problem. It was described in the following quotes from participants’:

*“Sometimes it feels like I am being possessed with evil spirits which can be casted out at church”* (Ny006).

*“I think she bewitched me and the other children from my mother so that we don’t make any demands from our father”* (Ny008).

*“Sometimes I even think of going to church, the ZCC church for assistance. I think the tea that they make can also assist me, but I am afraid of embarrassment and what people thinks about me* (Ny001).

Some participants indicated that spiritual assistance could also help in terms of emotional and psychological support, but because of the stigma attached to the users of *nyaope* is not easy the spiritual centre like churches.

#### 4.3.4.3 Government support

Participants indicated that if the government could create employment for the unemployed youth it could assist them by making them stay away from streets doing nothing. Four participants indicated that the government could provide them with activities that could keep a drug users busy. This is how the participants suggested:

*“If I get involved in something that will keep me busy, because when I am just sitting around doing nothing, the thing I think about is nyaope”* (Ny001).

*“If also government can provide with jobs to keep people busy”* (Ny007).

The study has revealed that *nyaope* users were unemployed youth living in the rural communities. Therefore findings support previous literature by (Mokwena, 2015) which indicates that, *nyaope* drug is prevalent among young unemployed black people living in an underprivileged areas or communities.

#### **4.4 Conclusions**

In this chapter, introduction, participants profile and table illustrating the street language and the meaning was provided, followed by discussion of results. Identified themes and subthemes which have merged from the interviews with the participants were discussed. A literature review was also presented and discussed with the purpose of comparing the results with other findings.

## CHAPTER 05: CONCLUSION AND RECOMMENDATIONS OF THE STUDY

### 5.1 Conclusions

The aim of the study was to explore the impact of *nyaope* use and suggestion of strategies that can be used to reduce its use among the youth in the rural communities of Thulamela Municipality.

The objectives of the study were:

- To describe the *nyaope* drug used among the youth in the rural communities of Thulamela municipality
- To identify the causes of *nyaope* use among the youth in the rural communities of Thulamela municipality,
- To assess the impact of *nyaope* use among the youth in the rural communities of Thulamela municipality and,
- To suggest strategies that can be used to reduce *nyaope* use among the youth in the rural communities of Thulamela municipality.

On the basis of the specified objectives the study findings revealed that that *nyaope* is highly addictive and commonly used by the youth in the rural communities of Thulamela municipality. Therefore, it was described as a drug which contains domestic use products such as soap, rat poison, vinegar and HIV pills. The purpose of using the drug was to get the feeling of high, to get that sense of belonging and concealing problems. *Nyaope* is an easily accessible drug from the streets and can also be a homemade drug because of its ingredients or containments. The participants reported that they can only afford *nyaope* because it is the cheapest effective drug out of all the drugs available in Thulamela municipality as well as in other areas. *Nyaope* was continuously used regardless of the impacts which the *nyaope* drug users were encountering. Though their desire was to overcome the use of *nyaope*, the withdrawal symptoms remained the main challenge for users of *nyaope* to successfully quit the drug. Participants reported that rehabilitation centres were their only hope but the problem was that there is no rehabilitation centres in the Thulamela municipality (also in the whole Vhembe district). Therefore, the study recommends that rehabilitation centres be established in the Thulamela municipality to help *nyaope* users. The users of *nyaope* in the Thulamela municipality are mostly poor and unemployed background; they pose a significant challenge



because of the inability of the mental health services to provide them with the necessary assistance in the form of rehabilitation services which include tailor-made detoxification.

## 5.2 Limitation of the Study

The following are some of the limitations that could be associated with this study:

- The sample size was small (8) to be considered worth representative and generalisation of the findings.
- Only the youth were interviewed, therefore the findings do not reflect the impact of *nyaope* use experience among adults.
- Other ethnic groups in the area were not included in the study, but only Tshivenda speaking youth.
- Due to lack of literature directly addressing the use of *nyaope*, literature addressing substance use dominated the study.
- Translation of original materials might have compromised the originality of the data referred to.

## 5.3 Recommendations of the Study

On the basis of the study findings, the following issues are recommended: The results of this study indicate that *nyaope* use among the youth does not only impact the individual user but also the significant other and the community at large.

- Drug education

Due to the finding that some participants do not know the impact of *nyaope*, drug education using the outreach programs could be an effective strategy to reduce the prevalence of drug abuse. Such education should be considered for both youth and adults (parents).

Government support through collaboration with the NGO's in campaigns on *nyaope*/drug use can be helpful in the Thulamela municipality where such campaigns are rare. The government should consider establishing rehabilitation centres to provide the appropriate and effective therapeutic intervention to help the drug addicts. Recreational facilities are also required in the Thulamela municipality to help reduce loneliness among the youth.

- Parental support

Parents should create time to spend with their children, regardless of the relationship status between them and also learn about proper parenting. Which is also part of the plan of the department of social development which has been highlighted on the National Drug Master Plan 2013-2017 (2013) stating that, there should be education about good parenting is important in terms of reducing substance abuse problem. As noted by the researcher that, it is important for parents to maintain a balance between their employment commitments and the responsibility of caring for their children.

- Community engagement

The issue of stigma on the *nyaope* users in the communities has been noted a big challenge in terms of reducing the impact of *nyaope* use among the youth in the rural communities of Thulamela municipalities. It is therefore recommended that, the issue of stigmatisation be discouraged and support provided to the victims of *nyaope*. As also recommended on the Prevention of and Treatment for Substance Abuse Act no. 70 of 2008 (2009) that, measures aimed at skills development for individuals, families and communities to enable them to enjoy a better quality of life.

#### **5.4 Recommendations for Future Research**

Since this study was limited to only 08 participants form three rural communities in the Thulamela Municipality, the findings cannot be generalised to the whole population in the rural areas, it is therefore recommended that a broader study including different rural communities be conducted to compare emerging patterns in different rural communities.

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